HIV AND INFANT FEEDING

UPDATED WHO GUIDELINES, OCTOBER 2015

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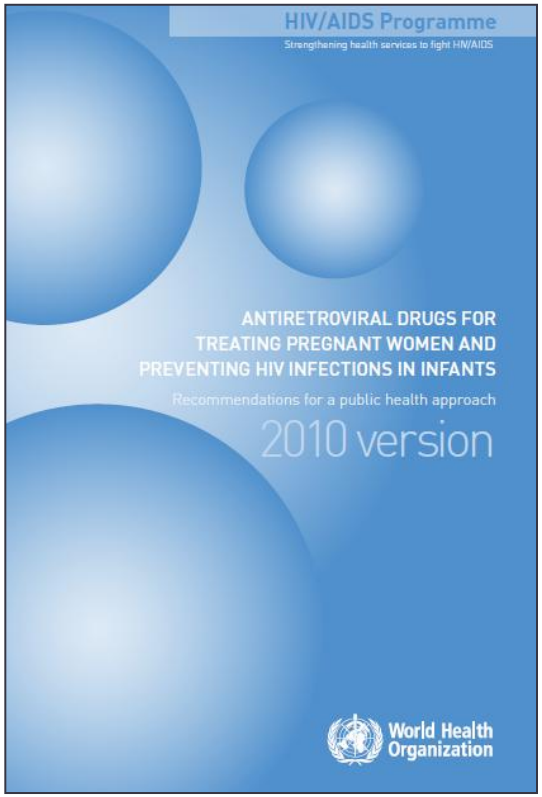
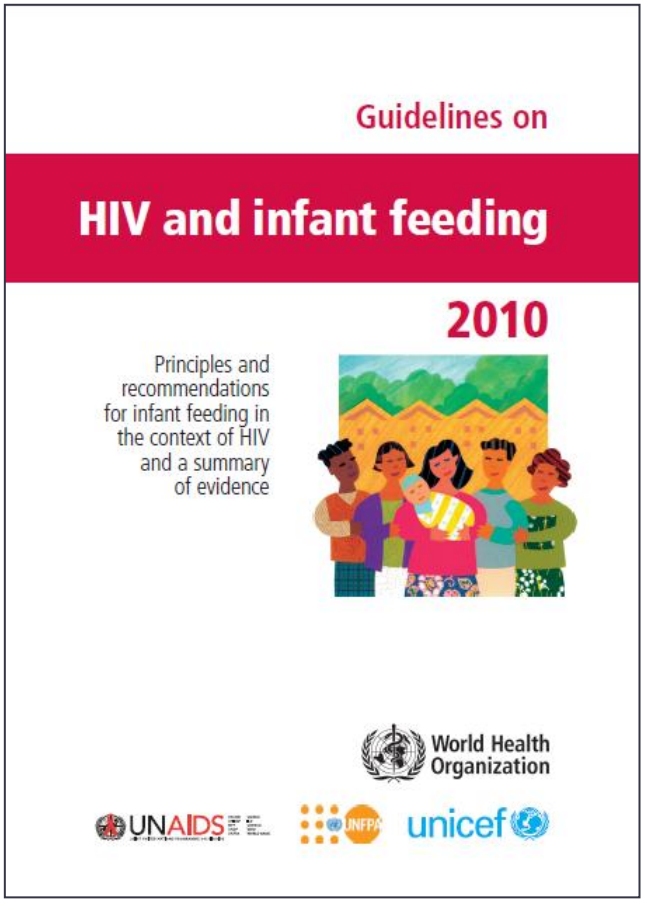
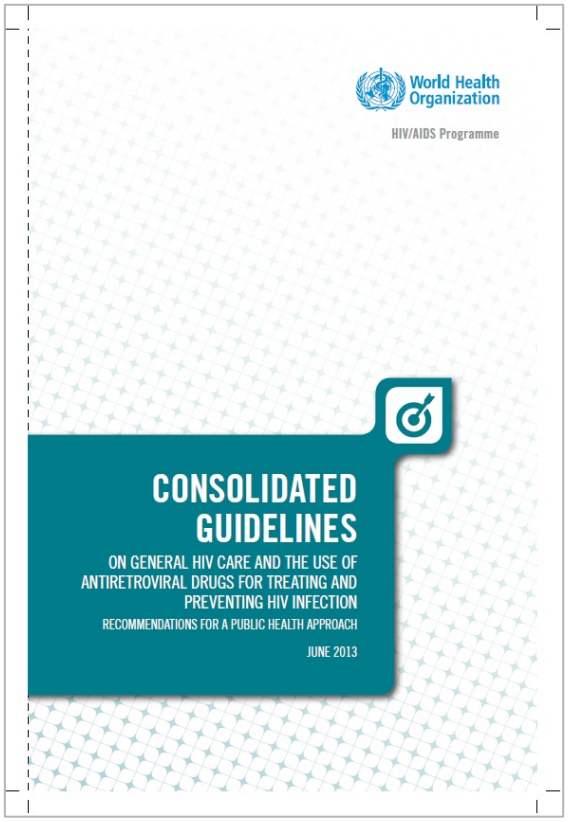
Maternal, Newborn, Child and Adolescent Health

