



ashm

Developing a sustainable HIV,
viral hepatitis & sexual health workforce

The Optimal Scenario & Context of Care

ASHM Guidance for Healthcare Providers regarding
Infant Feeding Options for People Living with HIV

with highlights from *Breastfeeding and Women Living with HIV in Australia*

August 2021



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*The Optimal Scenario & Context of Care
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Developed by the Australasian Society for HIV, Viral Hepatitis
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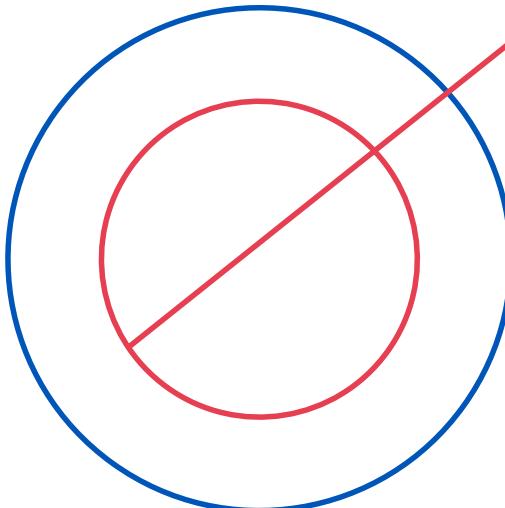


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Forward from ASHM

This document offers guidance for a shared decision-making process between a person living with HIV and their healthcare providers to ensure that informed choices are made concerning infant feeding options.

People/Women* living with HIV in Australia who are pregnant or considering pregnancy will want to have discussions with their healthcare providers to make informed decisions regarding their infant feeding options. This extends to all healthcare professionals working on any perinatal care team.

In recent years, there has been a growing recognition among healthcare providers, researchers and clinicians that **breastfeeding*** can be a viable choice for people living with HIV if they follow several criteria and are willing to engage in strategies to reduce the risk of HIV transmission. This situation is described as the 'Optimal Scenario' and summarised in an important discussion paper published in 2018 in the *Swiss Medical Weekly*.

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In developing this guidance, we have evaluated the risks of HIV transmission via breastmilk for mother-to-child transmission (MTCT) in light of accessible combination antiretroviral treatment (cART), weighed against the benefits of breastfeeding. The authors have reviewed the latest research relating to the transmission of HIV from parent to child through breastfeeding where the person was on effective cART and fulfilled several essential criteria and have found no evidence of transmission of HIV.

This guidance is based on the underlying evidence for the 'Optimal Scenario' and adds to this scenario what ASHM calls the 'Optimal Context of Care' required to support people living with HIV who may decide to breastfeed.

ASHM maintains that the safest choice for a person living with HIV and their infant is formula feeding to ensure that HIV transmission is minimised. However, this guidance recognises that clinicians and healthcare workers providing care and support for people living with HIV will have the experience, or can anticipate the experience, of people who live with HIV expressing a wish, preference or intention to breastfeed.

It is important to understand that this ASHM guidance does not provide clinical advice or a protocol for managing children with HIV infection, nor does it discuss or recommend optimal HIV treatment strategies for people living with HIV in the perinatal period.

ASHM recommends that healthcare providers seeking best practice guidelines for cART during pregnancy, and people living with HIV who are breastfeeding consult the BHIVA or the US Department of Health and Human Services guidelines, which can be found in the references to this guidance. The BHIVA and US guidelines are updated regularly and are the most appropriate source documents for those wanting to review the rapidly changing clinical guidance in this area.

We commend this guidance to you in your support and considerations with your patients living with HIV, and we encourage you to share this document with colleagues with other health professionals who may be part of teams providing clinical care, including perinatal care, to people living with HIV.

* ASHM acknowledges that the use of various terms from both the patient and provider perspective about gender and breastfeeding is multifaceted. We support the statement provided in this guidance from AusPath on Gender Inclusive Language and encourage all healthcare providers to adapt and evolve to ensure the use of gender-inclusive language to provide the best standard of care to our patients.



NA Medland

Dr Nick Medland
MBBS BA Hon, PhD FACHSHM FRCP(UK)
President, ASHM



Alexis Apostolellis

Alexis Apostolellis
CEO, ASHM

Gender-Inclusive Language

This guidance strives to ensure that the person living with HIV experience is reflected in what we say and how we say it as healthcare providers, regardless of whether a patient breastfeeds, chest-feeds, nurses their infant, or supports a partner who does.

We acknowledge that 'breastfeeding' is a contested term and may be something some patients may feel uncomfortable using due to their gender identity or possible history with breast trauma.

We encourage all healthcare workers to be gender inclusive, one step toward this is using trans-affirming language such as chest-feeding, nursing, and most importantly, the terms used by a patient. It's important to not assume that 'breastfeeding' is the term most comfortable for every person. To learn more about trans-affirming practice we recommend going to transhub located [\[here\]](#).

We acknowledge the diversity of people living with HIV who breastfeed, chest-feed, or nurse their infants, including transgender men and women, cisgender women, genderqueer or nonbinary people, and others assigned female at birth.

All healthcare workers must recognise that the universal use of the term 'woman' may not fit the identity of all people for whom this document is relevant.

We encourage all healthcare workers to become familiar with the education and advice provided through AusPATH, the peak body promoting communication and collaboration among professionals and community members involved in the health, rights and well-being of trans, gender diverse and non-binary people.



Fiona Bisshop

MBBS, FRACGP, DRANZCOG, BSc (Hons)
S100 General Practitioner
President, AusPATH

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The Optimal Scenario and Context of Care

The principles underlying the ASHM Guidance for Healthcare Providers regarding Infant Feeding Options for People Living with HIV

INFORMED DECISION MAKING

An informed decision on breastfeeding must include an understanding of all the benefits, risks, limitations, alternatives and uncertainties free from coercion or pressures from friends, families or healthcare professionals.

SUPPORTING CHOICE

Recognising that some people living with HIV who have had the option to breastfeed may choose to do so and they have the right to change their mind.

ENCOURAGING EARLY DISCUSSION

For people who are considering pregnancy, who are trying to conceive, or who are pregnant, the discussion of infant feeding options should be discussed as early as possible.

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SUPPORTING HEALTHCARE PROVIDERS

Healthcare providers should be supported to ask questions, to discuss their concerns in confidence, and are encouraged to contact ASHM for linkage to professional peer support or advice.

SUPPORTING A NETWORK OF CARE

Encouraging others to be part of the discussion on the benefits and risks of breastfeeding such as partners, family, friends or peer support officers is critical to making an informed choice.

CULTURALLY APPROPRIATE SUPPORT

Counselling and discussions should be culturally appropriate, and able to be understood, including for people whose first language may not be English.

Executive Summary

That all healthcare providers should become familiar with and practice gender inclusive language to support people living with HIV who are considering their infant feeding options



2

That the safest choice to minimise HIV transmission is formula feeding

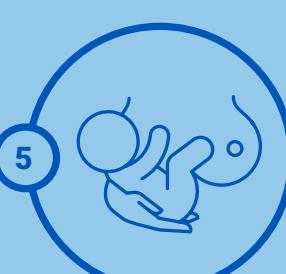
That healthcare providers should not actively recommend breastfeeding



4

That an approach based on shared decision-making and counselling, with a risk management approach for supporting people living with HIV who do choose to breastfeed should be used

That healthcare providers supporting people living with HIV who choose to breastfeed work together to evaluate whether the optimal scenario and context of care are in place to minimise HIV transmission through breastfeeding



Introduction

The construction of this guidance has been considered through numerous reviews with both specialist HIV clinicians, healthcare providers representing a range of practices in perinatal care and with a diversity of people living with HIV. It takes into consideration the rapidly changing context of research and knowledge development in this area and has been developed in parallel with a resource developed by the National Association of People with HIV Australia and Positive Women Victoria.

