Breastfeeding policies and practices in health care facilities in the Western Cape Province, South Africa

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Abstract

The Baby-Friendly Hospital Initiative (BFHI) is a global effort to improve the role of maternity services and to enable mothers to breastfeed their infants, thus ensuring the best start in life for their infants. The foundation for the BFHI is the Ten Steps to Successful Breastfeeding (BF). It has been shown, however, that the selective implementation of only some of the steps may be ineffective and discouraging to successful BF practices. An initial study was therefore conducted to assess the extent of the implementation of the Ten Steps in both public and private maternity facilities. Poor performance for some steps led to a follow-up study to investigate the knowledge and attitudes of health care workers (HCWs) and mothers alike and to evaluate the exclusive BF (EBF) practices of mothers attending private BF clinics. Both studies followed descriptive, cross-sectional designs and were set in the Cape Metropole in the Western Cape. Twenty-six maternity facilities participated in the initial study, for which observation lists were completed and verified by interviewer-administered questionnaires to both HCWs and mothers. Eighteen private BF clinics participated in the follow-up study, which included observations and interviewer-administered questionnaires to 25 HCWs and 64 mothers. During the initial study, lower mean scores were noted for Steps 1, 2, 6 and 10. The overall implementation of the Ten Steps was average. The findings highlighted the importance of the establishment and implementation of BF policies, of appropriate and continuous BF training and better referral systems to ensure initiation and establishment of early BF, EBF practices and support on an ongoing basis to ensure the best start in life for infants.

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Introduction

The World Health Organization (WHO) and the United Nations Children's Fund (UNICEF) launched the Baby-Friendly Hospital Initiative (BFHI) in 1991 following the Innocenti Declaration of 1990. This initiative is a global effort to improve the role of maternity services and to enable mothers to breastfeed their infants, thus ensuring the best start in life for their infants. It aims at improving the care of pregnant women, mothers and newborns at health facilities that provide maternity services. It also aims at strengthening practices that protect, promote and support breastfeeding (BF) and at removing practices that hinder the process.

The foundation for the BFHI is the Ten Steps to Successful Breastfeeding (Ten Steps).^{1,2,3} The evidence of the effectiveness of the Ten Steps is substantial for most of the steps.⁴ The selective implementation of only some of the steps, however, may be ineffective and discouraging to successful BF practices. The implementation of all the Ten Steps, which includes strong policies and the adequate, relevant and practical training of personnel, continuing support to mothers and restriction on the use of breast-milk substitutes (BMS) to clearly defined medical reasons, most effectively increases and sustains exclusive breastfeeding (EBF).

A recent Swiss study supported the finding that infants born in a babyfriendly hospital 'are more likely to be breastfed for a longer period, particularly if the facility shows high compliance with the UNICEF guidelines'.⁵ Approximately 20 000 hospitals in 150 countries have been accredited as baby-friendly, more than 60 countries have laws or regulations implementing the International Code of Marketing of BMS and many countries have some form of national BF authority.⁶

A study (referred to as the 'initial study') was conducted in 2001 to gain perspective on certain important elements of the BFHI in South Africa (SA) and, more specifically, in the Western Cape (WC) Province. At the time, there were only two baby-friendly accredited facilities in the WC and there was thus an urgent appeal by the Integrated Nutrition Programme (INP) of the National Department of Health (DoH) for focused efforts to assist health facilities in becoming baby-friendly accredited. The aim of the initial study was to assess the extent of the implementation of the Ten Steps in both public and private maternity facilities in the WC.

The poor implementation of specific steps found in the initial study resulted in a follow-up study in 2005. The target group for the follow-up study was private facilities only, as the initial study had indicated significantly poorer BF knowledge and barriers to EBF but significantly more referral to BF support groups in private facilities. The main aspects investigated in the follow-up study were the knowledge levels and the attitudes of health care workers (HCWs) and mothers alike and practices inhibiting the continuation of EBF by mothers attending private BF clinics.

