Nigerian Journal of Paediatrics 2007; 34 (1&2): 48-49

LETTER TO THE EDITOR

Dear Sir,

HIV and infant feeding: the concept of AFASS - A comment

By the year 2000, it was estimated that out of about 34 million cases of HIV/AIDS, about 1.3 million were children.[1] More than 90 percent of the childhood HIV/AIDS cases live in developing countries and the infections are acquired mainly through direct mother-to-child transmission (MTCT). It is well established that HIV is transmissible through breastfeeding.[2,3] Both cell-free and cell-associated HIV have been identified in the breast milk of 63 to 80 percent of women infected with HIV/AIDS.[4,5] Rates of MTCT via breastfeeding range from 10 to 33 percent.[2,6] In developing countries, about a third of all childhood HIV/AIDS are believed to be acquired through breastfeeding.

In 1984, an FAO/WHO/UNICEF joint statement stated *inter alia*, that "the most effective method of preventing breast milk transmission of HIV is breast milk avoidance".[7] Thus, in developed countries, HIV-infected mothers are advised not to breastfeed. A recent statement from the American Academy of Pediatrics emphasized this point.[8] However, in developing countries, because of the risks associated with formula feeding (infections, malnutrition and the associated morbidity and mortality), breastfeeding is a recommended option for HIV-infected mothers.

Since 1992, WHO/UNICEF policy statements on HIV/AIDS and infant feeding as they pertain to developing countries have undergone several modifications. The most recent consensus statement released in October 2006, stated that exclusive breastfeeding is recommended for HIV-infected mothers for the first six months of life unless replacement feeding is Acceptable, Feasible, Affordable, Sustainable and Safe (AFASS) for them and their infants before that time.[9]

Controversies have trailed what could be described as "double-standard" in WHO/UNICEF recommendations for HIV and infant feeding in developed and developing countries. WHO/UNICEF policy statements assume that it is a lesser evil for infants to acquire HIV through breastfeeding from their mothers than risk possible diarrhoea, respiratory infections, malnutrition or other problems that may follow the use of infant formula. Is this a fair assumption? Very few people will agree that it is fair considering the fact that for now, HIV is not curable.

On AFASS as a concept, a number of questions need to be addressed. Who determines when AFASS has been met? Is it the mother (stressed as she would be by her HIV status), her family, or the health-care provider? If the use of breast milk substitutes (BMS) is unacceptable to a mother and/or her family, is it not a failure of the counseling process? If an HIV-infected mother and her family are properly counseled, they are most likely to accept and cope with the problems imposed by her HIV status and this has been proven by a number of studies.[10,11] The issues of feasibility, affordability and sustainability depend on national health policy. Is it morally right to expose a baby to HIV through breastfeeding when this can very easily be prevented? Safe use of BMS relates to health education on hygiene, the promotion of a healthy environment and provision of potable water. These are not beyond the reach of any family, community and country with the right attitudes and commitment.

There have been worries about "spill-over effect" of the use of BMS by HIV-infected mothers and its impact on the promotion, protection and support of breastfeeding. The importance of breastfeeding to child survival especially in developing countries is not in doubt. However, not every woman can or should breastfeed. Also, breast milk is not available to every baby. Contraindications to breastfeeding have always existed even before the advent of HIV/AIDS. Mothers with such contraindications are normally advised (and assisted) to use BMS and there are no worries about "spill-over effect". Moreover, why should spill over occur if mothers are well educated on the advantages of breastfeeding and conducive

Professor Bede C. Ibe

Department of Paediatrics,
University of Nigeria Teaching Hospital,
Ituku-Ozala, Enugu.

environment created for effective breastfeeding by mothers who have no reason to use BMS.

In developed countries, the rate of mother-to-child transmission (MTCT) has declined to as low as two percent of births among HIV-infected mothers with the introduction of voluntary counseling and testing (VCT), zidovudine prophylaxis, elective caesarean section, safe use of infant formula and avoidance of breastfeeding.[12,13] In sub-Saharan Africa where such interventions are not available, and where prolonged breastfeeding is the norm, MTCT rates have remained high – between 25 percent to 35 percent.[14]

AFASS as a concept is wrong and should be discarded. It is against the principles of preventive medicine. All children, including children in developing countries are entitled to the highest standards of care. That should always be the aim. All HIV-infected mothers, whether in developed or developing countries, should be advised not to breastfeed because of the substantial risk of HIV transmission through breastfeeding. Such women (mothers) should be educated and assisted on the safe use of BMS.