Recommendations for the Use of Antiretroviral Drugs in Pregnant Women with HIV Infection and Interventions to Reduce Perinatal HIV Transmission in the United States² were most recently updated by the Department of Health and Human Services in February 2021.³ This document recommends formula feeding as the strategy least likely to result in HIV transmission and does not endorse breastfeeding where the person is living with HIV. This document further recommends that:

- People who have questions about breastfeeding have the right to receive patient-centred and evidence-based counselling
- When people living with HIV choose to breastfeed, they need to be supported with information about risk reduction measures to minimise the risk

Further to the recently updated advice from the United States, the British HIV Association Guidelines for the Management of HIV in Pregnancy and Postpartum 2018 (2020 third interim update)⁴ has recommended that:

- People who are virologically suppressed on cART with good adherence and who choose to breastfeed should be supported to do so, and should be informed about the risk⁵ of transmission of HIV through breastfeeding in this situation and the requirement for extra patient and infant clinical monitoring
- When a person decides to breastfeed, they and their infant need to be reviewed monthly in a clinic for HIV RNA viral load testing during, and for two months after stopping breastfeeding; and,
- BHIVA advises that maternal cART (rather than infant pre-exposure prophylaxis) is advised to minimise HIV transmission through breastfeeding and safeguard the person's health.

This update to ASHM guidance for healthcare providers regarding infant feeding options for people living with HIV favours the 'Optimal Scenario'⁶ as discussed by researchers in the *Swiss Medical Weekly* (July 2018).

The 'Optimal Scenario' refers to the conditions identified by the authors after a comprehensive analysis of available literature, which demonstrated no occurrences of mother-to-child transmission of HIV through breastfeeding.

Where people living with HIV cannot achieve the 'Optimal Scenario', guidelines for people living with HIV should follow the current recommendations from the UK (BHIVA, March 2020 third term update) and the USA (USA perinatal guidelines, February 2021).

2 Recommendations for the Use of Antiretroviral Drugs in Pregnant Women with HIV Infection and Interventions to Reduce Perinatal HIV Transmission in the United States. HHS Panel on Treatment of Pregnant Women with HIV Infection and Prevention of Perinatal Transmission. Accessed September 29, 2020. https://clinicalinfo.hiv.gov/sites/default/files/guidelines/documents/Perinatal_GL.pdf

3 Since HIV management evolves rapidly, the HHS Panel has a mechanism to update recommendations on a regular basis. The most recent information is available on the website: What's New in the Guidelines. ClinicalInfo. Updated February 10, 2021. Accessed June 17, 2021. <https://clinicalinfo.hiv.gov/en/guidelines/perinatal/whats-new-guidelines>

4 British HIV Association guidelines for the management of HIV in pregnancy and postpartum 2018 (2020 third interim update). British HIV Association. Accessed 17 June 2021. <https://www.bhiva.org/file/5f1aab1ab9aba/BHIVA-Pregnancy-guidelines-2020-3rd-interim-update.pdf>

5 The BHIVA guidance indicates this as a 'low risk' activity however caution must be exercised in relation to counselling and support for the patient to ensure their comprehension of the relative nature of risk and the terms associated with range such as low, minimal, high etc.

6 Kahlert C, Aebi-Popp K, Bernasconi E, et al. Is breastfeeding an equipoise option in effectively treated HIV-infected mothers in a high-income setting? *Swiss Med Wkly*. 2018;148(w14648). Accessed June 17, 2021. DOI: [10.4414/smw.2018.14648](https://doi.org/10.4414/smw.2018.14648)

'As a nurse working with people living wth HIV, it's fantastic to finally have a resource to provide women and families with clear guidance and support about their options for infant feeding based on the best current evidence. For many years there have been mixed messages about infant feeding for people living with HIV. This guidance provides much needed clarity, and that will be empowering.'

Dr. Liz Crock AM

HIV Nurse Practitioner
President, ANZANAC (Victorian Branch)
An ANMF HIV Nursing Special Interest Group

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The Optimal Scenario

Researchers identified the following three factors as the 'Optimal Scenario' for minimising the risk of transmission of HIV during breastfeeding:

- 1 Adherence to cART
- 2 Under ongoing clinical care
- 3 A suppressed HIV pVL of <50 RNA copies/ml throughout the pregnancy and breastfeeding

The Optimal Context of Care

Where the parent meets the optimal scenario they can minimise, but not eliminate, the risk of forward transmission. In this situation, there are many ways healthcare providers can contribute to positive health outcomes, and in particular, support the retention of people living with HIV in antenatal care:

- All healthcare providers involved in care commit to an open, non-judgmental and unbiased approach towards breastfeeding
- The team must seek a clear understanding of the person's preference concerning their infant feeding options
- The team to utilise a discussion-based harm minimisation approach with the person
- Present the evidence for and against breastfeeding, including the current limitations of medical knowledge at this time, in a way in which the person can understand them and which is culturally appropriate (see RISKS and BENEFITS sections that follows)
- Assure the patient that the whole antenatal care team respects whatever their decision is, including the right for any decision made to change, and that any decision will not affect the quality of the antenatal care or HIV management offered to them
- Support a decision-making process that is free of judgement or coercion, including legal coercion





The National Association of People With HIV Australia (NAPWHA) in collaboration with Positive Women Victoria, has produced 'Breastfeeding for women living with HIV in Australia', a community resource for people living with HIV who may be pregnant or thinking about becoming pregnant, and considering their infant feeding options.

Infant feeding considerations

If you are living with HIV and you are pregnant or thinking about becoming pregnant, you may be thinking about breastfeeding your baby, and whether it is safe or advisable.

The information in this factsheet is provided for women who are living with HIV and want to understand the issues around breastfeeding or formula feeding.

We hope after reading this information, you will feel encouraged by the news that although medical and health experts agree that formula feeding is still the safest option, breastfeeding is increasingly being recognised as an option that may be open to some women living with HIV.

We encourage you to use this information to start a discussion with your doctor or health care team.

We recognise that for any individual woman living with HIV, there are many things to consider when deciding what is best for feeding your new baby. The information in this factsheet may be of use, but the decision will not be the same for all women. We encourage women living with HIV to:

- Take your time with this decision and consider including this for discussion early in your pregnancy or family planning process.
- Talk to your HIV peer support worker, who is there to listen to you, guide you through the information, and support you through this process.