World Health Organization

WHO guidelines

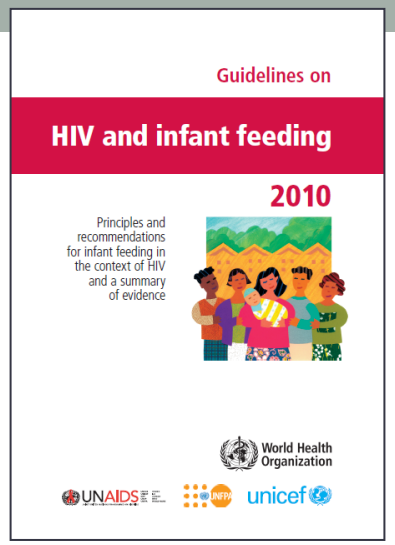






http://www.who.int/hiv/en/

Setting national recommendations for infant feeding in the context of HIV



National (or sub-national) health authorities should decide whether health services will principally counsel and support mothers known to be HIV-infected to:

- breastfeed and receive ARV interventions, or,
- avoid all breastfeeding,

as the strategy that will most likely give infants the greatest chance of **HIV-free survival.**

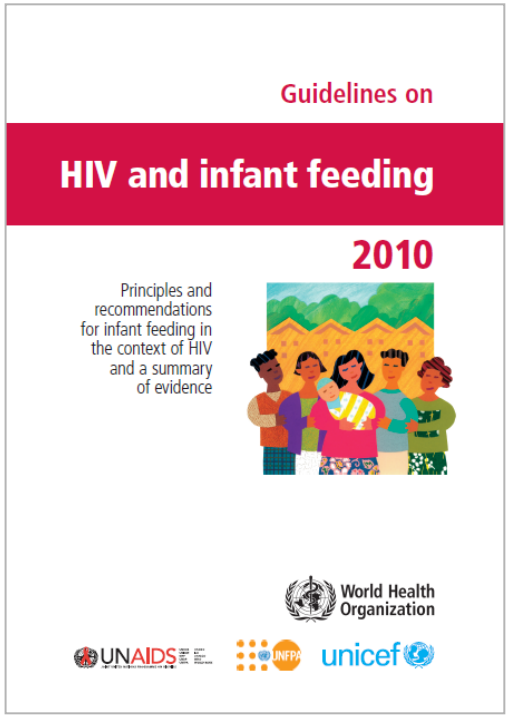
This decision should be based on international recommendations and consideration of the socio-economic and cultural contexts of the populations served by Maternal and Child Health services, the availability and quality of health services, the local epidemiology including HIV prevalence among pregnant women and main causes of infant and child mortality and maternal and child under-nutrition

… in settings where national authorities decide to promote and support BF and ARVs …

Which breastfeeding practices and for how long?