Materials and methods

Both the initial and the follow-up studies followed descriptive, cross-sectional designs. The initial study was conducted at facility level (ecological) and the follow-up study on individuals. The Cape Metropole was conveniently (due to its close proximity) selected as the study setting. For the initial study, a sampling frame of 52 public and private maternity facilities was identified from lists from the DoH, the Provincial Administration of the WC and the websites of private-hospital groups in the WC. For the follow-up study, a sampling frame of 35 private BF clinics was identified from the websites of private-hospital groups and the La Leche League SA. In both studies, the full sampling frame was approached to participate.

In the initial study, a maximum of three HCWs and five mothers were selected at each facility using purposive sampling. HCWs (one doctor, one sister in charge and one nurse) working in the maternity facilities present at the time of the investigators' visit and fluent in English or Afrikaans were included in the study. Mothers present at the time of the visit who were in a condition to participate, who had had uncomplicated natural or Caesarean-section births, who had a gestation period of 38 to 42 weeks, who had infants with a normal birth weight (> 2 500 g) and who were literate and fluent in English, Afrikaans or Xhosa were included in the study.

In the follow-up study, purposive sampling was used to identify a maximum of three HCWs and a maximum of five mothers for inclusion at each private BF clinic. Inclusion criteria for the mothers included being English or Afrikaans speaking, consenting to participate, having infants younger than six months, attending the clinic for at least the second time and currently BF. Consenting English and Afrikaans-speaking HCWs on duty on the day of the clinic visit were invited to participate.

Data-collection tools for the initial study comprised a check-list for the observation of practices at each facility. The check-list was based on the BFHI Hospital Self-Appraisal Tool of the WHO/UNICEF and designed by the investigators of this study. Interviewer-administered questionnaires for the HCWs and mothers were also used to cross-check the observations in the check-list. The questionnaires included open and closed-ended questions aimed to evaluate the implementation of each step.

Data-collection tools for the follow-up study comprised intervieweradministered questionnaires for HCWs and mothers at private BF clinics. The questionnaires included open and closed-ended questions to determine BF knowledge levels and practices and a four-point Likert scale ('strongly agree', 'agree', 'disagree' and 'strongly disagree') for the attitude statements. Questions regarding knowledge of BF were based on the 18-hour WHO BF training course. Attitudes towards statements regarding BF as the best feeding option, discontinuing BF and support of BF were assessed. Practices were observed using a list based on the Ten Steps relevant to BF clinics.

Permission was obtained from the DoH, the Provincial Government of the WC and the facility managers of all the facilities visited. Ethics approval was obtained from the Head of Division: Human Nutrition on behalf of the Human Research Committee of the Faculty of Health Sciences, Stellenbosch University. All the participants (both the HCWs and the mothers) provided written, informed consent prior to participating in both studies.

Data analysis

The SAS system was used in the initial study and SPSS for Windows and Excel were used in the follow-up study.

In the initial study, elements from the observation lists and pooled responses from the questionnaires (both HCWs and mothers) for each facility were allocated to the relevant step of the Ten Steps. The frequency of implementation was calculated both overall and for the public and the private facilities. The HCWs' and mothers' responses were not collected individually but as representative of each specific facility. Contingency tables were drawn for each of the elements within the relevant step. The Fischer's Exact Test (with a significance level of < 0.05) was used to determine the differences between the public and the private facilities because the small sample size resulted in small values being expected in at least one of the contingency table boxes. Scores were also calculated for each facility for each step reflecting the degree to which the facility implemented the specific step. Means and standard deviations were calculated for each step's score. A grading scale was designed by the investigators to interpret these scores: a score from 0% to 25% was classified as 'poor implementation', 26% to 50% as 'below average', 51% to 75% as 'average' and 76% to 100% as 'good implementation'. The mean scores for each step were used to calculate a total mean score representing all Ten Steps.

