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EDITORIAL

# Urgent call for awareness and education about donor breastmilk

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Breastmilk is considered the best source of nutrition for newborn infants due to its numerous and well documented benefits.[1,2] Breastmilk and breastfeeding are also regarded as the most powerful interventions to save infants' lives[3], notably for those born preterm and low birth weight. For these infants, a weakened immune system and immature gastrointestinal system, with related motility, digestion and absorption issues could lead to dysbiosis and necrotising enterocolitis in the short term. If the infants survive, impaired neurodevelopmental outcomes can, and do, occur in the longer term.[4] In such cases, breastmilk can provide bioactive and immune factors that promote gut maturation, protect against infections, and facilitate growth.[5,6]

Between 15–20% infants are born low birth weight and premature globally, and may require admission to a neonatal intensive care unit (NICU).[7] Many of these vulnerable infants are, however, deprived of their mother's own milk (MOM)[7], due to factors such as abandonment, mother, or infant illness or death.[8] The lack of access to MOM leaves these infants more exposed to detrimental health outcomes.[9] In such instances, pasteurised donor breastmilk (DBM) is a superior alternative feed to commercial milk formula (CMF), especially in the high-risk infants.[10,11] In the last decade, DBM from breastmilk banks has become the standard of care for preterm infants in NICUs.[12,13]

The first breastmilk bank was established in 1909, in Vienna, Austria. Since then, the number has grown to more than 600 breastmilk banks around the world.[14] These banks are responsible for recruiting donors, where DBM is collected, processed, screened, stored, and dispensed to infants in need. Globally, services offered by the breastmilk banks have decreased infant mortality and morbidity.[10] – In Brazil, for example, since breastmilk banks were integrated into newborn health policy, neonatal mortality dropped by 73% between 1990 and 2013.[15] In South Africa (SA), before the 1980's, breastmilk banks connected to hospitals existed informally, but ceased to operate due to the outbreak of the HIV pandemic. However, the discovery of the holder pasteurisation method led to the official reinstating of breastmilk banking in KwaZulu-Natal province in the year 2000.[16] In 2011, the South African Ministry of Health and various stakeholders met, discussed, and signed an undertaking, the "Tshwane Declaration" to reduce the persistently high child mortality rates in the country. In this declaration, strategies that aim to protect, support, and promote breastfeeding for all mothers and infants, including those living with HIV, were addressed. One of the recommendations from the declaration was that "human milk banks should be promoted and supported as an effective approach, especially in post-natal wards and neonatal intensive care units, to reduce early neonatal and post-natal morbidity and mortality for babies who cannot breastfeed".[17] The Human Milk Banking Association of SA (HMBASA) was subsequently established and registered to ensure the safety of DBM.[16] Currently, there are 70 functional breastmilk banks in SA, of which 37 operate in the government setting.[18]

Even though breastmilk banks can provide safe and lifesaving donor milk to infants in such need, local and global evidence documented an insufficient caregiver's knowledge about breastmilk banking and an unwillingness to accept and use DBM. This is mainly due to concerns about the microbial safety of DBM, the pasteurisation process, the screening of donors, discomfort, and sensitivity of using a bodily fluid from another person.[19–21] In a rural region of Bangladesh, mothers were resistant to receive DBM from a breastmilk bank, even if it was indicated for their infants.[22] Furthermore, a study conducted in Turkey reported that more than a third of mothers had insufficient knowledge about breastmilk banking. After information about breastmilk banking was provided, about a third of participants showed interest in donating milk to the bank, but the vast majority still did not want to receive DBM.[21]

Two South African studies, one in Gauteng and another in the Eastern Cape, revealed insufficient maternal knowledge about DBM and an unawareness about breastmilk bank services.[23,24] Furthermore, in Limpopo province, breastfeeding mothers had negative attitudes and mentioned cultural barriers towards the use of DBM due to fear of contracting diseases, particularly HIV. In contrast, participants felt that donating milk to a breastmilk bank was a way to demonstrate altruism.[25]

Findings from the study featured in this issue of the SAJCN, conducted in KwaZulu Natal,[26] has reported similar results. Three quarters (64.4%) of participants had insufficient knowledge of DBM, which was ascribed to a lack of awareness of DBM. The authors of the study[26] suspect that the lack of awareness stems from lack of information sharing or inadequate education provided to mothers. Furthermore, negative attitudes towards DBM in the featured study[26] were largely associated with a lack of knowledge regarding HIV screening of donor mothers and fears of HIV transmission when using DBM.

Various, and repeated, calls have been made to include education on DBM in the ante-natal package of information provided to mothers. The featured study[26] affirms this call and recommends that DBM awareness and education should be specifically added to the general breastfeeding information and education to mothers, starting at antenatal visits. Education, during the ante-natal period, may also provide sufficient time for mothers to prepare for lactation.[13] Education to mothers should include the benefits of breastfeeding and breastmilk and provision of MOM as priority, donation of breastmilk, the processes performed at the banks to ensure safety and the use and administration of DBM. Mothers should know that they can utilise DBM if their infants are admitted to the NICU

and if they are unable to provide MOM, for whatever reason.[27] Furthermore, a clear recommendation for the SA setting, from the featured study[26] as well as previous research,[23–25] is that the education should include HIV and related issues. In health facilities where the mother baby friendly initiative (MBFI) is in place and where policies are clear, the time mothers spend in these environments should be adequate to cover the mentioned topics, improve knowledge, alleviate fears, and break myths.[26]

In further efforts to ameliorate the current situation, awareness creation and education to family members, community and religious leaders may also play a role in supporting the uptake of DBM in communities.[28] Awareness and education programmes about breastmilk banking can support breastfeeding, improve knowledge of communities about DBM and breastmilk banking, increase the usage of DBM and change mother's perceptions about breastmilk sharing.[9] Such programmes could assist in closing the knowledge gap about breastmilk banks which could influence the acceptability of DBM, while increasing awareness of the value of breastfeeding and, in turn, improve general community breastfeeding rates.[11]

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