

A consensus call to national child health programs "Drop mixed-feeding"

This document was presented to the participants of the South Asia Breastfeeding Partners' Forum 4 at New Delhi (10-12 December 2007) during the group discussion. Inputs provided by participants from south Asian countries are incorporated in the document.

Recent research shows that it is important to support HIV-positive women to avoid "mixed feeding" (breastfeeding plus other foods) to their infants, during the first six months¹. This calls for HIV programmes of the countries to bring a policy reform and develop a programme response for ensuring exclusive breastfeeding for ALL WOMEN including HIV positive women who choose to breastfeed. National AIDS Control Agencies should have a better look at the programme component of "infant feeding options" and provide much needed support to HIV positive mothers for whatever is the method of feeding: exclusive breastfeeding or replacement feeding. Policy and programme should not lead them to 'mixed feeding'.

New research findings

The intervention cohort study from South Africa¹ calls upon to drop mixed feeding. Findings of the study published in the Lancet (2007), assess the HIV-I transmission risks and survival associated with exclusive breastfeeding and other types of infant feeding in HIV positive women. The study estimated that risk of late acquisition of infection at six months of age via exclusive breastfeeding was 4.04%. Breastfed infants, who additionally received some solids, had II times higher risk of infection and if other milk or formula is given along with breastfeeding the risk could almost double. The authors reported that mortality by 3 months of age among 'replacement fed' babies was more than double than those

exclusive breastfed. This may be due to the fact that solid foods contain complex proteins, which can damage the lining of gastro-intestinal tract and cause the virus to pass through. Exclusive breastfeeding also reduces the chances of breast infections and inflammation as compared to "mixed feeding". Exclusive breastfeeding also protects the integrity of



intestinal mucosa making an effective barrier to HIV. Even subclinical mastitis is associated with an increased risk of HIV transmission.² These findings are significant addition to existing data on risks associated with artificial feeding. Earlier studies had found the transmission risks between 5-20% covering entire breastfeeding period and all type of breastfeeding.³

New policy recommendations emerge

The study¹ having looked into the risk of HIV transmission and survival associated with exclusive breastfeeding and other types of infant feeding, now clarifies further on infant feeding policies, and how and in what way a health worker should counsel and support HIV positive women on infant feeding options both in high and low prevalence settings. The study further establishes that the association between mixed breastfeeding and increased HIV transmission risk, together with evidence that exclusive breastfeeding can be successfully

Replacement Feeding means: "feeding infants who are receiving no breast milk with a diet that provides the nutrients infants need until the age at which they can be fully fed on family foods")

supported in HIV-infected women. In view of newer WHO recommendations⁴, it warrants revision of the current national guidelines on HIV and infant feeding.

Counseling and support in the new policy

What is infant feeding counselling and support?

In the above-mentioned study, after delivery, all mothers irrespective of their HIV status, were visited by the infant feeding counselors at their home 4 times during first 2 weeks and every two weeks after that. They were supported by the specialist clinics based nurses to maintain exclusive breastfeeding, or replacement feeding whichever was the choice of a woman. These counselors were fully trained using WHO's skill based training course for breastfeeding counselling and HIV and Infant Feeding counsellling.

In a commentary in the same issue of the Lancet, King and Holmes⁵ state that exclusive breastfeeding is uncommon in most communities and is easily undermined not only by the marketing efforts of infant formula manufacturers but a wide range of traditional and modern cultural beliefs, and poor health-care practices particularly in the health facilities. It is very common to offer other foods and drinks to infants in the first days and weeks of life because of several reasons including anxiety about milk supply or pressures to work outside the home. In the above mentioned study, 82% mother breastfed exclusively for at least 6 weeks, and 67% for at least 3 months. They received skilled support from well-trained, lay infantfeeding counsellors. Research in varied settings has found this approach to be effective. Counsellors need training, management, support, and supervision and health-care services need strengthening to provide this intervention. Health workers should be adequately informed and able to give mothers appropriate helpcurrently they are not. Furthermore, there is a need for community education to reach all family members especially men and older women, who influence infant-feeding decisions. This help and support prevents breast inflammation such as sore nipple/cracked nipples/mastitis.

The authors⁵ further stated that these activities also provide opportunities to protect breastfeeding women from becoming infected with HIV particularly when most of times they don't know their HIV status. The increased resources now available to prevent HIV infection in children should be invested in ways that also improve maternal and child health in general. But, in actual practice and budgeting, very little is earmarked for promotion of breastfeeding. Investment in promoting,

protecting, and supporting exclusive breastfeeding for 6 months has the greatest potential to improve HIV-free child survival in settings with both high and low HIV prevalence.

A recent article published in the American Journal of Public Health⁶ concludes that the promotion of exclusive breastfeeding has the potential to reduce postnatal HIV transmission among women who do not know their HIV status and child survival and HIV prevention programs should support this practice.