In the follow-up study, descriptive statistics in the form of frequencies were tabulated or represented graphically as appropriate regarding the knowledge and attitude scores of the HCWs and the mothers. The definition of EBF (an open-ended question) was scored out of eight and mean scores were determined. Knowledge was scored out of 22 for the HCWs' questionnaire and out of 17 for the mothers' questionnaire. Mean knowledge scores and standard deviations were calculated. The practices were allocated to the specific step of the Ten Steps and the frequency of implementation was calculated for addition to the table of the initial study.

Results

Twenty-six maternity facilities (a 50% fallout rate) consented to participate in the initial study (16 were public and 10 were private). Reasons for non-participation were not recorded. Eighteen private BF clinics (a 49% fallout rate) consented to participate in the follow-up study, which included questionnaires from 25 HCWs and 64 mothers.

Ten Steps

The degree of implementation of each of the Ten Steps was determined by evaluating practices influencing the steps during both studies (Table I).

Lower mean scores reflecting mostly 'below average' implementation were noted for Steps 1, 2, 6 and 10, with scores of 51% ('average'), 38% ('below average'), 42% ('below average') and 49% ('below average'), respectively (Figure 1), during the initial study. The total mean score for the Ten Steps was 64.18% (SD = 12.64%), indicating the implementation of the Ten Steps in the Cape Metropole area of the WC province at the time of the initial study as 'average' according to the grading scale designed for the study.

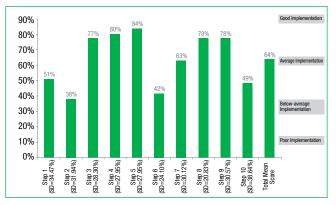
Table I: Selected elements of the implementation of the Ten Steps in public and private maternity facilities in the initial study (N = 26) and in private BF clinics
in the follow-up study ($N = 18$) according to observations and to questionnaires to the HCWs and the mothers at the facilities

Step	Elements [Required/Not allowed]		Initial study				Follow-up study**
		Source	All facilities (N = 26)	Public (N = 16)	Private (N = 10)	P value*	Private BF clinics $(N = 18)$
1	Explicit written policy for protecting, promoting and supporting breastfeeding addressing all Ten Steps in facility? [R] Facility could produce written copy of policy? [R] Aware of Ten Steps to successful BF? [R]	HCWs Obs HCWs	77% 31% -	69% 19% -	90% 50% -	0.35 0.19 -	- - 96%
2	Training on breastfeeding and lactation management given to appropriate staff? [R]	HCWs	58%	63%	50%	0.69	-
3	Mothers informed about benefits of BF? [R]	Mothers	64%	80%	40%	0.09	-
4	Mothers helped to initiate breastfeeding within appropriate time? [R]	Mothers	80%	67%	100%	0.06	-
5	Mothers shown to position, attach and remove their babies correctly when breastfeeding? [R] $% \left[R\right] =0$	Mothers	81%	67%	100%	0.06	-
6	Breastfeeding infants receive breast milk only? [R] Infants receive any milk feeds or water other than breast milk? [NA] Advertisement of dummies, bottles or formula milk in clinics? [NA]	HCWs Mothers Obs	58% 16% -	44% 93% -	80% 60% -	0.11 0.12 -	_ _ 22%; 39%; 17%
7	Mothers and infants remain together 24 hours a day, except for periods of up to an hour for hospital procedures or if separation is medically indicated? [R]	HCWs	85%	94%	60%	0.06	-
8	Mothers advised to breastfeed on demand? [R]	HCWs	85%	88%	80%	0.63	-
9	Infants given any dummies or pacifiers? [NA] Infants given any bottle feeds? [NA] Acceptable to give dummies to infants < 6 months of age? [NA] Health care personnel told mothers it is acceptable to give dummies to babies < 6 months of age? [NA]	Mothers Mothers HCWs Mothers	28% 12% - -	7% 100% _ _	40% 70% - -	*0.01 *0.05 _ _	- 40% 75%
10	Mothers referred to breastfeeding support groups whilst in hospital? [R]	HCWs	54%	25%	100%	*0.00	44%

*Fisher Exact Test statistically significant difference between public and private facilities determined from contingency tables of absolute values **Only specific elements were investigated in the follow-up study in response to the initial study.

