

HIV/AIDS, INFANT FEEDING, AND HUMAN RIGHTS



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OUTLINE

- 1. Questionable Coercion**
- 2. Uncertainty Regarding Transmission through Breastfeeding**
- 3. Health Outcomes and Implications for Feeding Choices**
- 4. Global Policy Recommendations**
- 5. Human Rights Law and Principles**
- 6. Is HIV/AIDS Exceptional?**
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1. Questionable Coercion

- ❑ Women diagnosed as HIV+ have been pressured to not breastfeed, usually by health workers.
- ❑ In some cases, officers of the law have been involved.
- ❑ In Oregon, the state government threatened to take physical custody of the infant if the mother breastfed.
- ❑ In developing countries, some HIV+ women have been pressured through the provision of free infant formula.
- ❑ In health care, under what conditions is pressure warranted? When and how should freedom of choice be restricted?

2. Uncertainty Regarding Effects of HIV Infection through Breastfeeding

- There are many uncertainties regarding the effects (not just transmission) of HIV through breastfeeding:
 - Definitions and Indicators
 - Likelihood of Transmission
 - Morbidity and Mortality
 - Protective Effects of Breastfeeding



Definitions and Indicators

- Indicators of HIV infection in the mother? The infant?
- Difference between transmission and infection?
- How distinguish transmission during pregnancy, during birth process, and from breastfeeding? Latency effect?
- Variations in breastfeeding: initiation, duration, exclusivity
- Drug treatments make breastfeeding more or less advisable?

<u>Study</u>	<u>Group</u>	<u>Rate of infant HIV infection (%)</u>					
		<u>At birth</u>	<u>6 weeks</u>	<u>Months</u>			
				<u>3</u>	<u>6</u>	<u>15-18</u>	<u>24</u>
South Africa	Breast-fed (n = 394)	6.9	19.9	21.8	24.2	31.6	---
	Formula (n = 157)	7.6	18.0	18.7	19.4	19.4	---
Kenya	Breast-fed (n = 191)	7.0	19.9	24.5	28	---	36.7
	Formula (n = 193)	3.1	9.7	13.2	15.9		20.5
Brazil	Breast-fed (n = 168)	---	---	---	---	21	---
	Formula (n = 264)	---	---	---	---	13	---


Likelihood of Transmission

- Dunn (1992): Estimated 14% would be infected by breastfeeding. Ignored large variance. Ignored health outcomes.
- Coutsooudis (2001): Transmission with exclusive breastfeeding was not higher than with replacement feeding.

MORTALITY

- “In the absence of antiretroviral therapy, all pediatric HIV infections are likely to be fatal (Brahmbatt and Gray 2003).”




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- “An estimated 800,000 children are newly infected with HIV annually. The majority of these children live in sub-Saharan Africa, where half of HIV-infected children die before their 5th birthday (Dabis 2004).”

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- Most data on mortality of HIV-infected children:
 - Cover children 0-13
 - Make no distinction between mortality due to HIV/AIDS and other causes
 - Fail to distinguish among various causes of HIV infection (e.g., sexual transmission, contaminated blood products, infection during pregnancy, infection during birth process, infect through breastfeeding)

REPORTED MORTALITY RATES

- 62 % (Spira 1999)
- 22 % (European Collaborative Study 2002)
- 20-25% (HIV Paediatric . . . 2003)
- < 5 % (HIV Surveillance . . . 2003)

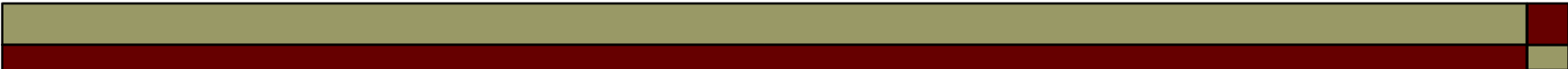
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- Pediatric HIV is not always fatal.

 - For the mother who needs to choose among different feeding methods, there is no reason to give more attention to deaths caused by HIV infection through breastfeeding than to deaths from other causes.



Protective Effects of Breastfeeding

- Mortality rates for infants infected through breastfeeding are likely to be lower than the rates for infants infected through other pathways because of the protective effects of breastfeeding.



3. Health Outcomes and Implications for Feeding Choices: A Systematic Approach

- To guide the feeding choice, one needs to know how the choice of feeding method relates to likely health outcomes in the particular circumstances.
- Absolute mortality (and morbidity) levels are irrelevant. What matters is the *differences* across different feeding methods.
- One does not need to know transmission rates.

ANALYTIC FRAMEWORK

- Exposure
 ↓
- Transmission
 ↓
- Infection
 ↓
- Disease
 ↓
- Death

The biological process goes through a series of phases, a chain of causation.

In any specific context, there is a probability (likelihood) of causation between the phases.