You can find contacts for HIV peer support via napwha.org.au/hiv-peer-support/



Access and download a copy of the community resource

For more information visit these community organisation websites:

Potential Risks of Breastmilk

There are four key factors to consider regarding potential risks of HIV transmission to an infant from breastmilk:

10
1

Researchers have observed transmission through breastfeeding in the range of 0.3% (up to six months) and 0.6% (up to 12 months of breastfeeding) where the person was considered to be taking cART during pregnancy and the breastfeeding period. Of concern was that these studies actually did not have routine VL testing – so it is unclear if any transmissions happened when there was not effective cART⁷

2

Because of the ethical complexities in researching the conditions for perinatal transmission of HIV, no randomised controlled studies specifically evaluate perinatal transmission with cART versus without cART. Therefore, the evidence is drawn from studies that may have different criteria making it difficult to compare outcomes and assess the impact of different phases or stages of pregnancy, childbirth and infant feeding on HIV transmission risk

3

Even though the Swiss paper authors could not identify a case of MTCT under the 'optimal scenario' conditions, they could not exclude the possibility that transmission did or might happen under these conditions⁸

4

Even though the risk of transmission may be low, if it occurs in a single case, the consequences of HIV transmission are lifelong

Additional risks of breastfeeding by a person living with HIV may include:

- The post-partum (after delivery) period is well understood to be vulnerable (e.g., irregular sleep, elevated risk for mood disorders, many new demands on the parent) and, for some people, this may increase the risk of reduced adherence and consequently an increased HIV plasma viral load (pVL). In this period particularly, support of adherence to cART and regular monitoring of pVL is critical
- Although breast milk concentrations of cART are low,⁹ risks from longer exposure to maternal cART through breastfeeding and associated toxicity cannot be excluded.
- Episodes of mastitis or of cracked or bleeding nipples may increase the risk of HIV transmission
- An increased risk HIV related MTCT was observed when infants had received mixed feeding, i.e. among HIV-infected people when breastfeeding was accompanied by formula feeding

7 Fowler, M, Qin M, Fiscus S, et al. Benefits and risks of antiretroviral therapy for perinatal HIV prevention. *N Engl J Med.* 2016; 375:1726-1737. DOI: 10.1056/NEJMoa1511691

8 Kahlert C, Aebi-Popp K, Bernasconi E, et al. Is breastfeeding an equipoise option in effectively treated HIV-infected mothers in a high-income setting? *Swiss Med Wkly.* 2018;148(w14648). Accessed June 17, 2021. DOI: [10.4414/smw.2018.14648](https://doi.org/10.4414/smw.2018.14648)

9 Flynn P, Taha T, Cababasay M, et al. Prevention of HIV-1 transmission through breastfeeding: Efficacy and safety of maternal antiretroviral therapy versus infant nevirapine prophylaxis for duration of breastfeeding in HIV-1-infected women with high CD4 cell count (IMPAACT PROMISE): a randomized, open label, clinical trial. *J Acquir Immune Defic Syndr.* 2018; 77(4): 383-392. DOI: 10.1097/QAI.0000000000001612

"This ASHM guidance on infant feeding for people living with HIV is tremendously useful for care providers and community members around the world.

It clearly lays out an empathic way to review infant feeding choice in the context of HIV using a respectful shared-care decision making model and logically outlines the current available science.

I will be using it in my clinical practice, and I thank the authors."

Mona Loutfy

MD, FRCPC, MPH
Infectious Diseases Specialist & Professor
Women's College Hospital,
University of Toronto, Canada

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Benefits of Breastfeeding

Guidelines in Australia encourage individuals to exclusively breastmilk feed their infant for around the first six months of the baby's life¹⁰ and longer for up to 12 months and beyond as a general recommendation. Similar advice exists in many countries, including Canada, New Zealand, the UK and the USA.

Many parents consider breastmilk a simple, easy and affordable way of providing nutrition to their infant and psychologically essential for the care and development of their infant.

Research demonstrates that breastmilk has beneficial effects for the infant including:

- Breastfeeding has a range of benefits for the developing infant, including improved visual acuity, psychomotor development¹¹ and cognitive development.¹² Breastfed infants have a reduced risk of a range of serious illnesses and conditions such as gastroenteritis, respiratory illness, otitis media, allergy and sudden unexpected death in infancy (SUDI).¹³ They are also less likely to develop chronic disease later in life^{14,15}
- Breastfeeding promotes faster maternal recovery from childbirth and the return to pre-pregnancy weight, as well as delaying the return of menstrual periods. People who have breastfed have a reduced risk of breast and ovarian cancer in later life¹⁶
- Breastfeeding may assist in bonding and attachment between mothers and babies¹⁷

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Discussion

In this guidance, ASHM has endorsed the Swiss paper advocating for the 'Optimal Scenario' and added to this what ASHM considers to be the optimal context of care. Adjacent to this are the principles of a shared decision-making process, supporting informed choice, encouraging early discussion and supporting a network of care that is culturally supportive.

However, given the clinical equipoise identified in the analysis from this paper, the authors noted a strong recommendation for parents to refrain from breastfeeding in settings where they are not able to achieve all components of an optimal scenario for the prevention of transmission.

The paper's authors maintain that **healthcare workers should not actively recommend breastfeeding for people living with HIV**. This ASHM guidance supports this position and encourages all healthcare providers to ensure that provisions are made to support a person's decision to formula feed their infant.

However, upon review of the evidence to date and the considerations being debated, ASHM believes that there are several important cultural and social considerations that must be factored into the decision-making process, including:

- The potential conflict between information and advice given to people in high-income settings compared with the advice given in some resource-poor settings where the overall reduction of childhood morbidity and mortality has underpinned breastfeed

10 Core practices in pregnancy care: Preparing for breastfeeding. Pregnancy Care Guidelines. Department of Health. Updated February 4, 2021. Accessed June 17, 2021. <https://www.health.gov.au/resources/pregnancy-care-guidelines/part-b-core-practices-in-pregnancy-care/preparing-for-breastfeeding>

11 Horta BL, Bahl R, Martínez JC, Victora CG. Evidence on the long-term effects of breastfeeding: systematic review and meta-analyses. World Health Organization; 2007. Accessed June 17, 2021. https://apps.who.int/iris/bitstream/handle/10665/43623/9789241595230_eng.pdf

12 Kramer MS, Aboud F, Mironova E, et al. Breastfeeding and child cognitive development: new evidence from a large randomized trial. *Arch Gen Psychiatry*. 2008;65(5):578–84. DOI:10.1001/archpsyc.65.5.578

13 Ip S, Chung M, Raman G et al. Breastfeeding and maternal and infant health outcomes in developed countries. *Evid Rep Technol Assess*. 2007;153:1-186. PMID: 17764214

14 Horta BL, Bahl R, Martínez JC, Victora CG. Evidence on the long-term effects of breastfeeding: systematic review and meta-analyses. World Health Organization; 2007. Accessed June 17, 2021.

15 Ip S, Chung M, Raman G et al. Breastfeeding and maternal and infant health outcomes in developed countries. *Evid Rep Technol Assess*. 2007;153:1-186. PMID: 17764214

16 A review of the evidence to address targeted questions to inform the revision of the Australian Dietary Guidelines. National Health and Medical Research Council, Department of Health and Ageing. Accessed June 17, 2021. https://www.eatforhealth.gov.au/sites/default/files/files/the_guidelines/n55d_dietary_guidelines_evidence_report.pdf

17 Ibid.

- Practical and financial considerations which may make it, on balance, preferable for the person to breastfeed
- Social and cultural complexities, such as the stigmatisation of people who choose not to breastfeed, which may also lead to a fear of unwanted disclosure of their HIV status

These issues make it even more critical that the 'Optimal Scenario' **must** attend to the principles and actions described within the 'Optimal Context of Care'.

We note that there is a well informed and considered debate relating to the risks and benefit analysis of people living with HIV who have considered breastfeeding as an important and viable option.