HCWs = health care workers; Obs = Observation

Figure 1: Mean scores for the Ten Steps in public and private maternity facilities in the initial study (N = 26) calculated from observations and from questionnaires to the HCWs and the mothers at the facilities



Step 1: Have a written breastfeeding policy that is routinely communicated to all health care staff

Twenty (77%) of the twenty-six initial-study facilities reported having a written BF policy, although only eight (31%) could actually produce the written copy. Of these, seven (85%) reported that their policy protected BF. On evaluation of these policies, however, only half prohibited all promotion and group instruction for the use of BMS, feeding bottles and teats, which means that these did not protect BF. Twelve (46%) initial-study facilities claimed that their policies were displayed in all the areas that served mothers, infants and/or children, whereas this was observed in only two of these facilities.

Step 2: Train all health care staff in skills necessary to implement this policy

HCWs at the majority (23; 88%) of the 26 initial-study facilities reported that the personnel were aware of the advantages of BF. HCWs at fifteen of the facilities (58%) furthermore stated that training on BF and on the maintenance of lactation was given to the appropriate personnel within six months of their appointment and that the instruction covered at least eight of the Ten Steps. The duration of this training, however, was found to be inadequate at nine (60%) of these fifteen facilities when compared to BFHI requirements.

Step 3: Inform all pregnant women about the benefits and management of breastfeeding

Ante-natal clinics were available at twenty (77%) of the twenty-six initial-study facilities but only eight (40%) of these facilities reported providing mothers with written information about the benefits and management of BF during ante-natal sessions. These clinics had records available but only nine of the records indicated that BF had been discussed with pregnant women. Interestingly, mothers at 17 (64%) of the 26 initial-study facilities stated that they had been informed about the benefits of BF.

BF knowledge levels were determined during the follow-up study, indicating that the average knowledge score obtained by the mothers (N = 64) was 11/17 (66% \pm 13.5), whereas the average score obtained by the HCWs (N = 25) was 14/22 (62% \pm 7.5). Results from the follow-up study also indicated that the majority of the mothers (55; 86%) had not felt pressured by the HCWs to breastfeed. In contrast, the HCW responses to the statement 'It is my responsibility to convince the mother to breastfeed exclusively' were divided, with 13 (52%) agreeing with the statement. All the mothers in the follow-up study agreed that the HCWs had a positive attitude and sufficient knowledge regarding BF.

Step 4: Help mothers to initiate breastfeeding within half an hour of birth

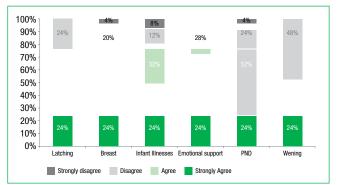
HCWs at 23 (88%) of the 26 initial-study facilities indicated that they allowed mothers to hold their infants within the period recommended by the BFHI criteria. Fewer (20; 77%) indicated that they assisted mothers to initiate BF within the recommended period. The mothers at only 17 (64%) of the 26 initial-study facilities, however, stated that they had actually held their babies within the recommended period but the mothers at 21 (81%) of these facilities did confirm that staff had offered assistance to initiate BF within the recommended period.

Step 5: Show mothers how to breastfeed and maintain lactation even if they were to be separated from their infants

Information provided by both the HCWs and the investigators' observations indicated that the mothers at 88% (23 of the 26) of the initial-study facilities were able to demonstrate correctly how to position and attach their infants for BF. The mothers, however, reported that they had been shown how to attach, position and remove their infants during BF at only 81% (21) of the initial-study facilities. The HCWs at 23 (88%) of the initial-study facilities reported that the correct methods for the expression of breast milk had been demonstrated to the mothers and that information about expression had been provided. In contrast, the mothers at only nine (36%) of the initial-study facilities agreed that they had BF consultants (with specialised training in lactation) who were available on a full-time basis to advise mothers.