The overall probability of exposure leading to death is the product of the probabilities for each intermediate link.

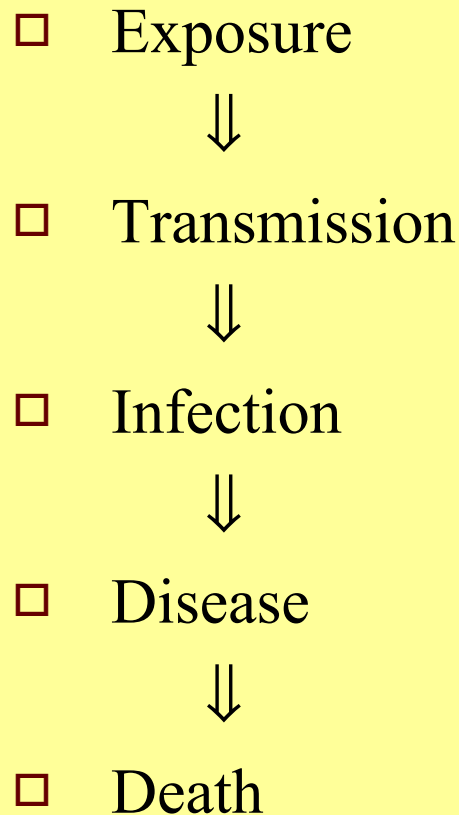
ANALYTIC FRAMEWORK

- Exposure
 ↓
- Transmission
 ↓
- Infection
 ↓
- Disease
 ↓
- Death

To use with this framework one needs definitions and indicators for each phase of the process.

Not all deaths of people who are HIV-positive are due to the fact that they are HIV-positive. They remain vulnerable to other causes of death.

ANALYTIC FRAMEWORK



One should make clear distinctions among these phases. The probability that, in any particular context, exposure will lead to transmission is different from the likelihood that it will lead to infection, or to disease, or to death.

The probabilities (the strengths of the linkages) may be affected by context and by treatments, and may vary over time.

APPLYING THE FRAMEWORK TO STUDY OF FEEDING CHOICES FOR CHILDREN OF HIV+ MOTHERS

- Exposure
 ↓
- Transmission
 ↓
- Infection
 ↓
- Disease
 ↓
- Death

Exposure comes from being born to and possibly breastfed by an HIV+ mother.

Transmission may be indicated by PCR tests, but crudely.

Alternative transmission pathways (during pregnancy, birth process, breastfeeding) are difficult to distinguish.

Infection in infants would be indicated by ?

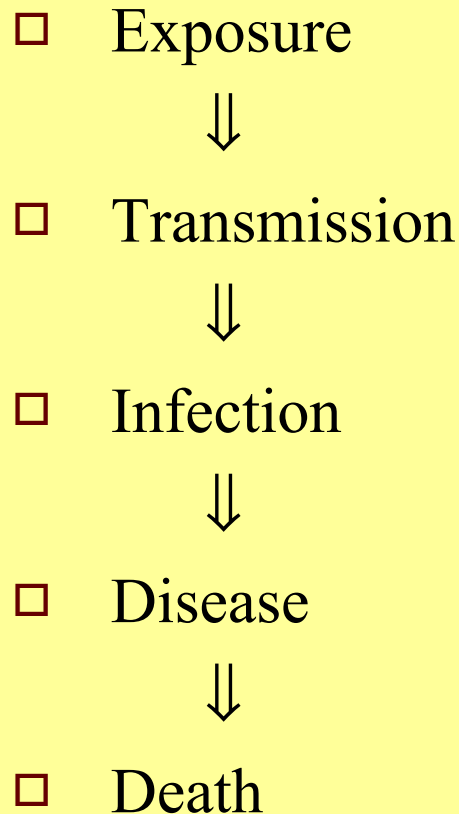
APPLYING THE FRAMEWORK TO STUDY OF FEEDING CHOICES FOR CHILDREN OF HIV+ MOTHERS

- Exposure
 ↓
- Transmission
 ↓
- Infection
 ↓
- Disease
 ↓
- Death

The linkage probabilities are likely to be different for different types of vertical transmission.

They are likely to be lower for transmission through breastfeeding because immunological components and other positive factors are delivered along with the virus.