In a study published in 2019 in the Journal of the International AIDS Society,¹⁸ the authors explore healthcare providers' current perspectives and experiences relating to infant feeding among pregnant and post-partum people living with HIV. The findings provide important insight to inform discussions about public health policy and the future directions for infant feeding guidelines when considering best practices for supporting parents, including accounting for the role of how gender, race, culture and HIV-related stigma intersect with parenthood and infant feeding. Importantly the study found that:

- The majority of provider respondents who participated in this research cared for a person living with HIV who desired to breastfeed, and a third had cared for a person who breastfed despite recommendations against it
- Providers found that the status of US guidelines and their incongruity with WHO guidelines left them without adequate resources to support people living with HIV to thoughtfully consider their infant feeding decisions

In the Journal of Law, Medicine & Ethics (2019), there is a critical and yet enlightening study that concludes with the finding that avoidance of breastfeeding by people living with HIV may not maximise health outcomes and recommends a revising of the US national guidelines in light of autonomy, harm reduction and health inequities.

However, the same journal provides a response to this study which analyses these findings and concludes that a reframing of the current US guidelines should read:

'Women who desire to breastfeed and who are adherent to antiretroviral medication, undergo regular clinical and laboratory monitoring, and have undetectable viral load (sustained for a given period), have a choice to breastfeed.'

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- Further, it is advocated that a comprehensive package of public health reforms would provide for the following:
 - Health professionals to be trained to identify people living with HIV who can breastfeed based on their viral load status at birth and other clinical and social factors (several of which the original paper identifies)
 - A personal profile and clinical tools to be developed to identify who are good candidates for breastfeeding
 - People living with HIV who choose to breastfeed receive increased adherence support and clinical monitoring, including consideration of more frequent viral load testing to ensure durable suppression

People living with HIV to be provided with counselling, clinical and social support, and home services to enable them to safely breastfeed their infant

¹⁸ Tuthill EL, Tomori C, Van Natta M, Coleman JS. "In the United States, we say, 'No breastfeeding,' but that is no longer realistic": provider perspectives towards infant feeding among women living with HIV in the United States. *J Int AIDS Soc.* 2019; 22(1). DOI: [10.1002/jia2.25224](https://doi.org/10.1002/jia2.25224)

Summary

A compelling presentation of the intersection between the policy, research and clinical practice on infant feeding was presented at a global webinar on HIV and Women (April 2021).¹⁹ The presentation stressed that the limited information and clinical standards for healthcare providers are creating challenges for healthcare providers supporting people living with HIV in decision-making around infant feeding.

Healthcare providers must do more to ensure that guidance such as these produced by ASHM address both the potential health benefits and risks related to breastfeeding for the person living with HIV as well as the potential health benefits and risks of not breastfeeding for the infant.

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The widespread awareness among stakeholders and the HIV community of U=U for sexual transmission has resulted in an increase of requests for infant-feeding guidelines to adapt and provide clear guidance on risks and benefits of breastfeeding with virologic suppression..

Our approach as healthcare providers must be to consider the challenges related to the health disparities and family, cultural, and economic values which all parents living with HIV have to face. Our challenge is to find the balance between advocating for the infant and ensuring that we are across the latest evidence, so that do not obstruct the autonomy of parents living with HIV.



¹⁹ Martel K, Cameron B. "Breastfeeding and HIV in the US and Canada: Centring Women's Lived Experiences into the Clinical, Research, and Policy Discussion", International Workshop on HIV & Women 2021: From Adolescence to Menopause. YouTube. Published May 18, 2021. Accessed June 17, 2021. <https://www.youtube.com/watch?v=XcvtrdHvxE4>



'Finally, a practical guide that takes on the real challenges when considering such an emotive issue as breastfeeding. There already exists an array of diverse and strong public opinions on this issue. This guide offers balanced information that will not only empower and support woman to safely consider their options but helps remove that stigma of guilt'

Katherine Leane

President Positive Life South Australia.2021
HIV Positive Woman and Mother of 34 years.

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Your multidisciplinary healthcare team and their role



Access and download a copy
of the community resource



HIV specialist doctor

Once your pregnancy is confirmed, your **HIV specialist doctor** who prescribes your HIV medications, refers you to either (or both) an **Infectious Diseases specialist doctor** and/or an **Obstetrician**. This will depend on the Australian State or Territory where you live.

If you or your baby are unwell, or you develop any breast or nipple infection, it is important to seek advice from your **General Practitioner (GP)** as soon as you suspect a breast infection.

In this period, your **HIV specialist doctor** will coordinate the regular blood tests for you and your baby. These blood tests monitor your viral load and check that your baby has not contracted HIV from your breastmilk.

Infectious Diseases specialist doctor

An **Infectious Diseases specialist doctor** provides ongoing care and management of HIV and any other infections during pregnancy. This includes providing you with education about methods of reducing HIV transmission to your baby.

They will ensure that you are linked to an **HIV multidisciplinary team** and **pediatric infectious diseases team**.

Note: A Sexual Health or HIV s100 prescribing doctor who specialises in the care of women living with HIV and pregnancy may fulfill the same role as an Infectious Diseases specialist doctor.

Make your decision only after a discussion with your HIV doctor and HIV specialist obstetrician (and your partner if you choose). Make the decision together after considering all the risks and benefits of breastfeeding.

This discussion needs to take place early in your pregnancy – within your first trimester, so that information and support can be arranged and provided for you.

For more information visit these community organisation websites:

Obstetrician	<p>Your obstetrician arranges your routine blood tests and monitors your blood results specific to pregnancy. They arrange ultrasounds to check on your baby's growth and position baby's birth.</p> <p>They also have specialist skills to manage complex or high-risk pregnancies and births. They manage and discuss your labour as either a natural birth or a caesarean.</p>
HIV multidisciplinary team (MDT)	<p>Pregnant women with HIV will be linked into an multidisciplinary team (MDT) made up of many different people. These may include:</p> <p>Specialist HIV nurses and nurse practitioners who are linked in with your MDT service and may provide education, counselling about HIV and its management, and talk to you about feeding options for infants.</p> <p>Specialist midwives who are involved in your 'obstetric care', the phase relating to childbirth and the processes associated with it.</p> <p>Lactation consultants who specialise in helping mothers to breastfeed. They provide information and support in showing you the correct techniques that will help you avoid breast infections and other problems.</p> <p>Social workers who can provide social support should you need it.</p> <p>A pediatric infectious diseases team who can prescribe the antiretrovirals for your baby and manage your baby's regular blood tests after birth.</p>
HIV peer support worker / HIV peer navigator	<p>An HIV peer support worker or HIV peer navigator can help support you in communicating with your multidisciplinary team. They can also provide information on where you can find HIV specialist healthcare professionals. In some cases, they may be able to connect you with other women living with HIV who are/have breastfed and may be able to provide social support.</p> <p>Contact Positive Women Victoria or your state-based HIV organisation. These contacts can also be found on the NAPWHA website – https://napwha.org.au/hiv-peer-support/</p>
	 <p>Access and download a copy of the community resource</p>

For more information visit these community organisation websites:

Strategies to Reduce the Risk of HIV Transmission when Breastfeeding

The transmission reduction strategies which follow aim to provide the safest means of breastfeeding for parents living with HIV. These strategies require that the person maintains an undetectable HIV viral load and only breastfeed if they and the infant are in good health (i.e. breast health, gut health etc). The critical nature of maintaining an undetectable viral load has recently been found in a study where in "women receiving mART, increased MVL and decreased CD4 count during breastfeeding were associated with increased risk of infant HIV-1 infection."²⁰

