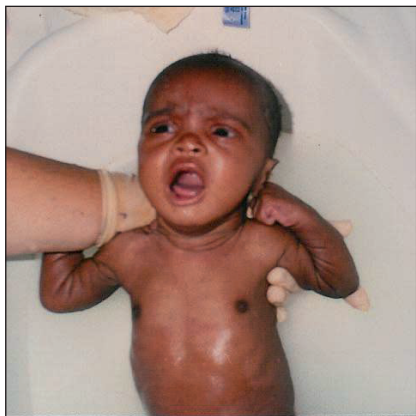




BREASTMILK BANKING REGAINS VITAL EXPRESSION



From this: HIV-positive at 2 months old on 29 January 2003, Mbuyelo (not his real name) suffered from malnutrition, scabies and tuberculosis, was in respiratory distress and weighed 3 kg. A month later his mother died of AIDS after signing his adoption papers.

Breastmilk banking as a means of supporting low-birth-weight infants and HIV-compromised children is fast regaining its gold standard status in South Africa's top hospitals after diligent HIV research work by a Durban public health scientist.

Anna Coutsooudis, professor in the Department of Paediatrics and Child Health at the University of KwaZulu-Natal, pioneered a unique nutritional scheme feeding just five orphans in an inauspicious Umbilo Road home, 4 years ago (see *SAMJ Izindaba*, January 2002).

Her iThemba Lethu breastmilk bank began with the excess milk of 20 breastfeeding women, providing 750 ml per day to each of the orphans, but more importantly, used screening of donors and pasteurisation of the breastmilk to eliminate any chance of HIV infection.

With the formula feeding versus breastmilk debate in full cry at the time, some fellow scientists saw her work as controversial and risky. Yet Coutsooudis persisted, convinced she was on the right track. 'The risk of infants contracting diarrhoea and pneumonia

through formula feeding in unhygienic low-income settings is just unacceptably high,' she told *Izindaba* at the time.

Not only did the project expose more privileged donor mothers to the tragedy of the AIDS epidemic, but its continued success eventually began to allay the more conservative clinicians' fears. So much so that it has now virtually restored the status of breastmilk banks in several major hospitals to pre-HIV era levels.

Coutsooudis told *Izindaba* that breastmilk banks using the iThemba Lethu protocols have now been set up in Cape Town, Johannesburg and Pretoria and are being adapted for use in Groote Schuur, Mowbray, Tygerberg and Pretoria Academic hospitals. The banks used UNICEF funding to enable the purchase of the same pasteurisers as iThemba Lethu.

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'It's gratifying to see that fears have been allayed as people have realised that providing you run the banks well, with good protocols and standards, there should be no danger of infection,' she said.

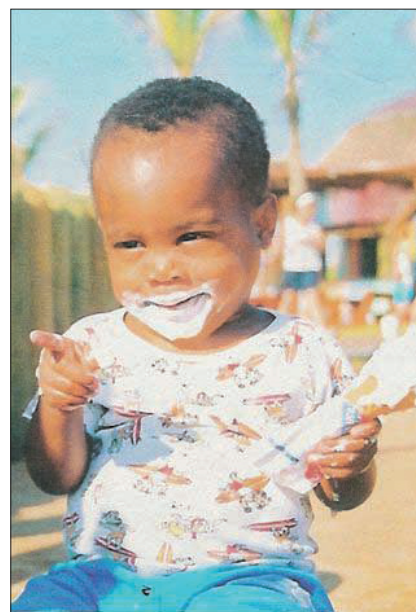
HIV babies recover miraculously

Coutsooudis can cite case after case of severely HIV-compromised infants speedily regaining condition and weight after just a few weeks of breastmilk feeding, further enhancing and supporting the initiation and continuance of ARV treatment. She said AIDS orphans (or abandoned

HIV-positive infants) were specifically targeted because they had usually suffered 'considerable nutritional insult' and were in desperate need of the rehabilitative and immunological properties of breastmilk.

Coutsooudis said new evidence clearly showed that morbidity and mortality were lower in HIV-infected children who received breastmilk, even from their own HIV-infected mothers, than in infected infants fed on formula.

In spite of considerable controversy and some AIDS orphanages even declining donated breastmilk for HIV-infected children, the WHO HIV and Infant Feeding Consultation held in Geneva in October last year pronounced clearly in its favour.



To this: Fed with donated breastmilk for a year, Mbuyelo was started on HAART at 21 months, adopted into a loving family and is now 2 years and 8 months old, weighing 12.7 kg – and flourishing.



Corne Vermeulen of Durban with his premature daughter, Miki, whose mum, Dr Liesl Roope, kept on donating her excess milk to iThemba Lethu.

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Donors are sourced from antenatal clinics and mothers' groups, targeting women in the middle-income bracket who have access to refrigeration and freezing facilities as well as hygienic kitchens where they can safely handle their breastmilk. All women who volunteer as donors are screened for lifestyle risks for infectious diseases as well as for drug taking. Although no blood tests are done on volunteers, all are requested to provide the results of their routine antenatal HIV and syphilis testing. As a further safeguard all the milk that is received at the bank is defrosted and pasteurised and then refrozen. Donor mothers are instructed how to collect and store the milk.

Coutsoudis said the bank's functioning had been further improved by purchasing high-quality plastic bottles specifically manufactured for pasteurising expressed breastmilk. Milk is stored frozen until collected by the breastmilk bank staff and taken to the bank for pasteurisation. The average length of time that a donor mum donates for is about 3 months and most mothers manage to donate about 250 ml per day.

Getting international help

Another first last year was iThemba Lethu receiving three shipments of frozen, pasteurised breastmilk (about 110 litres), after a United States woman saw their website and began what is now known as the International Breastmilk Bank Project.

The fledgling project has sparked more interest among South African women and iThemba Lethu is now able

to supply milk to two large children's homes in Durban (Lily of the Valley and Shepherd's Keep) and, most recently, for a preterm baby in George Hospital.

Coutsoudis said evidence presented at the WHO October consultation showed that the early cessation of breastfeeding (before 6 months) was associated with an increased risk of infant morbidity (especially diarrhoea) and mortality in HIV-exposed children in completed (Malawi) and ongoing (Kenya, Uganda and Zambia) studies.

New preliminary evidence presented from Botswana and Zambia showed that breastfeeding of HIV-infected infants beyond 6 months was associated with improved survival compared with stopping breastfeeding.

The conference called on governments and other stakeholders to 're-vitalise breastfeeding protection, promotion and support in the general population, and to actively support HIV-infected mothers who choose to exclusively breastfeed'. Coutsoudis said that because breastmilk banking was one of the strategies to support and promote breastfeeding it was 'vital that we urgently expand breastmilk banking here in South Africa'.

iThemba Lethu, in collaboration with UNICEF, ran a workshop with all the key local role players in March last year to try and form a Human Milk Banking Association of South Africa to formulate guidelines for operating, supervising and regulating breastmilk banks locally. Their website is HYPERLINK "<http://www.ithembalethu.org.za/>" www.ithembalethu.org.za and that of Jill Youse, the United States breastfeeding mother who helped the local project go international, is www.breastmilkproject.com.

Chris Bateman