

## Promotion, protection and support of exclusive breast-feeding (EBF) – How to change a normative behaviour into a reality?

The benefits of breast-feeding for both the newborn and the mother have been well documented over centuries.<sup>1,2</sup>

Starting with the neonate, it has been established that breast-feeding within the first hour of birth can avert 22% of infant deaths.<sup>3</sup> More recently, the literature has focused on the crucial role of breast-feeding especially for children under two years of age in terms of child survival, and its potential in preventing up to 1.4 million deaths among children below the age of five years.<sup>1,4,5</sup> Exclusive breast-feeding (EBF) practices are equally beneficial in both poorly resourced and in affluent communities. With regard to the latter, the UK Millennium Cohort Study documented that six months of EBF resulted in a 53% reduction in hospital admissions attributable to diarrhoea and a 27% decline in respiratory infections.<sup>6</sup> In developing countries, where the disease burden is accentuated by pandemics such as HIV and AIDS, and limited access to clean water and sanitation, early and immediate EBF, and continued breast-feeding beyond six months, is the optimal nutrition for children.

According to UNICEF, while breast-feeding initiation rates are no longer declining at the global level, only 38% of children younger than six months of age in the developing world are exclusively breast-fed and only 39% of 20–23 month olds benefit from the practice of continued breast-feeding.<sup>7</sup> Additional recent evidence also indicates that only in 28 countries worldwide are about 50% of children exclusively breast-fed.<sup>8</sup>

In South Africa, according to the South African Demographic and Health Survey (SADHS) of 1998,<sup>9</sup> 88% of mothers have ever initiated breast-feeding, and by 2003 this had improved only marginally (2%).<sup>10</sup> However, in the first three months of life, only 10% of infants were exclusively breast-fed, while 48.3% of infants were formula-fed, nationally. The EBF rate for infants aged nought to five months was 7%. Of particular concern is that approximately 70% of infants in this age category had received complementary feeds before the age of six months, when they would be physiologically more prepared to

accept such types of foods. It is clear that the rates of EBF in South Africa are low and that even when EBF is practised this exclusivity is maintained for a very limited period of time.

In this issue of the SAJCN, Sowden et al provide interesting insight into the feeding practices of affluent mothers in the Cape Metropole. Their study is interesting in that, contrary to most of the published literature on breast-feeding practices in South Africa and other developing countries that focuses on the poorer sectors of society, the study particularly addresses the determinants of feeding practices among the higher socio-economic classes in the Cape Metropole. Key findings of the study indicate that most of the mothers (80%) decided after delivery that they would formula feed their infants. This finding indicates that there may be missed opportunities at the antenatal, labour and postnatal care stages for mothers to be advised on the advantages of breast milk as the “normal” feeding option.

The latter concept is supported by the current literature, derived from three Cochrane reviews of randomised trials of interventions to promote and support breast-feeding in developed countries. The review indicates that counselling during pregnancy, in hospital and at home is a moderately effective intervention in increasing breast-feeding rates.<sup>11</sup> In a separate random effects meta-analysis of evidence for the effectiveness of interventions at primary care level to promote breast-feeding in mainly the developed countries, it was established that breast-feeding promotion through structured education by a professional or lay person had a positive effect in terms of increasing exclusive breast-feeding in the first three months and beyond. Further, in a subgroup analysis, evidence indicated that the combination of pre- and post-natal breast-feeding interventions (especially if lay support was used) contributed to increased breast-feeding rates, albeit on a modest scale.<sup>12</sup>

The second important issue raised by Sowden et al is that breast-feeding constraints pertained primarily to the lack of facilities to breast-feed in public (75%) and at workplaces (71%). In efforts to address this constraint, countries such as Scotland have recently

(in 2005) introduced legislation to make it an offence to prevent a mother from breast-feeding her child under two years of age in public.<sup>13</sup> The creation of baby-friendly environments in the workplace has not yet taken off in South Africa, or even internationally,<sup>14</sup> but it should prove beneficial in addressing a key constraint to breast-feeding practices, and hence it requires further consideration.

Whilst the findings of Sowden et al indicate that the lack of breast-feeding knowledge was a barrier for only 38% of the mothers (in the study), this figure may be an underestimate considering that more than 50% of the mothers did not know the determinants of breast milk nutrient composition and more than a third (36%) believed that formula milk was as healthy as breast milk. The latter figure is in a similar range (up to 25%) as recorded in an American study.<sup>15</sup> The promotion of breast-feeding on the basis of “breast is best” may, therefore, have been less than effective in achieving the desired aims. Rather, the future promotion of exclusive breast-feeding as being the “normal” method of feeding an infant may prove more effective. This approach is in accord with the new WHO growth standards,<sup>16</sup> and needs to be further investigated.

Whilst safe infant feeding and the support and promotion of EBF is confounded by the prevalence of HIV in South Africa, extensive local evidence, in a research but not programmatic setting, is supportive of intensive and frequent counselling of mothers both at health facility and household level on EBF having a measure of effectiveness.<sup>17,18</sup> Within the context of EBF promotion, the reasons for refraining from breast-feeding among affluent women in the Cape Metropole are not that dissimilar to the concerns that other mothers are likely to face worldwide.<sup>19–21</sup> Furthermore, there is also significant consistency in the recommendations being made on how to reverse the global trend towards refraining from breast-feeding. Therefore, in addition to the recommendation made by Sowden et al, wherein the model suggested is still based on expectations of maternal health seeking, there is a need for more intense community and household level promotion of breast-feeding as the “normative” method of infant feeding. There is also a need to embark on the implementation of baby-friendly communities, the promulgation of appropriate legislative frameworks, such as the Code of Marketing of Breastmilk Substitutes, to protect breast-feeding, and customisation of innovative messages on EBF benefits within the cultural and socio-economic context of each community and its household members if we are to successfully transform a “normative behaviour” dream into reality.