All the HCWs in the follow-up study agreed that they felt equipped to help mothers with latching problems, emotional support and

Figure 2: Percentage of the HCWs' attitude responses to the statement 'I feel equipped to help mothers with the following problems' (N = 25) in the follow-up study



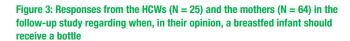
weaning and most (96%) felt equipped to help mothers with breast problems. Some HCWs, however, did not feel equipped to help mothers with infant illnesses (N = 5) or post-natal depression (N = 6) (Figure 2). HCWs at 25 (96%) of the 26 initial-study facilities reported that special attention and care was given to women who had never breastfed or who had previously encountered problems with BF.

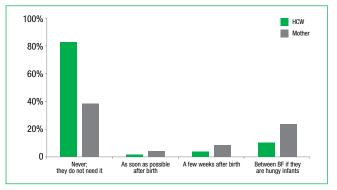
Step 6: Give newborn infants only breast milk; give milk feeds and water only if medically indicated

HCWs at 20 (77%) of the 26 initial-study facilities claimed to have a clear understanding of the few acceptable reasons for prescribing food or drink other than breast milk to BF infants. According to the HCWs, the breastfed infants had not received any food or drink other than breast milk at 15 (58%) of the initial-study facilities. The mothers at four (16%) of these facilities, however, stated that their infants had received food or drink other than breast milk. Two thirds (17) of the initial-study facilities reported that the promotion of infant foods or drinks did not occur. Such promotion was, however, observed at one of these facilities in the form of a poster. Promotion was also observed at various BF clinics in the follow-up study (the advertisement of dummies in four [22%] of the eighteen BF clinics, of bottles in seven [39%] of the clinics and BMS in three [17%] of the clinics). Only half (N = 13) of the 26 initial-study facilities reportedly refused the free or low-cost supplies of BMS.

The majority of the mothers (48; 73%) in the follow-up study reported that an HCW had explained the term EBF to them and almost all (62; 97%) agreed that EBF was the best feeding option for their infants. Only two of the sixty-four mothers in the follow-up study, however, knew the complete and correct definition of EBF (as specified by the WHO); a mean score of five out of eight was achieved by the mothers in the follow-up study for the EBF definition. Although all the HCWs in the follow-up study strongly agreed that EBF was the best feeding option for an infant less than six months of age, only four (16%) could correctly define EBF; overall, the HCWs in the follow-up study achieved a mean score of six out of eight for the EBF definition and none achieved a score lower than four.

When asked 'When is the appropriate time to give a breastfed baby a bottle?', most of the HCWs in the follow-up study stated that BF infants did not need bottle feeds. Only 41% of the mothers, however, reported the same. Eight of the HCWs in the follow-up study (12%) stated that hungry infants should receive bottle feeds between BF or that a bottle should be given a few weeks after birth (3; 4%) (Figure





3); no HCWs indicated that they would advise mothers to start with BMS when returning to work and most (17; 71%) indicated that they would recommend giving expressed breast milk in a bottle or a cup (7; 29%). When the mothers in the follow-up study were asked what the HCWs had recommended when they returned to work, however, 21% reported that BMS had been recommended, 64% had been encouraged to give expressed breast milk in a bottle and only 15% had been encouraged to give expressed breast milk in a cup.

Step 7: Practise rooming-in; allow mothers and infants to remain together 24 hours a day

According to the HCWs in the initial study, rooming-in was practised at 22 (85%) of the 26 initial-study facilities. This practice, however, was observed at only 18 (69%) of the initial-study facilities and was reported by mothers at only 16 (62%) of these facilities.

Step 8: Encourage breastfeeding on demand

By placing no restrictions on the frequency or length of BF, HCWs at 24 (92%) of the 26 initial-study facilities showed that they were aware of the importance of BF on demand. This was corroborated by the mothers at 22 (84%) of these facilities.