APPLYING THE FRAMEWORK TO STUDY OF FEEDING CHOICES FOR CHILDREN OF HIV+ MOTHERS

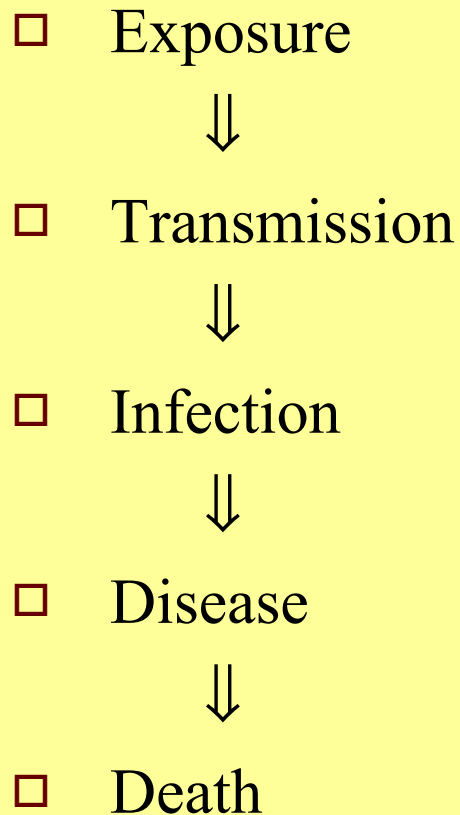


Timing may be unclear. For example, a slow infection process could lead to erroneous assumptions about the timing of transmission.

Which childhood diseases should be attributed to HIV infection?

Which childhood deaths should be attributed to HIV/AIDS?

APPLYING THE FRAMEWORK TO STUDY OF FEEDING CHOICES FOR CHILDREN OF HIV+ MOTHERS



In any given context, how do the probabilities differ with different feeding methods?

Which probabilities are easy to know?

Which probabilities are important to know?

Why is the likelihood of transmission important?

TO STUDY OF FEEDING CHOICES FOR CHILDREN OF HIV+ MOTHERS, COMPARE ACROSS FEEDING METHODS

METHOD 1

- Exposure
- ↓
- Transmission
- ↓
- Infection
- ↓
- Disease
- ↓
- Death

METHOD 2

- Exposure
- ↓
- Transmission
- ↓
- Infection
- ↓
- Disease
- ↓
- Death

METHOD 3

- Exposure
- ↓
- Transmission
- ↓
- Infection
- ↓
- Disease
- ↓
- Death



4. Global Policy Recommendations


- “When replacement feeding is acceptable, affordable, sustainable and safe, avoidance of all breastfeeding by HIV-infected mothers is recommended. Otherwise, exclusive breastfeeding is recommended during the first months of life (WHO 2001).”



AFASS

- Feasible
- Affordable
- Sustainable
- Acceptable
- Safe

To be determined by whom? How?





AFASS guideline assumes replacement feeding is preferred if it can be used safely.

Why?

5. Human Rights Law and Principles

- The human right to adequate food is based on the premise that:
 - normally individuals will make their own food choices, and
 - the state has an obligation to provide information to assure that the individual can make sound choices.

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- The Convention on the Rights of the Child requires that states
 - “...shall ensure that all segments of society, in particular parents and children, are informed, have access to education and are supported in the use of basic knowledge of child health and nutrition [and] the advantages of breastfeeding . . .”

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- The Siracusa Principles require that informed choice should not be restricted unless
 - It is carried out in accordance with the law
 - It serves a legitimate objective of general interest
 - It is necessary to achieve the objective
 - There are no less intrusive means
 - The restriction is not imposed arbitrarily



*Strategic Framework for the Prevention of HIV
Infection in Infants in Europe, 2004.*

- “Decisions on the care of a child born to an HIV-infected mother must be guided by the right of the child to be cared for by the parents, and not to be separated from them except when necessary in the best interest of the child (p. 27)”


6. Is HIV/AIDS Exceptional?

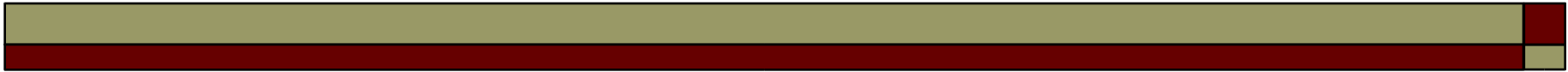
- While informed choice may be suspended under some circumstances (e.g., high risk to society, individuals incapable of making choices), currently available evidence does not justify coercion in relation to choosing methods of feeding infants of HIV+ women.
- Where informed choice is difficult, the remedy is better information, not coercion.



7. Conclusion

- It may be better to risk transmission of the virus by using exclusive breastfeeding in all circumstances, even when the AFASS conditions are met.
- There is no basis in science, law, national or global policy, or human rights to justify coercion of HIV+ women with regard to their choice of infant feeding methods.

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- Rather than suspend individual's freedom of choice, governments should provide the information that is needed, in a suitable format.
 - Governments should facilitate the undertaking of research to obtain the information that is needed.



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- On the basis of present evidence, it seems wise to recommend exclusive breastfeeding for at least six months for all women diagnosed as HIV+.
 - This recommendation applies even where women can provide replacement feeding in ways that are acceptable, feasible, affordable, sustainable, and safe.