Why should we bother about mixed feeding?

South Asia, home to about 1.4 billion people, has the highest number of under-five deaths and under-five children who are underweight. Out of total of 146 million under-five underweight children 70 million are in South Asia (UNICEF 2006), they are unlikely to achieve their full growth and potential development. The number of young children reflects the country progress on MDG I (eradication of extreme poverty and hunger). Early breastfeeding within one hour and exclusive breastfeeding for the first six months is thus the key to tackle infant nutrition and also survival of infants and young children. These two make key interventions to achieve the MDG-4 (reduction in child mortality). According to the UNICEF report released in September 2007, worldwide there is reduction in child mortality, through the SAARC nations lag behind. In South Asia, more than 1,400,000 babies are estimated to die during first month of life, and another 2,200,000 during 2 to 12 months. In India alone, about 1,100,000 babies die during first month of life, and about 500,000 during 2 to 12 months of age.⁷

The scientific evidence points out clearly that exclusive breastfeeding can be supported in the HIV positive women who will further decrease the mixed feeding and risk of transmission of HIV. Though there is a need to test pregnant women in the first place so they can be offered the options available to them according to their HIV status. These findings are very relevant in many countries where the population is dominantly of mixed feeders. If we can drop "mixed feeding" rates in our populations, the transmission rates will go down and HIV free child survival will enhance. International Baby Food Action Network (IBFAN) Asia conducted an assessment of policy and programme on infant and young child feeding counselling and support, as well as HIV programmes and infant feeding in the countries of south Asia, and it shows that a lot is needed to bridge the gaps. §



Recommendations

I. Harmonize infant feeding policies at national level with the latest WHO recommendations⁴

All National Government agencies dealing with HIV prevention in the region should accept and incorporate consensus statement by '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, Geneva, Oct'06, in their policies and planning. The consensus statement says "Exclusive breastfeeding is recommended for HIV-infected women for the first 6 months of life unless replacement feeding is acceptable, feasible, affordable, sustainable and safe for them and their infants before that time." The WHO consultation recommended further, "At six months, if replacement feeding is still not acceptable, feasible, affordable, sustainable and safe, continuation of breastfeeding with additional complementary foods is recommended, while the mother and baby continue to be regularly assessed. All breastfeeding should stop once a nutritionally adequate and safe diet without breast milk can be provided."

2. National AIDS Control agencies and Ministries of Health and Family Welfare in south Asian countries should revise their HIV policy to include Safe Exclusive breastfeeding (which means, exclusive breastfeeding 0-6 months, with intensive infant feeding counselling and support, ART, and counseling regarding when to stop breastfeeding, starting at six months) as one of the infant feeding options.

3. Providing explicit programme support for skilled counselling on infant feeding

Based on the recent research findings, we call upon the Ministry of Health in each south Asian country to provide explicit programme support of skilled counselling on infant feeding to its policy of exclusive breastfeeding for the first 6 months for <u>all babies</u>. Following actions are required to achieve this objective:

- IYCF is a low cost, low technology, effective, doable intervention and should be integrated in the National HIV control program on a priority basis.
- Earmarking a budgetary support and funds for ensuring proper "Infant feeding options and support".
- Ensure family level skilled counselling through home visits at least 4 times during first 2 weeks, and then every 2 weeks till six months, by skilled family counselors (3 days

training) to maintain the exclusive breastfeeding status for the first six months. National child health and nutrition programs should use their frontline workers for this purpose. For mothers who chose breastfeeding, prevention of breastfeeding problems like sore nipples needs lactation management and support. For HIV-positive mothers who chose replacement feeding, it requires sustainable supply of formula, education on safe feeding methods, supervision and support to avoid "mixed feeding", as well as stigma attached to replacement feeding etc. (see more details in Table 1)

- Family level counseling should be supported by specialist infant and young child feeding counsellors at 5 to 10,000 population, or at least a block of 30 villages for referral support and long term sustainability to help mothers who have any breast pathology like mastitis and sore nipples.
- Similarly in all hospitals above district level, public or private, a specialist Infant and young child-feeding counsellor should be made available. This needs at least 7day training and nurses would make a useful resource for providing such ongoing support. Doctors who have received similar special training should support them.