Step 9: Do not give any artificial teats or pacifiers (dummies or soothers) to breastfed infants

According to the HCWs, the use of dummies was practised at 13 of the 26 initial-study facilities. The mothers at only 7 (28%) of these facilities reported the practice, however, and it was observed at only 3 (12%) of the initial-study facilities. The mothers at 17 of the facilities reported being instructed not to give any bottles or dummies to their infants while BF. A significantly higher percentage of private initial-study facilities provided dummies (p = 0.01) and bottle feeds (p = 0.05) to breastfed infants than public facilities (Table I).

In the follow-up study, ten (40%) of the twenty-five HCWs responded that they thought it was acceptable for an infant under the age of six months to receive a dummy. Three quarters (48) of the 64 mothers, however, responded that the HCWs had told them that this was acceptable. The investigators observed the mothers giving dummies to their infants at 11 (61%) of the 18 BF clinics during the follow-up study.

Step 10: Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic

Eight (31%) of the twenty-six initial-study facilities reported that key family members had been educated with regard to the at-home support of BF mothers and fourteen (54%) reported that referral to BF support groups had occurred (significantly more at private clinics [p = 0.00]). The mothers at only three (12%) of the initial-study facilities agreed with the first statement, however, and the mothers at only two indicated that they had been referred to BF support groups.

In the follow-up study, when the mothers were asked where they had heard about the BF clinic that they were attending, 44% (N = 28) indicated the hospital, 17% (N = 11) indicated a doctor, 19% (N = 10) indicated a friend, 25% (N = 16) knew about the clinic from a previous pregnancy and 3% (N = 2) knew about the clinic from their antenatal clinic. All the mothers felt that the BF clinic's environment was comfortable and secure and that sufficient support was given at the clinic. Information and support given at the clinic

influenced the period of BF of 37% (N = 23) of the mothers. Fourteen percent (N = 9) of the mothers reported that there were times when they had wanted to stop BF and to start bottle feeding, while 86% (N = 55) of the mothers reported that they had never wanted to stop BF. More than two thirds (69%) of the mothers who had indicated that they had wanted to stop BF reported that the BF clinic had influenced them to continue with BF. The most advice and help with BF were reportedly received from the HCWs (72%), followed by peers (27%) and their own mothers (9%). All the private BF clinics in the follow-up study had an after-hours phone-in service to the BF Association help line and just over half (N = 10; 56%) of the clinics accommodated working mothers.

Discussion

Previous studies have indicated that it is difficult to use an experimental design to show that policies bring about change.⁷ It has, however, been observed that consistent and sustained improvement in hospital practices is most likely to occur when changes are supported and directed by the establishment and implementation of appropriate and specific written policies.⁴ Even though the vast majority of facilities in the initial study reported having a BF policy, many could not produce a written policy and some of the existing policies were inappropriate and/or were being implemented ineffectively. These findings are mirrored in previous studies conducted by the WHO, where ineffective implementation has been found to be more common than the absence of a BF policy.⁴

Infant and young-child feeding (IYCF) is a neglected area in the basic training of health professionals worldwide.⁸ Yet HCWs who care for infants face the challenge of communicating such complex health care information to parents on a daily basis.⁹ Adequate and appropriate training is also vital for the successful implementation of a BF policy.⁴ Research has indicated that appropriate training results both in increased compliance with the Ten Steps and in the improvement of IYCF knowledge and attitudes.^{10,11}

Results from the initial study indicated that, although most of the facilities provide ante-natal sessions and cover BF during these sessions, as confirmed by the mothers, this is not being recorded. The HCWs are moreover aware of the benefits of BF but their training is sub-optimal and many of the mothers were consequently not informed about the benefits of BF. This is supported by the results from the follow-up study, which indicated that the majority of the HCWs and the mothers could not define the term EBF and that their BF knowledge scores were below standard. These findings supported the great need for ongoing BF training, which has been expressed and advocated by health authorities on a global level.^{8,12}

Previous research has recognised that mothers, HCWs and other care givers require active and ongoing support to enable them to establish and sustain effective and appropriate BF practices.^{13,14} Even though BF is a natural act, it is also a learned behaviour¹⁴ and mothers therefore need practical advice and psychological support to breastfeed successfully.¹³ HCWs are in a key position, both in maternity wards and in health facilities, to help mothers to decide to breastfeed and to teach them the necessary skills to master the technique, especially with initiating BF and assisting with early problems.^{13,15}The results obtained from the follow-up study showed

that the HCWs play the biggest role in conveying information on BF and that the mothers had a very positive attitude towards the HCWs at the BF clinics.

