The prevention of mother-to-child HIV transmission programme and infant feeding practices

To the Editor: We commend Hilderbrand *et al.*'s[1] attempts to evaluate the infant feeding policy in their prevention of mother-to-child transmission (PMTCT) programme. However, we are concerned that the results of this study have been extrapolated into an inappropriate and misleading statement, viz. 'that the use of formula increases overall child survival'. We have a number of key criticisms.

The sample size of 113 (from probably more than 5 000 HIV-infected women seen between 1999 and 2002) is grossly inadequate in terms of drawing any conclusions about diarrhoea prevalence or mortality. Moreover there is no breast-fed comparison group and interventions to study diarrhoea risk typically involve thousands of subjects.[2]

Diarrhoea incidence data based on recall of more than 1 or 2 weeks are notoriously unreliable. In this study, critical periods of recall are not given and may have been 3 months or longer.

The cohort is quite unrepresentative (even of urban populations) as the infant mortality rate (IMR) in this province is 8.4 (compared with 61.2 in the Eastern Cape),[3] and water (71%) and electricity (75%) provision are above the national and continental averages. This is striking when these results are contrasted with those from appropriately designed studies which show different outcomes.[4,5]

There was no long-term follow-up to assess survival, morbidity, and mortality, and the inquiry is biased towards those women who chose formula-feeding and who were attending to receive their free supply. Dissatisfied mothers, those breast-feeding, and those whose babies had died, were less likely to comprise the study sample.

Diarrhoea is not the only outcome of importance; there are multiple short- and long-term benefits of breast-feeding to be considered. One factor is the cost of formula. In KwaZulu-Natal this accounts for about 50% of the cost of the PMTCT programme. What is the opportunity cost of this allocation? Every year more than 10 million children die because we deny them access to proven, inexpensive services. As a recent review[6] laments, 'levels of effort directed at preventing the small proportion of child deaths due to AIDS . . . seem . . . to be outstripping . . . efforts to save millions of children every year with a few cents' worth of simple therapies'.

We urge policy makers to eschew simplistic solutions to an essentially social, cultural, and economic issue, which is deeply rooted in the human experience of beneficent motherhood. In the worst case scenario the risk of breast-feeding for 6 months is about 4 - 5% only. The facile route is to recommend formula — it requires no imagination and reveals a poverty of vision for child health promotion. The difficult path is to ensure the protection of breast-feeding during the HIV pandemic, Glimpses of this approach are beginning to appear in recent studies.

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MRC mapping — extending the use of spatial data in health

To the Editor: The Health GIS (Geographic Information Systems) Centre and Malaria Research Lead Programme of the MRC, together with InterMap, have developed a web-based GIS application which is available on the internet (**http://www.mrcmapping.org.za**). The availability of new technology has enabled us to provide users with direct access to spatial data relevant to both health researchers and the health service community for the purposes of queries, presentations, reports and training material.

The provincial Departments of Health have made their health facility databases available for the purposes of this application and these data can now be viewed in relation to other datasets, such as schools, roads and population data, without the user needing to invest in expensive GIS software or attend specialised courses. A metadata file outlining the reference source and date of the respective data files is available on the system.

At the broadest level, household service data from the 2001 census data (sanitation, water and fuel for cooking) are available as thematic maps according to municipal boundaries