Discriminatory policies as the WHO/UNICEF policy on HIV and infant feeding in developing countries will only encourage political leaders in developing countries (especially of sub-Saharan Africa) to continue to offer their people poor governance. It is said that the life of a child in a low-income country is worth less to those with political power than the life of a child in a high-income country.[15] There is no reason why education, potable water, equitable health care and clean sanitary environment should continue to elude the people of sub-Saharan Africa in 2007 if not for poor and corrupt leadership. WHO, UNICEF and other international agencies should direct their efforts towards assisting the governments of countries in sub-Saharan Africa in the provision of the necessities for healthy living. Child health indicators in these countries have remained unacceptably high and unless there are positive changes in attitudes of people with political power and commitment to good governance, achievement of the millennium development goals (MDGs) will be a mirage.

References

1. Joint United Nations Programme on HIV/AIDS. Report on the global HIV/AIDS epidemic. Geneva: UNAIDS. June, 2000.
2. Dunn DT, Newell ML, Ades AE, Peckham CS. Risk of human immunodeficiency virus type 1 transmission through breastfeeding. *Lancet* 1992; 340: 585–8.
3. Nduati R, John G, Mbori-Ngacha D, Richardson B, Overbaugh J, Mwatha A. Effect of breastfeeding and formula feeding on transmission of HIV-1: a randomized clinical trial. *JAMA* 2000; **283**: 1167–74.
4. Lewis P, Nduati R, Kreiss JK, John GC, Richardson BA, Mbori-Ngacha D, *et al*. Cell-free human immunodeficiency virus type 1 in breast milk. *J Infect Dis* 1998; **177**: 34–9.
5. Pillay K, Coutsoudis A, York D, Kuhn L, Coovadia HM. Cell-free virus in breast milk of HIV-1 seropositive women. *J Acquir Immune Defic Syndr* 2000; **24**: 330–6.
6. Jeffery BS. Infant feeding and HIV. *Postgrad Doctor Africa* 2002; **24**: 76–8.
7. FAO/WHO/UNICEF Joint Expert Consultation: Energy and Protein Requirements. WHO Tech Report Series. 1984.
8. American Academy of Pediatrics. Policy Statement: Breastfeeding and the Use of Human Milk. *Pediatrics* 2005; **115**: 496–506.
9. WHO: HIV and Infant Feeding Technical Consultation Held on behalf of the Inter-agency Task Team (IATT) on Prevention of HIV Infections in Pregnant Women, Mothers and their Infants. Consensus Statement. Geneva, October, 2006.
10. Cartoux M, Meda N, Van de Perre P, *et al* and Ghent International Working Group on Mother-to-Child Transmission of HIV: Acceptability of voluntary HIV testing by pregnant women in developing countries: an international survey. *AIDS* 1998; **12**: 2489–93.
11. Inem AV, Adedokun AO, Ayankogbe OO. A voluntary counseling and confidential testing programme for prevention of mother-to-child transmission of HIV in a practice based Research Network Hospital in Lagos, Nigeria. *Nig Med Pract* 2003; **43**: 135–8.
12. Mofenson LM, McIntyre JA. Advances and research directions in the prevention of mother-to-child HIV-1 transmission. *Lancet* 2000; **355**: 2237–44.
13. Fowler MG, Simmons RJ, Roongpisthipong A. Update on perinatal HIV transmission. *Pediatr Clin North Am* 2000; **47**: 21–38.
14. Dabis F, Leroy V, Castetbon K, *et al*. Preventing mother-to-child transmission of HIV-1 in Africa in the year 2000. *AIDS* 2000; **14**: 1017–26.
15. Horton R. Comment. Newborn survival: putting children at the centre. *Lancet* 2005; **365**: 822.