It has been shown that BF counselling delivered by trained health professionals and community health workers is an effective intervention to improve EBF rates.^{15,16} The poor score for Step 6 indicates that many facilities fall short in promoting EBF, specifically regarding cup feeding rather than bottle feeding and not providing or promoting BMS or dummies. The inadequate training of personnel, misinformed or uninformed mothers and a lack of ongoing support have been identified as factors that may contribute to this problem^{4,17} and are corroborated by findings in both studies. For as long as HCWs convey inconsistent messages related to EBF and to the attitude that dummies, bottles and BMS are acceptable, EBF rates remain at risk.

There is a definite need for community involvement in the provision of appropriate support, with community support groups and communitybased counsellors being identified as options. Encouraging the formation of mother-to-mother support groups is highly beneficial. Family members should also be educated and encouraged to provide the BF mother with support. Many private facilities employ external BF consultants who are available to provide postnatal support to mothers. In the initial study, postnatal support in the form of the referral of mothers to BF support groups was found to be poor at public facilities but was found to occur at all the private facilities. In the follow-up study in the private clinics, less than half the mothers said that they had been referred to a BF clinic by the hospital where they gave birth. This disparity indicates that the referral of mothers for postnatal BF support by maternity facilities remains an area of concern. This could be due to referrals simply not being made or to miscommunication between the HCWs and the mothers.

In conclusion, the findings of the two studies highlighted the importance of the establishment of BF policies and of the correct implementation of these policies in health facilities that care for mothers and their infants. The findings also highlighted the importance of appropriate and continuous BF training to ensure initiation and the establishment of early BF, EBF practices and support on an ongoing basis. These ensure that infants are given the best start in life.

In an attempt to reverse declining BF rates in SA, *National BF Guidelines for Health Workers* was published in 2000,¹⁸ promoting the WHO resolution for exclusive and extended BF. Since then, the promotion, protection and support of BF have also been prioritised in the DoH comprehensive national nutrition strategy for combating malnutrition, namely the INP.¹⁹ Two of the eight INP key performance areas (KPAs), namely maternal nutrition and IYCF, include strategies to promote, protect and support BF. The movement to improve BF rates through the implementation of the BFHI is therefore gaining momentum. Currently, 232 out of a possible 545 health facilities (42.5%) in SA have been awarded baby-friendly status.²⁰

During 2002, the INP in the WC appointed an assistant director to focus on the KPAs of maternal nutrition and IYCF. The SA IYCF policy was also signed by the minister of health in the latter part of 2007. The proposed legislation of the South African Code of Marketing of BMS is furthermore in draft format; it is imperative that this code should no longer be delayed and that it should be finalised as a

priority. These and other strategies to promote, protect and support BF can contribute to improved BF rates and, ultimately, to improved infant and child health in SA. Lessons learned from other countries indicate that this can be achieved.²¹ It is believed that the reported studies contributed to the renewed efforts by the WC INP to assist facilities in becoming baby-friendly accredited, emphasising the importance and value of the research and practice partnerships between academic institutions and government.

Limitations

As only consenting facilities were included in both studies, with a 50% fall-out rate, the samples may not be representative. Reasons for non-participation were not determined but they may bias results, as they may be related to non-compliance to the Ten Steps. BF clinics included in the follow-up study were from only one private-hospital group, since BF clinics from other private-hospital groups either did not respond or did not give consent.

