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Formula-feeding is not a sustainable solution

We agree with the authors Binagwaho et al.¹ that sustainable access to safe drinking water is important and will go a long way to reducing the dangers associated with formula feeding. However, even if we meet the United Nations' Millennium Development Goal (MDG) of halving the proportion of people without sustainable access to safe drinking water by 2015, there will still remain some 600 million people without safe water.² According to current trends Sub-Saharan Africa, which bears the brunt of HIV, is estimated to only reach this MDG goal by 2040.² We submit, however, that even in situations where one does have access to clean water, there are inherent risks, such as pneumonia and diarrhoea, associated with the absence of breast milk, probably related in part to the role

that breast milk plays in stimulating maturation of the infant's innate gastrointestinal immunity.³ These dangers are exacerbated in resource-poor settings resulting in the documented increase in mortality when young infants are not breastfed.⁴ In HIV-prevalent settings, as we previously, and the authors now mention, there are indeed a few settings where formula feeding has been shown to reduce the potential threat of mortality among formula-fed infants. Of note is that the study quoted⁵ and other similar studies all have shown equivalence in HIV-free survival. If breast- and formula-feeding (in these few settings) have similar outcomes in terms of HIV-free survival of infants, why would a developing country invest in a technology that comes at significant cost to public health budgets? In KwaZulu-Natal province, which has the highest HIV prevalence in South Africa, supply of formula has accounted for up to 50% of the provincial budget for prevention of mother-to-child transmission of HIV (PMCT). Would it not be more directly cost effective to invest in safe water for all? A major outbreak of diarrhoea that caused a spike in mortality, particularly among formula-fed infants, in Botswana (one of the wealthiest sub-Saharan African countries) illustrates the complexities of continuously providing an adequate formula supply and recognizes the inherent dangers of a contaminated water supply in a national PMCT programme.⁶ This highlights the importance of following the latest UNAIDS/UNICEF/WHO guidelines (2007) of only using replacement feeding when it is "acceptable, feasible, affordable, sustainable and safe" – having clean water only satisfies one of these criteria.

We need to bear in mind that breast milk remains a very important food source in food-insecure households and we need to be more imaginative in looking for ways of preserving it while rendering it safe. A stark reminder of the need to preserve household food security comes from the 2009 Millennium Development Goals Report⁷ where it is reported that the

current economic and food crises are endangering the recent gains that have been made in eradicating hunger and poverty. The threat of food insecurity is not only to the formula-fed newborn but also at 6 months and older when milk still constitutes a significant portion of the infant's food intake.

The issues on breastfeeding and HIV transmission are now "stale, flat and unprofitable" as there are proven interventions to simultaneously reduce HIV transmission, improve survival of infants and preserve the multiple benefits of breastfeeding. These interventions include: promotion and support of exclusive breastfeeding during the first 6 months;⁸ maternal highly active antiretroviral therapy (HAART) and infant antiretroviral prophylaxis;⁹ and the use of a simple home-based method of flash heating breast milk which destroys the HIV virus while maintaining the majority of nutritional and immunological properties of breastmilk.¹⁰

The search for sustainable solutions that also implement sensible emergency measures, supersedes short-term answers such as formula-feeding. In emergencies, the use of formula is neither a sustainable solution nor a sensible immediate option. ■

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