WHO revised recommendations on HIV and Infant feeding

Updating Estimates of Mother-to-Child Transmission Rates-
Standardized Rates to Use for Modelling, Programme Evaluation, Reporting, and Target Setting

Sept. 1-2, 2010 at the USAID Global Health Fellows Bureau Office

WHO recommendations

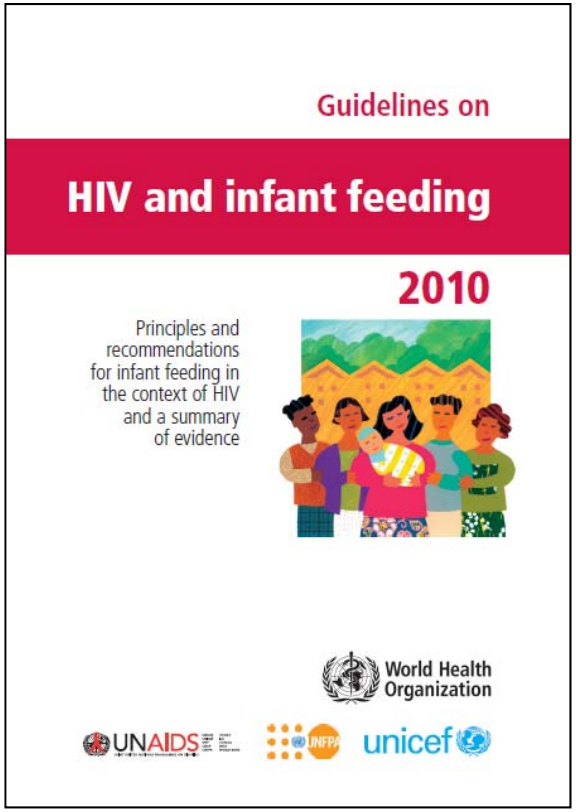
- Last revised 2006/2007
  - 'HIV and Infant Feeding Update' - ISBN 978 92 4 159596 4
- 2009/2010 revisions considered …
  - New research evidence
  - Accumulated programmatic experience
  - Public health implications
- Overall aim – to improve HIV free survival of infants born to mothers known to be HIV-infected

UNICEF/WHO/UNAIDS recommendations (2007) on HIV and infant feeding

- Exclusive breastfeeding is recommended for HIV-infected mothers for the first 6 months of life unless replacement feeding is acceptable, feasible, affordable, sustainable and safe for them and their infants before that time.
- At six months, if replacement feeding is still not acceptable, feasible, affordable, sustainable and safe, continuation of breastfeeding with additional complementary foods is recommended, while the mother and baby continue to be regularly assessed

- **Rapid cessation of breastfeeding and modified cows milk as a replacement feed dropped as recommendations**

Principles and Recommendations



- Principles define the values and context within which recommendations are implemented
- Recommendations reflect the best available evidence base

- 9 principles and 7 recommendations
  - Generally reinforced former principles and recommendations including:
    - Optimal feeding practices of infants of HIV uninfected mother or mothers of unknown HIV status
    - Feeding of infants already known to be HIV-infected
    - Protecting and promoting optimal infant feeding practices in general population
  - **2 significant changes from 2007**
    - Effective ARV interventions have transformed the 'landscape' for decisions re. infant feeding in HIV settings

2010 WHO Principles on HIV and infant feeding

1. Balancing HIV prevention with protection from other causes of child mortality;
2. Integrating HIV interventions into maternal and child health services;
3. Setting national recommendations for infant feeding in the context of HIV;
4. When antiretroviral drugs are not (immediately) available;
5. Informing mothers known to be HIV-infected about infant feeding alternatives;
6. Providing services to specifically support mothers to appropriately feed their infants;
7. Avoiding harm to infant feeding practices in the general population;
8. Advising mothers who are HIV uninfected or whose HIV status is unknown;
9. Investing in improvements in infant feeding practices in the context of HIV.

2010 WHO Recommendations on HIV and infant feeding

1. Ensuring mothers receive the care they need;
2. Which breastfeeding practices and for how long;
3. When mothers decide to stop breastfeeding;
4. What to feed infants when mothers stop breastfeeding;
5. Conditions needed to safely formula feed;
6. Heat-treated, expressed breast milk;
7. (Feeding) When the infant is HIV-infected.

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 to improve HIV FS in exposed infants …

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.

When HIV-infected mothers decide to stop breastfeeding (at any time) they should do so gradually within one month

