Breast or Bottle
Infant Feeding and HIV

Glenda Gray

Worldwide, a rapidly growing number of women of childbearing age are being infected with the HIV virus. An increasing number of babies are being vertically infected, that is, infected by their mothers. Mother to child transmission rates have been reported to range from less than 15% to over 40%. A transmission rate of about 30% is considered average for pregnancies occurring in Africa.

Vertical transmission can occur in the uterus, during the delivery process or through breast feeding. Recent studies have shown that there is a higher risk of infection to infants born to HIV positive mothers if they are breast fed. Available data also indicate that a higher rate of transmission through breast feeding occurs if the mother has been infected after giving birth.

The detection of the HIV virus in breast milk and the publication of several reports implicating breast feeding as a transmission route raise the question of whether babies with HIV positive mothers should be breast fed or bottle fed.

Debating the Advantages of Breast Milk

The arguments promoting breast feeding amongst HIV positive mothers are based mainly on the limited amount of research, on the relationship between different feeding modes and diarrhoeal mortality in infants, that took place before the 1960s. This research varies in quality, some findings are contradictory and substantial areas of ignorance remain. Many researchers have questioned its validity and its relevance to the nineties. Nevertheless, breast feeding appears to offer protection to children up to one year of age, the protection being greatest in the first three months.

Some recent research findings also highlight advantages of breast feeding. A study in Brazil found that the risk of death from common infections was higher in infants who had not been breast fed. These infants were 14 times more likely to die from diarrhoea and almost 4 times more likely to die from respiratory infections than those who were breast fed. In Malaysia, in homes without piped water or a toilet, infants who were not breast fed were 5 times more likely to die.

However, evidence is starting to emerge that, under certain conditions, bottle fed babies are not necessarily at a disadvantage. Presently, a substantial

number of well babies seen at the Baragwanath neonatal follow-up clinic get supplementary bottle feeds or are exclusively bottle fed. A recent review of the statistics from the birth to ten study showed a decline in the infant mortality rate in Soweto over the last three years, despite the higher rate of formula feeding in the community.

HIV or Diarrhoea/Pneumonia

A small increase in the risk of transmission of HIV through breast feeding could affect large numbers of infants. A million HIV positive mothers breast feeding their children each year could result in tens of thousands of HIV infected children. If, on the other hand, HIV positive mothers were to bottle feed their infants, there would be a decrease in the vertical transmission rate and, therefore, fewer children suffering and dying from AIDS. The costs incurred by the health sector in treating paediatric AIDS would decline. If milk powder was cheap, and clean water and facilities for sterilising bottles universally available, artificial feeding would be the logical choice.

However, under conditions where access to water and heating is suboptimal and humanised milk feeds are unaffordable, advising mothers to formula feed will lead to increased infant morbidity and mortality, as indicated by examples from Brazil and Malaysia. Bottle feeding thus appears feasible in communities where alternatives to breast feeding are widely available and affordable. But, in developing countries, any HIV prevention programme which promotes formula feeding has to weigh the risk of acquiring HIV through breast feeding against the protective effects of breast milk from the common causes of early child morbidity and mortality.

WHO, UNICEF and Discrimination

WHO and UNICEF issued a statement on HIV and breast feeding in March 1992, which commences by asserting that "in all populations, irrespective of HIV infection rates, breast feeding should continue to be protected, promoted and supported." However, health authorities in many developed countries are recommending that HIV positive women should not breast feed their infants. In their consensus statement, WHO and UNICEF state that the simplistic division between developed and developing countries is inappropriate and, instead, use the term 'settings' to describe the range of poverty and wealth around the world. They suggest that, if an alternative feeding method is possible, then a mother known to be HIV positive should use this feeding method, but, if this is likely to

cause illness and death from infectious diseases, then the mother should breast feed.

The consensus statement essentially provides different recommendations for rich and poor women. WHO and UNICEF are encouraging health workers to discriminate in the advice they give to mothers on the basis of the mothers' standard of living. This is an unusual, even unique, situation, since health directives and policies generally hold good for the global community, not just for certain 'settings'.

At present, the Johannesburg group of teaching hospitals affiliated to the University of Witwatersrand have only managed to avoid this discriminatory conclusion because they have failed to address the issue. There is no consensus regarding the best mode of feeding for the babies born to HIV positive mothers. Thus, different health workers at different hospitals offer different advice. An infant born to an HIV positive mother at Johannesburg Hospital will most likely be put onto artificial formula feeds whereas a similar infant born at Baragwanath Hospital will be breast fed.

Social Change, Prevention and Counselling

The WHO/UNICEF recommendations leave much to be desired. The organisations take cognizance of the existence of different conditions in different 'settings'. However, the consensus statement, in keeping with the general thrust of the current work done by these organisations, implicitly accepts these differences. The statement fails to reject the underlying reason for the discriminatory recommendations, namely the current imbalance between the developing and developed world and between rich and poor 'settings'. The eradication of this imbalance and the attainment of basic human rights, such as the provision of a safe water supply, access to heating and a living wage, would pave the way to a single recommendation promoting artificial feeding to all infants of HIV positive mothers.

Meanwhile, in all countries, the first and overriding priority in preventing HIV transmission from mother to infant is to prevent women of child-bearing age from becoming HIV positive in the first place. WHO and UNICEF should be pressurising governments to set up appropriate educational programmes, to ensure easy and ready access to condoms and to provide prevention and appropriate care for sexually transmitted diseases.

HIV infected men and women have a number of important concerns, including looking after their own health, maintaining their jobs, and ensuring provision for their children in the future. They require counselling and guidance

Is breast always best? ***Photo: UNICEF***

on a wide range of issues, such as the risk of HIV transmission to sexual partners, the risk to infants, and infant feeding practices. All HIV infected persons who wish to avoid having children should have easy access to family planning information and services.

All pregnant women found to be HIV positive should have access to counselling and support. They should know the risks of perinatal transmission. If alternative feeding is an appropriate option, mothers should be encouraged to bottle feed and should get all the support they need. Finally, the decision makers or policy makers should be consulting with these very women and the communities from which they come, in order to ensure that policies are appropriate for the people they serve.

Glenda Gray is a member of SAHSSO