References

- 1. WHO, Regional Office of Europe. Infant feeding. nutrition and food security. [Cited 2009 Jan 16]. Available from www.euro.who.int/nutrition/Infant/20020808_1.
- UNICEF. Nutrition. UNICEF in action. Key publications and links. [Cited 2009 Jan 16]. Available from http:// www.unicef.org/programme/breastfeeding/links.htm.
- UNICEF. Nutrition. Baby-friendly Hospital Initiative: revised, updated and expanded for integrated care. [Cited 2009 Jan 16]. Available from http://www.unicef.org/nutrition/files/BFHI_Revised_Section1.pdf.
- WHO. The evidence of the effectiveness of the Ten Steps, World Health Organisation. Geneva: WHO; 1998.
- Merten S, Dratva J, Ackermann-Liebrich U. Do baby-friendly hospitals influence breastfeeding duration on a national level? Pediatrics. 2005 Nov 116(5):e702–708.
- UNICEF. Press Centre. 15 years after Innocenti Declaration, breastfeeding saving six million lives annually [press release]. [Cited 2006 Jan 24]. Available from http://www.unicef.org/media/media_30011.html.
- Janovsky K, Cassals A. Health policy and systems research: issues, methods and priorities. In: Janovsky K, editors. Health policy and systems development. An agenda for research. Geneva: WHO, 1996; p. 11–23 (unpublished document WHO/SHS/NHP/96.1).
- WHO. Department of Child and Adolescent Health and Development. Nutrition. Implementing the global strategy for infant and young child feeding, Meeting report. 2003 [cited 2009 Jan 16]. Available from http://www.who.int/child_adolescent_health/documents/infant_feeding/en/index.html.
- Menghini KG. Designing and evaluating parent education materials. Adv in neonatal care. 2005;5:273–283.
- Kramer MS, Chalmers B, Hodnett ED, et al. Promotion of Breastfeeding Intervention Trial (PROBIT): A randomized trial in the Republic of Belarus. JAMA 2001;285:413–420.
- Cattaneo A, Buzzetti R. Effect on rates of breastfeeding of training for the Baby Friendly Hospital Initiative. BMJ. 2001;323:1358–1362.
- WHO. Department of Child and Adolescent Health and Development. Child and adolescent health. Progress report 2000–2001. 2001 [cited 2009 Jan 16]. Available from http://www.who.int/child_ adolescent_health/documents/child/en/index.html.
- Savage-King FS. Helping mothers to breastfeed. Revised ed. Nairobi: African Medical and Research Foundation 14. 33, 1992; p. 1–5.
- 14. WHO. Department of Nutrition for Health and Development, Department of Child and Adolescent Health and Development. The optimal duration of exclusive breastfeeding. Report of an expert consultation. Geneva: WHO; 2001.
- Cape Town Breastfeeding Liaison Group. Breastfeeding Education Programme. An 8 hour training programme for health workers. Bellville:2001.
- WHO. Department of Child and Adolescent Health and Development. [homepage on the Internet]. [Cited 2006 Jan 10]. Available from http://www.who.int/child-adolescent-health/NUTRITION/graphic_EBF.jpg.
- Davies A. PMTCT: How "informed" is the literate mother's decision regarding infant feeding options in the Gert Sibande district, Mpumalanga province, South Africa [dissertation]. Stellenbosch University; 2005.
- Department of Health/UNICEF. South African breastfeeding guidelines for health workers. Pretoria: Department of Health; 2000.
- Department of Health. South Africa. Integrated Nutrition Programme: a foundation for life. Issue 3. 2002.
- 20. Department of Health. Number of baby-friendly hospitals 1999–2008. BFHI databases, Pretoria: 2008.
- 21. Meyer A, Du Plessis LM. The basis for legislating the South African Code of Ethics for the marketing of breastmilk substitutes. In: Abstract book, 8th Biennial Congress of the Association for Dietetics in South Africa and the 20th Biennial Congress of the Nutrition Society of South Africa; 2004 Aug 23–27; Worcester, South Africa.