

GRADE Profile 5

Question: In infants born to HIV-infected mothers, does the use of replacement feeding result in increased mortality in the first 18 months of life, if

- safe water and sanitation cannot be assured at household/community level
- there is uncertainty that sufficient formula can be provided over the first 6/12 months of life
- the physical conditions to safely prepare replacement feeding are not available
- the mother or caregiver is not prepared to avoid mixed feeding

Populations: Breastfed and replacement fed HIV-exposed infants

Settings: Burkina Faso, Cambodia, Cameroon, Côte d'Ivoire, Kenya, India, Nigeria, South Africa, Tanzania

Bibliography: MESH words included in search strategy: "HIV, infant feeding, mortality, water, AFASS".

98 publications identified; 28 selected following review of abstracts; 19 found to report primary data, of which 2 only reported data on modified animal milk and so were excluded.

Quality assessment							Summary of findings					Importance
No of studies	Design	Limitations	Inconsistency	Indirectness	Imprecision	Other considerations	No of patients		Effect		Quality	
							Infants given replacement feeds (commercial infant formula)	Breastfed infants	Relative (95% CI)	Absolute		
Outcome: Mortality							Quality of evidence in literature identified and reviewed: LOW					Importance of Outcome: 9 (very high)
1	Randomized Nduati et al., 2000						Increased mortality by 6wks (3.9%) NS Mortality 2yr. 20% HIVFS 2yr. 70%	1.0% by 6 wks Mortality 2yr. 24.4% HIVFS 58%				

	Marino et al., 2007						sterilisation and storage habits common 61% prepared formula delivered to ward already contaminated of which 24% was heavily contaminated			
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1. One of four studies reported quality of infant feeding counselling on HIV infection or mortality at 36 wks.
2. Two studies reported qualitative data only. One study reported mother pre-natal intentions only
3. 1 report of discussions with health workers only, not mothers
4. 1 report of bacterial safety of hospital formula feeds only

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