Mothers known to be HIV-infected (and whose infants are HIV uninfected or of unknown HIV status) should exclusively breastfeed their infants for the first 6 months of life, introducing appropriate complementary foods thereafter, and continue breastfeeding for the first 12 months of life.

Breastfeeding should then only stop once a nutritionally adequate and safe diet without breast milk can be provided.



22 UNAIDS priority countries (2012)

- The vast majority have adopted Breastfeeding with ARVs as policy

Questions raised

Can a country recommend exclusive breastfeeding and ARVs to HIV-infected mothers even when rates of EBF are low?

Do HIV-infected mothers really need to stop breastfeeding, especially if they are on lifelong ART?

Do ARVs reduce transmission if the mother does not exclusively breastfeed?

Is it important to promote exclusive breastfeeding if ARVs are effective even when mothers mix feed?

How to give health workers confidence to want to recommend HIV-infected mothers to breastfeed while receiving ART/ARVs?

Barriers to implementing WHO's exclusive breastfeeding policy for women living with HIV in sub-Saharan Africa: an exploration of ideas, interests and institutions

by Eamer, GG and Randall, GE

Int J Health Plann Manage. 2013 Jul-Sep;28(3): 257-68

'Findings suggest that WHO Guidelines on preventing vertical transmission of HIV through exclusive breastfeeding in resource-limited settings are not being translated into action by governments and front-line workers because of a variety of structural and ideological barriers.'