Maternal Care Strategies

Social Support

- Maintain regular engagement with healthcare providers
- Support people to maintain a healthy supportive environment which may include family support, support from friends, and peer support

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Clinical Support

- Support excellent adherence to antiretroviral medications throughout breastfeeding
- Maternal HIV viral loads to be monitored at four-weekly intervals during breastfeeding to ensure continued viral suppression (plasma viral load <50 copies/mL)
- In the event of virological failure, the patient to be advised to stop breastfeeding and commence formula feeding. After the infant is formula-fed, do not return to breastfeeding
- Store expressed breast milk when virally suppressed for times of need²¹
- Breastfeed exclusively for as short a period as possible and for no longer than six months

- Although home pasteurisation or "flash-heating" of breast milk has been found to "kill the HIV in breast milk"²² this option and the proper technique of doing so should occur only in close consultation and upon advice of a lactation consultant.^{23, 24}
- When weaning to solids, people should follow standard Australian Breastfeeding Association guidance,²⁵ introducing complementary solids after six months of age. It is recommended that people living with HIV who wean their infant off breastmilk is to change to formula milk only and then introduce solid food gradually over a few weeks. All parents should consult their HIV healthcare team well in advance to plan their strategy for transitioning their infant from breastmilk to solid food

Clinical Indications

- **Mastitis/Breast Infections:** Suspend breastfeeding from both breasts if the parent has mastitis/breast infection (including cracked or bleeding nipples) in either breast. The infant should be commenced on formula feeding, and the person should not return to breastfeeding or use stored expressed breast milk. Cracked or bleeding nipples can be caused by infections or irritation from breastfeeding. Nipple health is critical to lactating parents, and it important to consider referring breastfeeding parents to a lactation consultant to help them understand how to take care of their breasts and nipples
- **Maternal gastroenteritis:** Suspend breastfeeding if the mother has a gastrointestinal infection; either use stored expressed breast milk (EBM) from ≥ 2 days before the gastrointestinal illness or formula feed
- **Infant gastroenteritis:** Stop breastfeeding if the infant has gastrointestinal symptoms and start formula feeding. Formula feeding should then continue after gastrointestinal symptoms in the infant have resolved

Do not return to breastfeeding after the infant is formula-fed in any of the above situations.

20 Flynn PM, Taha TE, Cababasay M, Butler K, Fowler MG, Mofenson LM, Owor M, Fiscus S, Stranix-Chibanda L, Coutsoudis A, Gnanashanmugam D, Chakhtoura N, McCarthy K, Frenkel L, Beck I, Mukuzunga C, Makanani B, Moodley D, Nemadzira T, Kusakara B, Patil S, Vhembo T, Bobat R, Mmbaga BT, Masenya M, Nyati M, Theron G, Mulenga H, Shapiro DE; and the PROMISE Study Team. Association of Maternal Viral Load and CD4 Count with Perinatal HIV-1 Transmission Risk during Breastfeeding in the PROMISE Postpartum Component. *J Acquir Immune Defic Syndr*. 2021 Jun 8. doi: 10.1097/QAI.0000000000002744. Epub ahead of print. PMID: 34108383.

21 Maternity - Breast Milk: Safe Management. Policy Directive. NSW Health. https://www.seisihd.health.nsw.gov.au/sites/default/files/documents/PD2010_019.pdf

22 Israel-Ballard K, Donovan R, Chantry C, Coutsoudis A, Sheppard H, Sibeko L, Abrams B. Flash-heat inactivation of HIV-1 in human milk: a potential method to reduce postnatal transmission in developing countries. *J Acquir Immune Defic Syndr*. 2007 Jul 1;45(3):318-23. doi: 10.1097/QAI.0b013e318074eecc. PMID: 17514015.

23 HIV in breastmilk killed by flash-heating, new study finds Available at https://health.ucdavis.edu/welcome/features/20070620_flashheated_breastmilk/index.html Accessed 17 June 2021

24 Positive Women Inc. NZ/Aotearoa, Feeding Options for Babies who's mothers have HIV Available at <https://positivewomen.co.nz/wp-content/uploads/2019/06/5-0-PW6445-Feeding-Options-Brochure.pdf> Accessed 17 June 2021

25 Breastfeeding and family foods. Australian Breastfeeding Association. Updated July, 2020. Accessed 17 June 2021. <https://www.breastfeeding.asn.au/bf-info/weaning-and-introducing-solids/solids>

'At [The Well Project](#), we are committed to ensuring women living with HIV have access to comprehensive and accurate information about their bodies, lives, and health, and we know breastfeeding with HIV is an issue that has been overlooked for far too long in high-resource settings.

It is so encouraging that healthcare providers across Australia are listening to and amplifying the voices of women living with HIV so that they are able to provide the best care and optimise the quality of life of women and families affected by HIV.

We encourage all our allies across Australia to sign on to our [Expert Consensus Statement](#) which provides a map to help guide all of our efforts to support bodily autonomy and informed decision-making for women and other birthing parents living with HIV.'

Krista Martel

Executive Director
The Well Project



Infant Care Strategies

For the most up to date clinical advice on any matters about cART infant care strategies, please refer to the BHIVA²⁶ and US guidelines²⁷ which are regularly updated and can be found at the links below. The following advice is based upon current guidelines and is subject to change:

Infant testing regimen during breastfeeding

Infants to be tested for plasma HIV RNA or blood lymphocyte HIV DNA:

- Within the first 48 hours (test the baby, not cord blood), prior to hospital discharge
- Then again at two weeks of age
- Then again at four-weekly intervals (until breastfeeding has stopped)

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Infant testing regimen after breast feeding ceased

- Infants to be tested for plasma HIV RNA or blood lymphocyte HIV DNA:
- At four weeks after last breastmilk feeding has stopped
- At eight weeks after last breastmilk feeding has stopped
- And at 18-24 months for HIV antibodies to exclude rare late postnatal HIV infection. Seroreversion (clearance of maternal HIV antibodies) should also be documented

Infant gastroenteritis

- If an infant has gastroenteritis and is formula-fed, the infant can be managed according to standard gastroenteritis management (i.e. fluid management). **Stored breast milk should not be used for infants with gastroenteritis**
- Breastfeeding should not resume, even after the resolution of the gastroenteritis

If formula feeding is commenced

- If formula feeding has commenced for illness or any other reason, breastfeeding should be stopped and not resumed

Infant clinical visits

- The infant should have a clinical visit at the time of each testing

Infant immunisation

- This should be followed as per the Australian immunisation schedules²⁸

26 British HIV Association guidelines for the management of HIV in pregnancy and postpartum 2018 (2020 third interim update). British HIV Association. Accessed 17 June 2021. <https://www.bhiva.org/file/5f1aab1ab9aba/BHIVA-Pregnancy-guidelines-2020-3rd-interim-update.pdf>

27 Recommendations for the Use of Antiretroviral Drugs in Pregnant Women with HIV Infection and Interventions to Reduce Perinatal HIV Transmission in the United States. HHS Panel on Treatment of Pregnant Women with HIV Infection and Prevention of Perinatal Transmission. Accessed 17 June 2021. https://clinicalinfo.hiv.gov/sites/default/files/guidelines/documents/Perinatal_GL.pdf

28 National Immunisation Program Schedule. Department of Health. Updated January 5, 2021. Accessed June 17, 2021. <https://www.health.gov.au/health-topics/immunisation/immunisation-throughout-life/national-immunisation-program-schedule>

Medical appointments for you and your infant

If you decide to breastfeed, you and your baby will need to attend regular medical appointments with your HIV healthcare team. You and your baby will be required to have regular blood tests to check that your viral load remains undetectable and that your baby remains HIV negative.

