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.

Anna Coutsoudis
Nigel Rollins
Miriam Adhikari
Raziya Bobat

Department of Paediatrics and Child Health
Nelson R Mandela School of Medicine
University of KwaZulu-Natal
Durban

Ruth Bland

Africa Centre for Health and Population Studies.
Somkhele
KwaZulu-Natal

1. Hilderbrand K, Goemaere E, Coetzee D. The prevention of mother-to-child HIV transmission programme and infant feeding practices. *S Afr Med J* 2003; **93:** 779-781.
2. Baqui AH, Black RE, El Arifeen S, *et al.* Effect of zinc supplementation started during diarrhoea on morbidity and mortality in Bangladeshi children: community randomised trial. *BMJ* 2002; **325:** 1062.
3. *South African Demographic and Health Survey,* 1998.
4. Coutsoudis A, Pillay K, Spooner E, Coovadia HM, Pembrey L, Newell ML. Morbidity in children born to women infected with HIV in SA: does mode of feeding matter? *Acta Paediatrica* 2003; **92:** 890-895.
5. World Health Organisation. WHO collaborative study on the role of breastfeeding on the prevention of infant mortality. Effect of breastfeeding on infant and child mortality due to infectious diseases in less developed countries: a pooled analysis. *Lancet* 2000; **355:** 451-455.
6. Jones G, Steketee RW, Black RE, *et al.* How many child deaths can we prevent this year? *Lancet* 2003; **362:** 65-71.

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

and provides the user with a macro view of the country highlighting the least serviced areas. As the user zooms into a selected area of interest, increasing layers of data become available, from health districts to subdistricts, going right down to road and river information at the micro level. Health facilities and schools can be displayed on the map, at the required level of detail and information obtained on each data-point, for example name. Population data can also be added at an enumerator area level, allowing the user to determine the number of people living in the area of interest. Straight line distances between features can be calculated as can user-defined catchment areas around facilities. A further useful function is the search option, which allows users to search for health facilities, schools and places by name and locate these on the map. Maps can be printed at any level of detail with a user-defined title.

Additional 2001 population data useful to health researchers will be made available at the sub-place level and also by means of a series of pre-defined catchment areas around health facilities, indicating the number of people living within set distances.

This application will be developed in an ongoing manner to meet end user requirements and any comments and feedback on data and functionality are therefore welcome.

Bronwyn Curtis
Amanda Jackson

Health GIS Centre and Malaria Research Lead Programme
Medical Research Council
P O Box 70380
Overport
Durban
4067

The medical situation in Palestine

To the Editor: It is clear from a previous letter to the editor entitled 'Israel, Iraq, Zimbabwe — should we care?' by Waner *et al*.[1] that certain medical professionals have compromised their medical ethics and humanitarianism as they allow their political views to cloud their judgement concerning the medical conditions in occupied Palestine.

It is appalling that these people fail to mention the blatant disregard that the Israeli Defence Force (IDF) displays for medical ethics and neutrality, considering that there have been over 231 reports to date of Palestinian ambulances being fired on and their personnel being killed as a result.

International aid organisations, the International Committee of the Red Cross (ICRC) as well as Médecins Sans Frontières (MSF) have come out in strong condemnation of the IDF for its denial of the international human right to free access to patients, as personnel are constantly harassed and detained by the military at checkpoints for no apparent reason. The ICRC has even had to limit its activities in the West Bank area as a result of threats to staff and attacks on vehicles and officers.

MSF has in addition introduced medico-psychological services for Palestinian families and reports on the shocking psychological condition and feeling of hopelessness experienced by Palestinians exposed to violence and brutality from the IDF.

It is also of particular concern that IDF soldiers at checkpoints refuse to allow critically injured, terminally ill and even pregnant women passage to hospital. This has resulted in countless deaths which could have been prevented had the IDF followed international protocol and of course common sense. Head of the Palestinian Medical Relief Services, Dr Mustapha Barghouti, has highlighted the plight of medical personnel in their inability to bring medicines into besieged areas, as well as a shortage of many important medicines.

The medical situation in occupied Palestine can only be described as critical and on the brink of an impending health crisis. Brutality on the part of the IDF, the closure of Palestinian territories and attacks on medical personnel and ambulances have paralysed the Palestinian health care services and can only be described as cruel and barbaric. A far cry from the euphoric and false view posed by some of our misinformed colleagues.

S Mahomed

PO Box 1085
Westville
3630

1. Waner S, Miller J, Cohen MD, Pollon J. Israel, Iraq, Zimbabwe — should we care? (Briewe). *S Afr Med J* 2003; **93:** 634 - 636.