### Matji JN

Nutrition Consultant, Pretoria, South Africa

**Correspondence to:** Ms Joan Matji

**e-mail:** tsebo@netactive.co.za

### References:

1. WHO Collaborative Study Team on the Role of Breastfeeding on the Prevention of Infant Mortality. Effect of breastfeeding on infant and child mortality due to infectious diseases in less developed countries: a pooled analysis. *Lancet* 2000 February 5;355(9202):451-455.
2. Cunningham AS, Jelliffe DB, Jelliffe EF. Breast-feeding and health in the 1980s: a global epidemiologic review. *J Pediatr*. 1991 May;118(5):659-666.
3. Edmond KM, Zandoh C, Quigley MA, Amenga-Etego S, Owusu-Agyei S, Kirkwood BR. Delayed breastfeeding initiation increases risk of neonatal mortality. *Pediatrics* 2006 Mar;117(3):e380-6.
4. Effect of breastfeeding on infant and child mortality due to infectious diseases in less developed countries: a pooled analysis. WHO Collaborative Study Team on the Role of Breastfeeding on the Prevention of Infant Mortality. *erratum appears in Lancet* 2000 Mar 25;355(9209):1104. *Lancet* 2000 Feb 5;355(9202):451-455.
5. Black RE, Allen LH, Bhutta ZA, Caulfield LE, de Onis M, Ezzati M, et al. Maternal and child undernutrition: global and regional exposures and health consequences. *Lancet* 2008 Jan 19;371(9608):243-260.
6. Quigley MA, Kelly YJ, Sacker A. Breastfeeding and hospitalization for diarrheal and respiratory infection in the United Kingdom Millennium Cohort Study. *Pediatrics* 2007 Apr;119(4):e837-42.
7. United Nations Childrens Fund (UNICEF). State of the Worlds Children 2008. December 2007:1.
8. United Nations Childrens Fund (UNICEF). Childinfo: Monitoring the Situation of Women and Children. Statistics by Area: Child Nutrition. [http://www.childinfo.org/breastfeeding\\_overview.html](http://www.childinfo.org/breastfeeding_overview.html) (Accessed 17/01/2009.)
9. Department of Health Pretoria South Africa, Measure DHS ORC Macro Calverton Maryland USA. South African Demographic and Health Survey, 1998 Report. Available at: <http://www.doh.gov.za/facts/sadhs-f.html>. (Accessed 16/01/2009.)
10. Department of Health Pretoria South Africa, Measure DHS ORC Macro Calverton Maryland USA. South African Demographic and Health Survey, 2003 Preliminary Report. 2005; Available at: <http://www.doh.gov.za/facts/sadhs 2003/prelimreport.pdf>.
11. Hodinott P, Tappin D, Wright C. Breast feeding. *BMJ* 2008 Apr 19;336(7649):881-887.
12. Chung M, Raman G, Trikalinos T, Lau J, Ip S. Interventions in primary care to promote breastfeeding: an evidence review for the U.S. Preventive Services Task Force. *Ann Intern Med*. 2008 Oct 21;149(8):565-582.
13. Bolling K, Grant K, Hamlyn B, Thornton A. Infant feeding survey 2005. 2007.
14. Renfrew M, Hall D. Enabling women to breast feed. *BMJ* 2008;337:a1570.
15. Li R, Rock VJ, Grummer-Strawn L. Changes in public attitudes toward breastfeeding in the United States, 1999-2003. *J Am Diet Assoc* 2007 Jan;107(1):122-127.
16. Berry NJ, Gribble KD. Breast is no longer best: promoting normal infant feeding. *Maternal & Child Nutrition* 2008 Jan;4(1):74-79.
17. Bland RM, Rollins NC, Coovadia HM, Coutsooudis A, Newell ML. Infant feeding counselling for HIV-infected and uninfected women: appropriateness of choice and practice. *Bull WHO* 2007 Apr;85(4):289-296.
18. Bland RM, Little KE, Coovadia HM, Coutsooudis A, Rollins NC, Newell ML. Intervention to promote exclusive breast-feeding for the first 6 months of life in a high HIV prevalence area. *AIDS* 2008 Apr 23;22(7):883-891.
19. Li R, Fein SB, Chen J, Grummer-Strawn LM. Why mothers stop breastfeeding: mothers' self-reported reasons for stopping during the first year. *Pediatrics* 2008 Oct;122(Suppl 2):S69-76.
20. Onayade AA, Abiona TC, Abayomi IO, Makanjuola RO. The first six month growth and illness of exclusively and non-exclusively breast-fed infants in Nigeria. *East Afr Med J* 2004 Mar;81(3):146-153.
21. Pelto GH, Levitt E, Thairu L. Improving feeding practices: current patterns, common constraints, and the design of interventions. *Food & Nutrition Bulletin* 2003 Mar;24(1):45-82.