Your baby will also receive an HIV test at 48 hours after birth, at two weeks of age and then at four-week intervals until breastfeeding has stopped. If a test finds your viral load is no longer undetectable, you must stop breastfeeding and start formula feeding. You cannot return to breastfeeding in absence of expert advice from healthcare team. Your baby will also continue having immunisations as per the Australian immunisation schedule.

After you have stopped breastfeeding, you and/or your baby will have several more blood tests. This is to test that the baby has cleared HIV antibodies they received from your breastmilk.



Access and download a copy
of the community resource



For more information visit these community organisation websites:

Appendix A - Australian Healthcare Providers Professional References and Referral Sources

The following organisations listed provide support and resources on matters related to infant feeding and parental support.

The **Australian College of Midwives** (ACM) is the peak professional body for midwives in Australia. They support the midwifery workforce by advocating for the profession at a government level, promoting the benefits of midwifery care to the wider community and ensuring midwives in Australia are supported with industry information, quality education, career development and personal support through all stages of their career.

The **Breastfeeding Health Initiative** focuses on improving healthcare for babies, their mothers and families by ensuring all mothers, regardless of their feeding choices and circumstances, receive unbiased information, appropriate support and factual advice in both the antenatal and postnatal period

The **Australian Breastfeeding Association** (ABA) is Australia's peak breastfeeding information and support services. The ABA provides up-to-date information and continuing education for health professionals working with mothers and babies.

The Australian Breastfeeding Association (ABA) runs the **National Breastfeeding Helpline 1800 Mum 2 Mum (1800 686 268)**. The Breastfeeding Helpline is available 24 hours a day, seven days a week. It is staffed by trained, volunteer counsellors who answer calls on a roster system in their own homes.

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Lactation Consultants of Australia and New Zealand provides a uniquely southern hemisphere approach to breastfeeding and lactation. As the peak body for lactation professionals in Australia and New Zealand, their goal to support lactation consultants and medical professionals in order to improve the experiences of breastfeeding mothers.

The **NHMRC Infant Feeding Guidelines (2021)** are written to assist health workers to provide consistent advice about breastfeeding and infant feeding. They provide a review of the evidence and clear recommendations on infant feeding for health workers.

AusPATH actively promotes communication and collaboration among professionals and community members involved in the health, rights and well-being of trans, gender diverse and non-binary people.

The National Association of People Living with HIV Australia hosts the **Network of Women Living with HIV**, known as Femfatales. This is an advisory group by and for women living with HIV, constituted to provide collaboration between those involved in policy and advocacy work for women living with HIV in Australia.

Women's Healthcare Australasia (WHA) is a non-profit community of more than 140 maternity services in every state and territory. This link below provides a map and easy access to details for all these services.

Raising Children provides up-to-date, evidence-based, scientifically validated information about raising children and strategies for parents and carers.

Rainbow and Same-Sex parents and families

Breastfeeding and Bottle feeding

Professional resources and links

All sites accessed were current as of May 30, 2021.

Organisations listed are for reference only and does not imply endorsement of this guidance document.

Appendix B -

Annotated Bibliography of key reference materials for healthcare providers on Infant Feeding for people living with HIV

Below are some the key reference and academic publications which have been published with reference to issues pertaining to infant feeding options for people living with HIV as discussed in this guidance

World Health Organization Updated recommendations on HIV prevention, infant diagnosis, antiretroviral initiation and monitoring

March 2021

A rolling review undertaken to update the Spectrum mathematical model summarised the risk of vertical transmission according to maternal viral load. The subset of studies comparing transmission with a viral load below and above 1000 copies/ml showed overall 0.22% versus 5.8% transmission rates, respectively (0.22% versus 5.8% for formula feeding and 0.38 versus 5.3% for breastfeeding). The subset of studies comparing viral load below and above 400 copies/ml showed overall 0.41% versus 3.3% transmission rates, respectively (0.36% versus 3.5% for formula feeding and 1.8% versus 7.3% for breastfeeding). Although the time of transmission is difficult to determine, mother-to-child transmission events were observed, albeit at low proportions, even with low levels of virus.

The risk of HIV transmission remains as long as breastfeeding continues. If the 9-month test is conducted earlier than three months after cessation of breastfeeding, infection acquired in the last days of breastfeeding may be missed. Retesting at 18 months or three months after cessation of breastfeeding (whichever is later) should be carried out for the final assessment of HIV status. If breastfeeding extends beyond 18 months, the final diagnosis of HIV status can only be assessed at the end of breastfeeding.

If breastfeeding ends before 18 months, the final diagnosis of HIV status with antibody testing can only be assessed at 18 months. Antibody testing should be undertaken at least three months after cessation of breastfeeding (to allow for the development of HIV antibodies). For infants younger than 18 months old, NAT should be performed to confirm infection. If the infant is older than 18 months, negative antibody testing confirms that the infant is uninfected; positive antibody testing confirms the infant is infected.

Summary points taken from the Updated recommendations on HIV prevention, infant diagnosis, antiretroviral initiation and monitoring: March 2021. Geneva: World Health Organization; 2021.

HIV-Infected Mothers Who Decide to Breastfeed Their Infants Under Close Supervision in Belgium: About Two Cases

May 2020

Breastfeeding by HIV-infected mothers remains a complicated dilemma for health professionals. Exclusive artificial breastfeeding remains the most reliable and safe way to prevent transmission in developed countries. Few studies discuss the consequences of breastfeeding on children when mothers are infected with HIV in industrialised countries. The current recommendations advise on supporting the decision of HIV-infected mothers who really want to breastfeed but remain vague about the strategies that should be implemented. There is a clear unmet need to clarify these issues in order to best accompany HIV-infected women in their choice to breastfeed while ensuring the safety of their infants.

Bansacal N, Van der Linden D, Marot J-C and Belkhir I (2020) HIV-infected mothers who decide to breastfeed their infants under close supervision in Belgium: About two cases. *Front. Pediatr.* 8:248.

23

"In the United States, we say, 'No breastfeeding,' but that is no longer realistic": provider perspectives towards infant feeding among women living with HIV in the United States

January 2019

This paper explores providers' current perspectives and experiences around infant feeding among pregnant and post-partum WLHIV. The findings provide important insight to inform professional organizations discussions about public health policy as they consider future directions for infant feeding guidelines among WLHIV. Ultimately, when considering best practices for supporting WLHIV, accounting for the role of how gender, race, culture and HIV-related stigma intersect with motherhood and infant feeding is paramount.

The majority of provider respondents cared for a WLHIV who desired to breastfeed, and a third had WLHIV who breastfed despite recommendations against it. Providers found that the status of US guidelines and their incongruity with WHO guidelines left them without adequate resources to support WLHIV's infant feeding

decisions. Our findings provide important insight to inform professional associations' discussions about public health policy as they consider future directions for infant feeding guidelines among WLHIV.

Tuthill, E. L., Tomori, C., Van Natta, M. and Coleman, J. S. "In the United States, we say, 'No breastfeeding,' but that is no longer realistic": provider perspectives towards infant feeding among women living with HIV in the United States. *J Int AIDS Soc.* 2019; 22(1):e25224.