Mma bana study

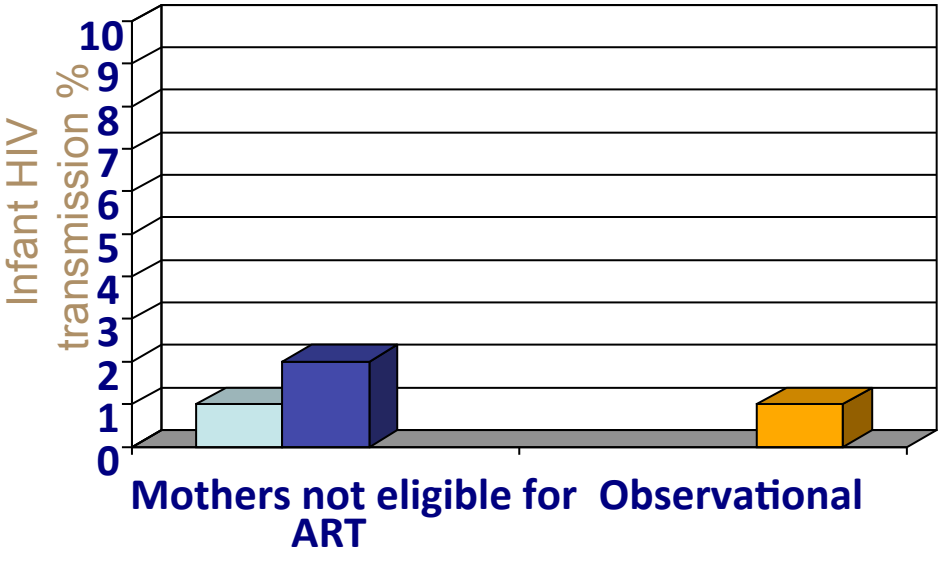
2 randomised arms and one observational

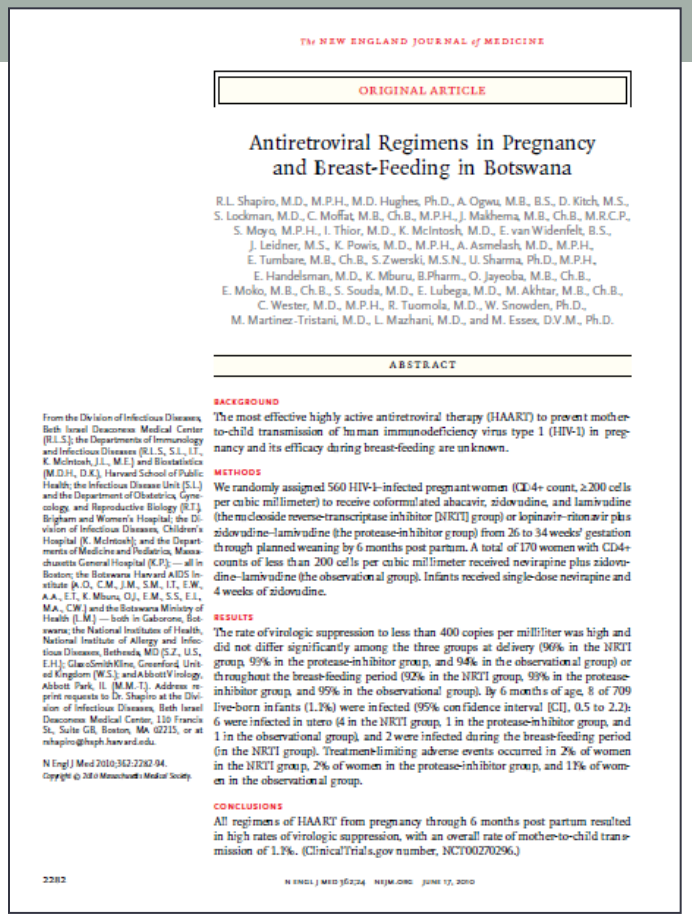
Mothers not eligible for ART received either:

lopinavir/ritonavir and combivir } for 6m

or abacavir/AZT/3TC } while BF

Mothers eligible for ART – outcomes observed





The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

Antiretroviral Regimens in Pregnancy and Breast-Feeding in Botswana

R.L. Shapiro, M.D., M.P.H., M.D. Hughes, Ph.D., A. Ogwu, M.B., B.S., D. Kitch, M.S., S. Lockman, M.D., C. Moffat, M.B., Ch.B., M.P.H., J. Makhema, M.B., Ch.B., M.R.C.P., S. Moyo, M.P.H., I. Thior, M.D., K. McIntosh, M.D., E. van Widenfelt, B.S., J. Leidner, M.S., K. Powis, M.D., M.P.H., A. Asmelash, M.D., M.P.H., E. Tumbare, M.B., Ch.B., S. Zwerski, M.S.N., U. Sharma, Ph.D., M.P.H., E. Handelsman, M.D., K. Mburu, B.Pharm., O. Jayeoba, M.B., Ch.B., E. Moko, M.B., Ch.B., S. Souda, M.D., E. Lubega, M.D., M. Akhtar, M.B., Ch.B., C. Wester, M.D., M.P.H., R. Tuomola, M.D., W. Snowden, Ph.D., M. Martinez-Tristani, M.D., L. Mazhani, M.D., and M. Essex, D.V.M., Ph.D.

ABSTRACT

BACKGROUND

The most effective highly active antiretroviral therapy (HAART) to prevent mother-to-child transmission of human immunodeficiency virus type 1 (HIV-1) in pregnancy and its efficacy during breast-feeding are unknown.

METHODS

We randomly assigned 560 HIV-1–infected pregnant women (CD4+ count, ≥200 cells per cubic millimeter) to receive coformulated abacavir, zidovudine, and lamivudine (the nucleoside reverse-transcriptase inhibitor [NRTI] group) or lopinavir–ritonavir plus zidovudine–lamivudine (the protease-inhibitor group) from 26 to 34 weeks' gestation through planned weaning by 6 months post partum. A total of 170 women with CD4+ counts of less than 200 cells per cubic millimeter received nevirapine plus zidovudine–lamivudine (the observational group). Infants received single-dose nevirapine and 4 weeks of zidovudine.

RESULTS

The rate of virologic suppression to less than 400 copies per milliliter was high and did not differ significantly among the three groups at delivery (96% in the NRTI group, 93% in the protease-inhibitor group, and 94% in the observational group) or throughout the breast-feeding period (92% in the NRTI group, 93% in the protease-inhibitor group, and 95% in the observational group). By 6 months of age, 8 of 709 live-born infants (1.1%) were infected (95% confidence interval [CI], 0.5 to 2.2): 6 were infected in utero (4 in the NRTI group, 1 in the protease-inhibitor group, and 1 in the observational group), and 2 were infected during the breast-feeding period (in the NRTI group). Treatment-limiting adverse events occurred in 2% of women in the NRTI group, 2% of women in the protease-inhibitor group, and 1% of women in the observational group.