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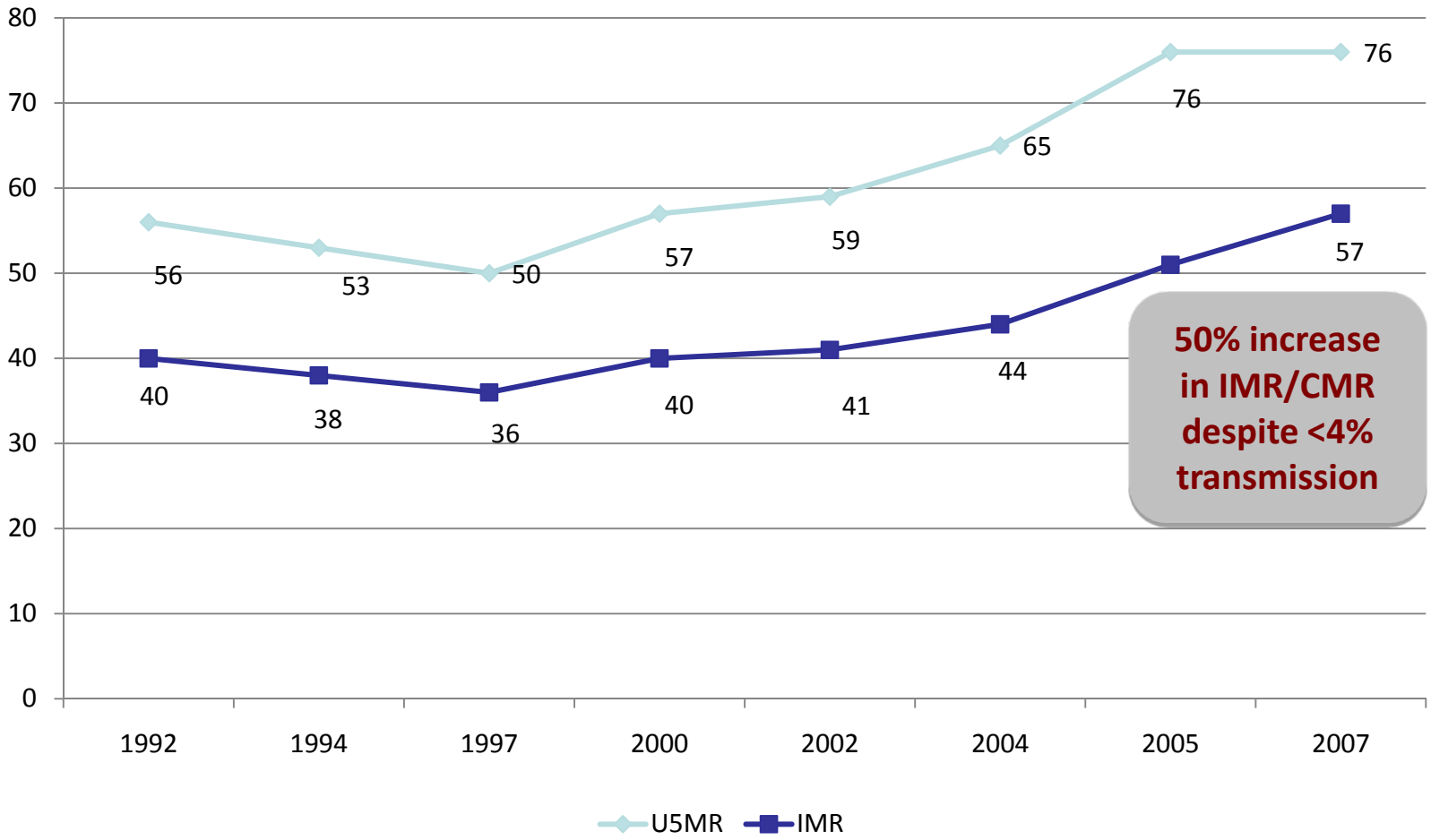
- 12 months represents the duration for most HIV-infected mothers that capitalizes on the maximum benefit of breastfeeding in terms of survival (excluding any consideration of HIV transmission). In the presence of ARV intervention to reduce risk of transmission, this combination may give best balance of protection vs. risk

Probability of HIV infection or death by maternal status, ART/ARV intervention and infant feeding practice *among infants who are HIV uninfected at birth*

Infant Feeding scenario #	Mothers fulfil eligibility criteria and on ART			Mothers do not fulfil criteria for ART. Infant NVP prophx. or maternal triple ARV prophx.			Probability of infant HIV infection or death if maternal ART criteria	
	Feeding practice			**Feeding practice**			**CD4 <200**	**CD4 <350**
	0-6m	6-12m	12-18m	0-6m	6-12m	12-18m		
1	RF	RF	RF	EBF	CBF	CBF	0.103	0.100
2	RF	RF	RF	EBF	CBF	RF	0.101	0.097
3	RF	RF	RF	EBF	RF	RF	0.107	0.101
4	RF	RF	RF	RF	RF	RF	0.141	0.141
5	EBF	CBF	CBF	EBF	CBF	CBF	0.095	0.099
6	EBF	CBF	RF	EBF	CBF	RF	0.091	0.094
7	EBF	RF	RF	EBF	RF	RF	0.097	0.099
8	EBF	CBF	RF	RF	RF	RF	0.128	0.137
Where CD4 count is unknown								
9	RF	RF	RF	RF	RF	RF	0.141	0.141
10	EBF	CBF	CBF	EBF	CBF	CBF	0.174	0.174

Botswana: Child mortality rates (BDS 2006, BFHS 2007)



- Higher infant and young child mortality (x 1.6) in rural areas where 45% of the populations lives (BFHS 2007)

Implications

Potentially …

- More HIV-infected mothers who will start breastfeeding
- HIV-infected mothers will breastfeed until at least 12 months
- Increased exclusive breastfeeding rates among HIV uninfected mothers
- Improved nutritional status and HIV free survival among HIV-exposed infants and improved survival among all children

Terminology

- Exclusive BF
- Partial (Mixed) breastfeeding
- Replacement feeding (non BF)
- Complementary feeding
- Cessation of breastfeeding (Weaning)