Exclusive Breast-Feeding Inhibits HIV Transmission

BY TIMOTHY F. KIRN
Sacramento Bureau

LOS ANGELES — Exclusive breast-feeding has now been convincingly shown to be associated with less transmission of HIV from infected mother to child than is breast-feeding that is sometimes supplemented with formula, Dr. Hoosen Coovadia said at the 14th Conference on Retroviruses and Opportunistic Infections. “Most women in the world do not exclusively breast-feed,” said Dr. Coovadia in a lecture in which he discussed the dilemma currently facing Africa, where so many mothers are infected.

Treatment can prevent mother-to-child transmission of HIV during birth with great efficacy, but then the child faces the risk of becoming infected through mother’s milk or getting diarrhea from food, water, or formula. In the developing world, breast-feeding is preferable and the weight of the evidence now suggests that it is the less risky of the alternatives, but probably only if breast-feeding is done exclusively, he said. “Women should change to exclusive breast-feeding because it is associated with a lower rate of transmission,” said Dr. Coovadia, the Victor Daitz professor for HIV/AIDS research at the University of KwaZulu-Natal (South Africa).

To support his case for exclusive breast-feeding, Dr. Coovadia cited a number of studies being presented for the first time at the conference, in which the desirability of breast-feeding in those parts of the developing world with high HIV prevalence was a major topic.

Breast-feeding should be supported in principle because it is so highly nutritious and protective against disease, he said. Estimates suggest, for example, that breast-feeding is so important that it could prevent 11% of the deaths that currently occur in children younger than 5 years of age in low-income parts of the world. No other measure comes close to having that effect. In comparison, the Haemophilus influenzae vaccine could prevent only 4% of deaths (Lancet 2003;362:65-71).

Until now, much of the available information has suggested that the health risks of the two options (breast-feeding vs. using formula) in the developing world were similar, with a slight protective edge to breast-feeding, Dr. Coovadia said.

In one published study, breast-fed children not infected at birth who were born to infected mothers in Botswana were more likely to become infected than were formula-fed infants. But they had a slightly lower mortality at 18 months (JAMA 2006;296:794-805).

The rate at which children of infected mothers become infected themselves through breast-feeding is about 0.74% per mother, and that appears to remain constant throughout the child’s first 2 years.

The most recent data, however, suggest that the transmission rate might be lower with exclusive breast-feeding, Dr. Coovadia said. One published study found that only 7% of children who were exclusively breast-fed had become infected by 18 months, compared with 14% of those who were only partially breast-fed (AIDS 2003;17:609-708).

A study in the Ivory Coast found that only about 6% of infants who were exclusively breast-fed became infected per year, compared with 32% of children who were breast-fed and supplemented.

And a late-breaking study presented at this meeting reported a rate of transmission of 4% at 140 days in children who were exclusively breast-fed, compared with 10% in children who were nonexclusively breast-fed, Dr. Coovadia noted.