CONCLUSIONS

All regimens of HAART from pregnancy through 6 months post partum resulted in high rates of virologic suppression, with an overall rate of mother-to-child transmission of 1.1%. (ClinicalTrials.gov number, NCT00270096.)

From the Division of Infectious Diseases, Beth Israel Deaconess Medical Center (R.L.S.); the Departments of Immunology and Infectious Diseases (R.L.S., S.L., I.T., K. McIntosh, J.L., M.E.) and Biostatistics (M.D.H., D.K.), Harvard School of Public Health; the Infectious Disease Unit (S.L.) and the Department of Obstetrics, Gynecology, and Reproductive Biology (R.T.), Brigham and Women's Hospital; the Division of Infectious Diseases, Children's Hospital (K. McIntosh); and the Departments of Medicine and Pediatrics, Massachusetts General Hospital (K.P.) — all in Boston; the Botswana Harvard AIDS Institute (A.O., C.M., J.M., S.M., I.T., E.W., A.A., E.T., K. Mburu, O.J., E.M., S.S., E.I., M.A., C.W.) and the Botswana Ministry of Health (L.M.) — both in Gaborone, Botswana; the National Institutes of Health, National Institute of Allergy and Infectious Diseases, Bethesda, MD (S.Z., U.S., E.H.); GlaxoSmithKline, Greenford, United Kingdom (W.S.); and Abbott Virology, Abbott Park, IL (M.M.-T.). Address reprint requests to Dr. Shapiro at the Division of Infectious Diseases, Beth Israel Deaconess Medical Center, 110 Francis St., Suite GB, Boston, MA 02215, or at rshapiro@hsph.harvard.edu.

N Engl J Med 2010;362:2282-94.

1248 pregnant women referred to study sites. After counselling about study interventions, 110 (8.8%) declined enrolment as preferred to give formula feeds.

Where we want to be

- Where HIV-infected mothers do not need to think about their status when they feed their infants.
  - Zero risk of HIV transmission
  - HIV-infected mothers have confidence in the benefits of BF and can benefit from all social and health aspects of breastfeeding
  - Health workers have confidence to promote and support BF
  - Breastfeeding does not have any negative connotation
  - Where HIV investment to promote and support breastfeeding among HIV-infected mothers, can also support breastfeeding among the general population and *vice versa*
  - **Where HIV-free survival and development is the metric of success**

Guideline process

- **Four areas reviewed**
  (mainly with respect to countries where BF is recommended and ART is provided)
  - For how long should a mother living with HIV breastfeed her infant/child if she is being supported with ART?
  - Should women living with HIV be supported in their infant feeding practices?
  - If mothers living with HIV are mixed feeding, are ARVs still protective against postnatal transmission?
  - If mothers with HIV plan to return to school/work, should she breastfeed for shorter than recommended (e.g. 12 months) or never breastfeed at all?
- **Three additional discussion points**
  - What to recommend in emergencies and humanitarian disasters?
  - What are the implications for routine M&E?
  - How should updated guidelines be disseminated in order to improve IFP in HIV prevalent settings incl. opportunities to improve practices in the general population

WHO recommendations on ART

- 2010 Guidelines on HIV and infant feeding are intrinsically linked to updated recommendations on ART
- WHO recommendations on antiretroviral treatment between 2010 and 2015 evolved from
  - Lifelong treatment only for pregnant women and mothers fulfilling specific immunological or clinical criteria AND antiretroviral drug prophylaxis either to breastfeeding infants (option A) or to lactating mothers (option B), **TO**
    - Lifelong treatment for all pregnant women and mothers, **TO**
      - Lifelong treatment for all, from whenever diagnosed.