Breastfeeding with HIV: An Evidence-Based Case for New Policy

April 2019

To help eliminate perinatal HIV transmission, the US Department of Health and Human Services recommends against breastfeeding for women living with HIV, regardless of viral load or combined antiretroviral therapy (cART) status. This article assesses the evidence and ethical justification for current policy, with attention to pertinent racial and health disparities. The article concludes that avoidance of breastfeeding by women living with HIV may not maximise health outcomes and discusses the recommendation for revising national guidelines in light of autonomy, harm reduction and health inequities.

Gross MS, Taylor HA, Tomori C, Coleman JS. Breastfeeding with HIV: An Evidence-Based Case for New Policy. *The Journal of Law, Medicine & Ethics.* 2019;47(1):152-160.

The Ethics of Breastfeeding by Women Living with HIV/AIDS: A Concrete Proposal for Reforming Department of Health and Human Services Recommendations

April 2019

In response to the article in an immediately prior edition of this journal (see above), the authors of this response consider a reframing of current US guidelines as a statement which would read: 'Women who desire to breastfeed and who are adherent to antiretroviral medication, undergo regular clinical and laboratory monitoring, and have undetectable viral load (sustained for a given period), have a choice to breastfeed' and a full package of public health reforms would provide for the following:

1. Health professionals should be trained to identify WLHIV who can safely breastfeed based on their viral load status at birth and other clinical and social factors, several of which are identified in Gross et al. paper.
2. A risk profile and clinical tools should be developed to identify people who are good candidates for breastfeeding.

3. WLHIV who choose to breastfeed should receive increased adherence support and clinical monitoring, including consideration of more frequent viral load testing to ensure durable suppression.
4. WLHIV should be provided with counselling, clinical and social support, and home services that could enable them to safely breastfeed their children.

Gostin LO, Kavanagh MM. The Ethics of Breastfeeding by Women Living with HIV/AIDS: A Concrete Proposal for Reforming Department of Health and Human Services Recommendations. *The Journal of Law, Medicine & Ethics.* 2019;47(1):161-164.

Women living with HIV in high-income settings and breastfeeding

October 2019

This opinion article challenges the guidelines in high-income settings recommend breastfeeding avoidance amongst women living with HIV (WLWH). Increasingly, WLWH in high-income settings, who are well-treated with fully suppressed viral loads, are choosing to breastfeed their infants, even with these recommendations. The purpose of this article is to review existing research and guidance on infant feeding amongst WLWH in high-income countries and to identify gaps in this evidence that require further investigation. The authors conclude that there is a need for collecting enhanced surveillance data on WLWH who breastfeed and their infants to augment clinical guidance in high-income settings.

Moseholm E, Weis N (Copenhagen University Hospital, Hvidovre; University of Copenhagen, Copenhagen, Denmark). Women living with HIV in high-income settings and breastfeeding (Review). *J Intern Med* 2020; 287:19-31.

Moving closer to what women want? A review of breastfeeding and women living with HIV in the UK and high-income countries

December 2019

Dolutegravir versus efavirenz in women starting HIV therapy in late pregnancy (DolPHIN-2): an open-label, randomised controlled trial

Late initiation of HIV antiretroviral therapy (ART) in pregnancy is associated with not achieving viral suppression before giving birth and increased mother-to-child transmission of HIV. This study aimed to investigate virological suppression before giving birth with dolutegravir compared with efavirenz, when initiated during the third trimester. A longer-term follow-up to detect transmissions during breastfeeding is ongoing as part of this study.

Freeman-Romilly, N., Nyatsanza, F., Namiba, A. and Lyall, H. (2020), Moving closer to what women want? A review of breastfeeding and women living with HIV in the UK and high-income countries. *HIV Med.* 21: 1-8.

Is breastfeeding an equipoise option in effectively treated HIV-infected mothers in a high-income setting?

July 2018

Given the theoretically very low risk of transmission by breastfeeding with cART, and the advantages and benefits of breastfeeding, also in industrialised countries, the strong recommendation to HIV-infected mothers to refrain from breastfeeding in this setting may no longer be justified. The authors propose how to proceed in Switzerland when an HIV-infected woman considers breastfeeding. We advocate a shared decision-making process and suggest a list of topics on which to provide unbiased information for the HIV-infected mother to enable her comprehensive understanding of one or the other decision. Although breastfeeding still should not be actively recommended in Switzerland, any HIV-infected mother, regardless of her geographical and cultural background, who decides to breastfeed should be supported by the best strategy to achieve optimal medical care for both herself and her child.

Kahlert, Christian; Aebi-Popp, Karoline; Bernasconi, Enos; Martinez de Tejada, Begoña; Nadal, David; Paioni, Paolo; Rudin, Christoph; Staehelin, Cornelia; Wagner, Noémie; Vernazza, Pietro (2018). Is breastfeeding an equipoise option in effectively treated HIV-infected mothers in a high-income setting? *Swiss Medical Weekly*, 148:w14648.

A qualitative study exploring infant feeding decision-making between birth and 6 months among HIV-positive mothers

October 2018

This study found that HCPs play a pivotal role in providing infant feeding support to HIV infected mothers but need regular updates to ensure advice is correct and appropriate. The key messages of this study include:

- HIV-infected women are strongly motivated to comply with infant feeding counselling messages from HCPs and resist contrary messages from friends and family.
- Infant feeding counselling messages given to HIV-infected mothers by HCPs are often outdated, confused and prescriptive, and fail to provide individual support, leading to inappropriate infant feeding decisions.
- In addition to skills development for facility-based HCPs, alternative approaches to providing accessible, community-based infant feeding counselling and support for HIV infected breastfeeding women should include training and deployment of peer counsellors, community health workers, and use of support groups.

Horwood, C, Jama, NA, Haskins, L, Coutsoudis, A, Spies, L. A qualitative study exploring infant feeding decision-making between birth and six months among HIV-positive mothers. *Matern Child Nutr*. 2019; 15:e12726.

Prevention of HIV-1 Transmission Through Breastfeeding: Efficacy and Safety of Maternal Antiretroviral Therapy Versus Infant Nevirapine Prophylaxis for Duration of Breastfeeding in HIV-1-Infected Women With High CD4 Cell Count (IMPAACT PROMISE): A Randomized, Open-Label, Clinical Trial

April 2018

No randomised trial has directly compared the efficacy of prolonged infant antiretroviral prophylaxis versus maternal antiretroviral therapy (mART) for the prevention of mother-to-child transmission throughout the breastfeeding period. This study found that both mART and iNVP prophylaxis strategies were safe and associated with very low breastfeeding HIV-1 transmission and high infant HIV-1-free survival at 24 months.

Flynn PM, et al Prevention of HIV-1 Transmission Through Breastfeeding: Efficacy and Safety of Maternal Antiretroviral Therapy Versus Infant Nevirapine Prophylaxis for Duration of Breastfeeding in HIV-1-Infected Women With High CD4 Cell Count (IMPAACT PROMISE): A Randomized, Open-Label, Clinical Trial. *J Acquir Immune Defic Syndr*. 2018 Apr 1;77(4):383-392.

