Comments

In the Viewpoint, Dr. Balsekar opined that the risk of death due to artificial feeding would be substantially lower than the 14% risk of HIV as a result of breastfeeding. This may not necessarily be true. The relative risk of diarrhea mortality in artificially fed infants in the first 6 months of life is estimated to be 25 times that in exclusively breastfed infants(l). Using mathematical modeling it has been estimated that the increased risk of transmission of HIV should be in excess of 12% before alternative feeding practices can be recommended in developing countries(2). The estimated 14% increased risk of transmission of HIV by breastfeeding is from a review of 5 studies(3). This figure is not absolute since it is based on studies in relatively small numbers of subjects; the 95% confidence limits ranged from 7-22%. Though the overall risk of transmission of HIV in the 5 studies quoted was 14%, only in 2 was breastfeeding significantly associated with increased risk of HIV transmission. Both of these were from Europe where the risk factor for HIV infection in the majority of women was intravenous drug abuse and not heterosexual transmission. The remaining 3 did not show an increased risk of HIV transmission from breastfeeding. Significantly, the two studies in women from developing countries, where HIV infection was mainly acquired through heterosexual transmission, did not show increased transmission via breastfeeding. In another study, the rate of perinatal transmission of HIV in Haitian mothers who breastfed their infants was no higher than Haitian women in Miami who never breastfed their infants(2). Therefore, from available data, it is still not clear whether the increased risk of transmission of HIV in developing countries from breastfeeding outweight its benefits. Further studies are required to resolve this issue.

However, I would agree with Dr. Balsekar's Comments in the 'Viewpoint' that the decision regarding breastfeeding in HIV-infected mothers needs to be-taken on an individual basis. The increased risk to the infant from artificial feeding varies depending on the socioeconomic and educational status of the mother. Some mothers, even in developing countries, may be able to give artificial feeds to their infants without significantly increasing the risk of diarrhea or mortality in their infants. In them, as among mothers in developed countries, the increased risk of transmission of HIV from breatfeeding may outweigh the increased risk of morbidity and mortality from failure to breastfeed. Parents must be assessed for suitability for artificial feeding and the decision whether or not to breastfeed should be made in the ante-natal period itself so that they are prepared to feed the infant appropriately soon after birth(4).

Dr. Selvan in his letter raises the possibility of pasteurizing breastmilk before use in infants of HIV-infected mothers. Obtaining sufficient breastmilk to pasteurize and freeze for future use from HIV-infected mothers who do not suckle their infants may be a very difficult proposition. The supply of milk from this source is unlikely to completely meet the needs of the infants. Obtaining breastmilk from sources other than the mother carries the risk of transmission of other infectious agents. While HIV may be inactivated by flash pasteurization, other infectious agents such as hepatitis B virus which have been demonstrated in breastmilk and have the potential to be transmitted via breastmilk, may not be inactivated by this process. For these reasons, though the use of breastmilk banks is

an interesting suggestion, I do not believe it is **a** practical solution to breastfeeding infants of HIV infected mothers.

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