For how long should a mother living with HIV breastfeed her infant?
(in settings where BF and ART is recommended)

- In settings where health services provide and support lifelong antiretroviral therapy, including adherence counselling, and promote and support breastfeeding among women living with HIV, the duration of breastfeeding should not be restricted.
- Mothers living with HIV should breastfeed for at least 12 months and can continue breastfeeding for up to 24 months or longer (as for the general population) while being fully supported for ART adherence.

(*Strong recommendation; Quality of evidence: up to 12 months – low quality; to 24 months – very low quality*)

Infant feeding support for mothers living with HIV

- 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.

(*Strong recommendation; Quality of evidence: high quality*)

When mothers living with HIV do not exclusively breastfeed

- Mothers living with HIV and healthcare workers can be reassured that ARV treatment is effective at reducing the risk of postnatal HIV transmission in the context of mixed feeding and that mixed feeding in itself is not a reason to stop breastfeeding.

(*Guiding statement in settings of sub-optimal practices*)

When mothers living with HIV plan to breastfeed for less than 12 months

- Mothers living with HIV and healthcare workers can be reassured that shorter durations of breastfeeding less than 12 months are better than never initiating breastfeeding at all.

(*Guiding statement in settings of sub-optimal practices*)

Questions / clarifications

- New recommendations / guiding statements

- Principle (2010)
  - National (or sub-national) health authorities should decide whether health services will principally counsel and support mothers known to be HIV-infected to:

    - breastfeed and receive ARV interventions, or,
    - avoid all breastfeeding,

    as the strategy that will most likely give infants the greatest chance of **HIV-free survival.**

Implications for responses in humanitarian disasters and emergency settings

- Principles of response discussed
  - Conflict / (recurrent) disasters / fragile states
- Major challenge to collect data in these settings
- Need to adapt existing recommendations to emergency context and develop principles for decision making re. how to respond according to context and nature of setting
- Formal consultation planned at WHO, Geneva – Q4

Dissemination

- Build on existing programmes and link with systems designed around ART
- Communication strategy needed for communities and health workers
- Need to engage professional associations
- Engaging and working with networks of mothers living with HIV

Next steps (1)

- ✓Disseminate main points
  - ✓Regional workshops and information dissemination
  - ✓IATT webinar
- ✓Update training materials
- ✓Translate into relevant languages (French, Spanish, Russian)

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Embargo: [add date when known]

Series

KG

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Breastfeeding 2

Why invest, and what it will take to improve breastfeeding practices?

Nigel C Rollins, Nita Bhandari, Nemat Hajeebhoy, Susan Horton, Chessa K Lutter, Jose C Martines, Ellen G Piwoz, Linda M Richter, Cesar G Victora, on behalf of The Lancet *Breastfeeding Series Group**

Despite its established benefits, breastfeeding is no longer a norm in many communities. Multifactorial determinants of breastfeeding need supportive measures at many levels, from legal and policy directives to social attitudes and values, women's work and employment conditions, and health-care services to enable women to breastfeed. When

This is the second in a **Series** of two papers about breastfeeding

*Members listed at the end of

Implications for M&E systems

- What do we need to know?
  - National data
    - Retention
    - **BF duration and method**
    - Child HIV infections
    - Child mortality
    - Maternal mortality
    - Viral load
  - Routine program data
    - Infant and maternal nutrition status
    - ARV coverage
    - (Morbidity)
- Implications for global estimates of paediatric infections

Next steps(?): reinstate IFP as a priority and focus for HIV programmes

- ✓Systematic collection of high value data
  - ✓BF practices and ART cover among mothers living with HIV
  - ✓Establish sentinel sites in 4-5 countries
- ✓Strategic engagement with 2-3 countries to mark the direction of things to come (feasibility and outcomes) and normalise BF. E.g.
  - ✓East and Southern Africa e.g. Botswana, Kenya and South Africa
  - ✓Haiti
  - ✓Tajikistan, Kyrgyzstan
- ✓Engage networks of mothers living with HIV
- ✓Strategy to engage, and win hearts and confidence of health professionals (incl. associations) and communities
- ✓Convene a meeting to review infant feeding principles and responses in HIV prevalent emergency settings