The 2016 WHO recommendations on HIV and infant feeding

2016

1. Mothers living with HIV should breastfeed for at least 12 months and may continue breastfeeding for up to 24 months or longer (similar to the general population) while being fully supported for ART adherence (see the WHO consolidated guidelines on ARV drugs for interventions to optimise adherence).
2. National and local health authorities should actively coordinate and implement services in health facilities and activities in workplaces, communities and homes to protect, promote and support breastfeeding among women living with HIV.
3. Mothers living with HIV and healthcare workers can be reassured that ART reduces the risk of postnatal HIV transmission in the context of mixed feeding. Although exclusive breastfeeding is recommended, practising mixed feeding is not a reason to stop breastfeeding in the presence of ARV drugs.
4. Mothers living with HIV and healthcare workers can be reassured that shorter durations of breastfeeding of fewer than 12 months are better than never initiating breastfeeding at all.

World Health Organization, United Nations Children's Fund. Guideline: updates on HIV and infant feeding: the duration of breastfeeding, and support from health services to improve feeding practices among mothers living with HIV. Geneva: World Health Organization; 2016.

Why is Breast-feeding a risk factor for HIV-1 transmission despite HIV-1 infected mothers receiving combination ART (cART)?

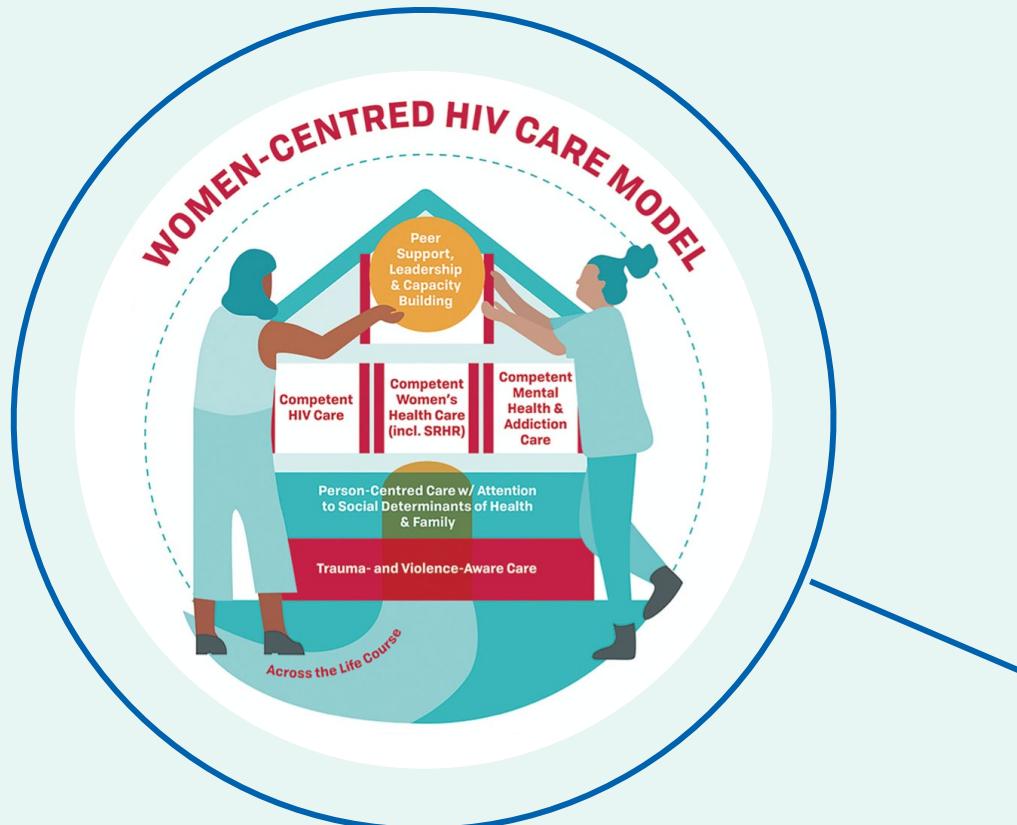
2015

This literature review aimed to investigate why breastfeeding is still a risk factor despite HIV-1-infected mothers being on effective combination ART (cART)? This review assesses the associated factors that contribute to the increased risk of HIV-1 transmission to the infant via breastfeeding.

This study evaluates and highlights the significant differences between the HIV-1 transmission rates between breastfeeding and formula feeding; it recognises the different causative factors that may contribute to the increased risk of HIV-1 transmission through breastfeeding and evaluates the impact and efficacy of antiretroviral prophylaxis for mothers who breastfeed by comparing mother-to-child transmission rates.

Anuttara, B. Why is Breast-feeding a risk factor for HIV-1 transmission despite HIV-1 infected mothers receiving combination ART (cART)? 'Edinburgh University Library' 2015

26



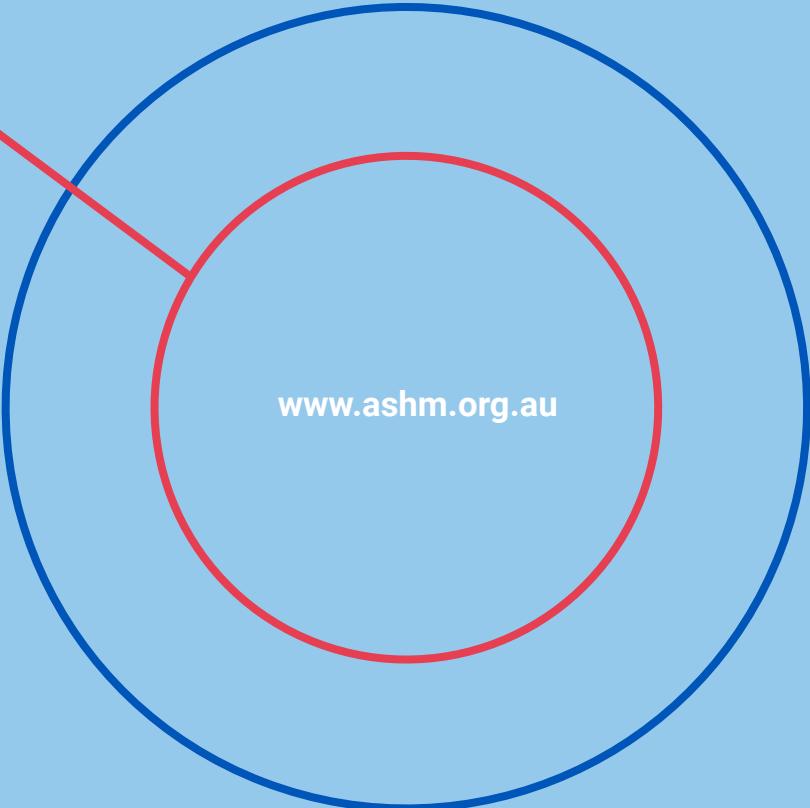
'A Women-Centred HIV Care (WCHC) Model is a result of collective research and discussions that concluded in new ways to address the health and wellbeing priorities of women living with HIV across their life course. The consensus among women living with HIV in the Salamander Trust's Global Values and Preferences survey (GVPS) commissioned by the World Health Organization (WHO) to inform the consolidated guideline on sexual and reproductive health and rights (SRHR) of women living with HIV is clear that all women—including those living with HIV—need humane, holistic services that take into account the different stages of a woman's life.'

Loutfy M, Tharao W, Kazemi M, et al. Development of the Canadian Women-Centred HIV Care Model Using the Knowledge-to-Action Framework. *Journal of the International Association of Providers of AIDS Care (JIAPAC)*. January 2021. doi:10.1177/2325958221995612



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