References

- 1. Coovadia HM, Rollins NC, Bland RM et al. Mother-to-child transmission of HIV-1 infection during exclusive breastfeeding in the first 6 months of life: an intervention cohort study. *Lancet 2007;* 369:1107-1116.
- Willumsen JF, Filteau SM, Coutsoudis A, Newell ML, Rollins NC, Coovadia HM, Tomkins AM. Breastmilk RNA viral load in HIVinfected South African women: effects of subclinical mastitis and infant feeding. AIDS 2003; 17(3):407-14.
- 3. De Cock KM, Fowler MG, Mercier E, De Vincenzi I, Saba J, Hoff E et al. Prevention of mother-to-child HIV transmission in resource-poor countries; translation research into policy and practice. *JAMA* 2000;283:1175-1182.
- 4 World Health Organization. The Inter-Agency Task Team. WHO HIV and Infant Feeding Technical Consultation Consensus Statement. Geneva: World Health Organization, 2006; http://www.who.int/reproductive-health/stis/mtct/infantfeedingconsensusstatement.pdf;accessed on April 25 2008.
- 5. Holmes WR, Savage F. Exclusive breastfeeding and HIV. *Lancet* 2007; 369:1065-66.
- 6. Piwoz EG, Humphrey JH, Tavengwa NV, Iliff PJ, Marinda ET, Zunguza CD et al. The Impact of Safer Breastfeeding Practices on Postnatal HIV-1 Transmission in Zimbabwe. *Am J Public Health* 2007; 97:1249-1254.
- 7. IBFAN South Asia Report Card on Child Survival and development 2007. *Http://ibfanasia.org/Reports/South_Asia_Report.pdf*, accessed on April 25, 2008.
- 8. World Breastfeeding Trends Initiative (WBTi). http://www.worldbreastfeedingtrends.org/, accessed on November2, 2007.

Table 1: What support is needed for the HIV positive mothers for practicing infant feeding options if they have made any of these two choices?

Needs	Chooses Exclusive breastfeeding	Chooses Replacement feeding
Support of skilled health workers/counsellors	Required Skilled counselling and support to practice exclusive breastfeeding and prevention as well as treatment of sore nipples, mastitis, prevention and treatment of breast over-fullness and engorgement etc	Required to teach replacement feeding including hygiene, dilution etc
Home visits	YES 2 visits in a week for first two weeks, preferably daily for first few days, and then every 2 weeks till about 6 months	YES Needs at least 3 visits in a week, preferably daily for first few days, to check for mixed feeding, and to ensure proper and safe replacement feeding.
Resources to ensure Affordability	Nutrition support to mothers (equal to what had to be spent on formula in case of replacement feeding)	Money to buy animal milk or powdered infant formula OR state ensures, resources to treat sick babies, responsive health care system, PLUS Nutrition support to mothers
Monitoring immune status of the mother	Provide appropriate health care to the mother and maintain CD4 count above >200/cmm	Provide appropriate health care to the mother and maintain CD4 count above >200/cmm
Safety	Needs education of family or parents to maintain exclusivity and prevent breast problems	Needs education of family or parents to prevent diarrhea and other killing illnesses
Education about contraception	Lactation Amenorrhea Method helps	To prevent next pregnancy, some contraception is required
ART	YES	YES
Policy support	YES	YES
Health watch and response	 For oral thrush, for mastitis, and other breast pathology, does not need a health facility, specialist counsellor can do the job. Growth monitoring 	 For sickness in the baby, diarrhea, pneumonia etc, need treatment in health facility Growth monitoring
Skilled IYCF counsellor	YES	YES
Primary prevention safe sex practices	YES	YES

Written and Edited by:

Dr. Arun Gupta, National coordinator, BPNI and regional coordinator IBFAN Asia; prepared the initial draft of the article and prepared the table given on the last page. He also contributed in the final editing of the article.

Dr. JP Dadhich, Project coordinator-Research, Documentation and HIV, BPNI; enhanced the contents and edited it further to give the final shape. He also coordinated the review process.

Designed by:

Amit Dahiya

Reviewers:

- I. Dr. K Kesavulu, Civil Surgeon Pediatrician, Government District Hospital, Hindupur, Andhrapradesh, India.
- Dr. Satish Saluja, Senior Consultant, Department of Neonatology, Sir Gangaram Hospital, New Delhi, India.
- $3. \ \ Dr\ Vijay\ Aruldas,\ General\ Secretary,\ The\ Christian\ Medical\ Association\ of\ India\ (CMAI).$
- 4. Dr. MMA Faridi, Principal, Dean, CMS, Professor of Pediatrics, Era's Lucknow Medical College, Sarfrajganj, Hardoi Road, Lucknow, Uttar Pradesh, India.
- 5. Dr NB Mathur, Professor of Pediatrics, Maulana Azad Medical College, New Delhi, India.
- Dr. AP Mehta, Consultant, Department of Pediatrics, Sunderlal Jain Hospital, New Delhi, India.

Acknowledgement

We are sincerely thankful to Dr. Peggy Henderson and Dr. Constanza Vallenas, Department of Child and Adolescent Health and Development, WHO, Geneva, Switzerland for having commented on the drafts.





Breastfeeding Promotion Network of India (BPNI) / International Baby Food Action Network (IBFAN-Asia)

BP-33, Pitampura, Delhi 110 034, India, Tel: +91-11-27343608, 42683059, Tel/Fax: +91-11-27343606 Email: bpni@bpni.org, info@ibfanasia.org, Website: www.bpni.org, www.ibfanasia.org