

Annex 3.

Search strategy for other reviews and general information on abstracts identified and papers included

Besides the main systematic review on HIV-free survival by infant feeding practices, four other reviews were carried out to investigate five scoping questions. The basic search strategy for relevant evidence was similar to that described in Annex 2. Medline and Pubmed electronic data based were searched, as well as abstracts from the following conferences:

1. 5th International Aids Conference 2009
2. 4th South African Aids Conference 2009
3. 16th Conference on Retroviral and Opportunistic Infections 2009

Studies performed in any country were included. Studies not published in English, and those published before 1998, were excluded from the analysis.

Details as to the key words searched and papers found are included after each question below.

- Qu 1. In HIV-exposed infant living in resource limited settings are replacement feeds other than commercial infant formula milk sufficient to support normal growth and development between 6-12 months of age?

Key words included in the search strategy were: “complementary feeding and HIV; replacement feeding and HIV”. The first search identified 44 papers, and the second one 63, but there was substantial overlap so that 98 papers were listed. Of these, 4 appeared relevant; two were included in the grade profile.

- Qu 2. In infants born to HIV-infected mothers, does the use of replacement feeding, when offered in settings where
- a. safe water and sanitation cannot be assured at household/community level
 - b. there is uncertainty that sufficient formula can be provided over the first 6/12 months of life
 - c. the physical conditions to safely prepare replacement feeds are not available
 - d. the mother/caregiver are not prepared to avoid mixed feeding
- result in increased mortality in the first 18 months of life?

Key words included in the search strategy were: “HIV, infant feeding, mortality, water, AFASS”. Ninety-eight publications were identified; 28 were selected following an initial review of abstracts; 19 were found to report primary data, of which 2 only reported data on modified animal milk and so were excluded.

- Qu 3. In infants born to HIV-infected mothers can heat-treated (maternal) breast milk be given without transmitting HIV infection and achieve normal growth?

Key words included in the search strategy were: “flash heat breast milk; pasteurisation breast milk and HIV; heat treatment breast milk and HIV”. Twenty-one publications were identified; 10 were selected following an initial review of abstracts; 5 were found to report primary data.

- Qu 4. In infants born to HIV-infected mothers, and who become HIV-infected despite the possible availability of prophylactic interventions, does breastfeeding compared to replacement feeding, with or without ART being initiated in the infant, result in better survival at 12 or 18 months of age?

Key words included in the search strategy were: “HIV-infected infants, HIV-infected children, mortality, feeding”. One hundred thirty-seven publications were identified; 21 were selected following an initial review of abstracts; 6 were found to report primary data.

5. In HIV-infected mothers, with or without ARV interventions, does breastfeeding for 6 months, 12 months, 24 months compared to using replacement feeds during the same intervals result in greater than expected weight loss, increased maternal mortality, increased deterioration of CD4 counts, increased progression to AIDS?

Key words included in the search strategy were: “breastfeeding, maternal health, HIV”; and “breastfeeding, maternal mortality, HIV”. For the first search, 276 publications were identified; 14 were selected following an initial review of abstracts. For the second search, 112 publications were identified; 6 additional reports were included. 20 publications identified, 10 found to report primary data, 1 meta-analysis