

## *Reactions of Trainee Health Personnel to Home-based Use of Expressed Breast-milk*

OA ABOSEDE

### Summary

**Abosede OA. Reactions of Trainee Health Personnel to Home-based Use of Expressed Breast-milk.** *Nigerian Journal of Paediatrics* 1987; 14:13. The attitudes and knowledge of final year medical students, final year nursing students and Community Health Officers-in-training concerning exclusive breast-feeding and home-based use and preservation of Expressed Breast-milk (EBM), was determined by means of a questionnaire. There were appreciable misconceptions and fears about breast-feeding and about the use and storage of EBM. Nurses were the most reluctant to advise mothers on the use of EBM for various reasons and up to 25% of the medical students would advise a woman not to breast-feed for cosmetic reasons. The study has highlighted the need for better training of health personnel on infant feeding.

### Introduction

MANY mothers who participated in a study on exclusive breast-feeding carried out in Lagos, expressed problems they encountered in their attempts to ensure that their babies fed only on their breast-milk. Even when they had refrigerators in their homes and electricity supply was adequate to keep them effective, they did not use or store expressed breast-milk (EBM) because of the negative attitude either their relations, friends or even health personnel had to the idea.

Nigerian mothers who work outside the home need to go back to work 6 weeks post partum; before their babies are old enough to be weaned.

They rely on artificial milk which some of them introduce as early as the days the babies are born. The high incidence of diarrhoea and malnutrition which results from improper use of artificial formulae will certainly be reduced if mothers are taught how to preserve their own breast-milk for use, during the short periods they are separated from their babies.

The purpose of this study therefore, was to find out the attitudes of health personnel-in-training to breast feeding and home-based use of EBM since they will in future, need to advise mothers on breast-feeding and on the advantages of breast-milk over artificial formulae.

### Materials and Methods

Questionnaires\* were distributed by random sampling, to 100 out of 151 final year medical

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College of Medicine, University of Lagos, Lagos

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Institute of Child Health and Primary Care

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\* Research Fellow I

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\* Editor's Note: Copies of the Questionnaire used are available from the author.

students, 100 out of 148 final year nursing students and all 21 Community Health Officers (CHOs) undergoing training at the College of Medicine, University of Lagos, in their lecture rooms. No pretesting was done before choosing the participants and there was no previous information on the study.

Questions probed participants' attitudes to breast-feeding, especially where done exclusively and to the use of their own or their wives' EBM at home. The reasons for their responses were solicited. The 89 questionnaires from the medical students, 62 from the nursing students and 20 from the CHOs which were completed and returned, were analysed.

## Results

### *Reactions of respondents to suggestions on breast-feeding and weaning*

Twenty-three (25.8%) of the 89 medical students and 4 (20%) of the 20 CHOs-in-training would not breast-feed or would advise a mother not to breast-feed for cosmetic reasons (sagging of the breast). Eight (19%) male medical students and 1 (5%) male CHO had never advised a mother on breast-feeding. One medical student, 2 nurses and one CHO confessed shyness about the subject (Table I).

The most popular weaning method suggested was gradual reduction of the number of feeds but a few felt that the mother should just suddenly refuse to offer her breasts (Table I).

Table 1

*Reactions of Health Personnel-in-Training to Questions and Suggestions on Breast-feeding*

<i>Suggestion/Question</i>	<i>Proportions Agreeing</i>		
	<i>Medical students (N = 89)</i>	<i>Nursing students (N = 62)</i>	<i>CHO in Training (N = 20)</i>
1. Would you for cosmetic reasons, prefer not to breast-feed or advise a woman (say your wife) not to breast-feed?	23 (25.8)*	0 (0)	4 (20.0)
2. If need be, would you give or advise a mother to express her breasts and keep the milk in a refrigerator for baby's feed while away?	33 (37.1)	20 (32.3)	12 (60.0)
3. Are you shy about discussing breast-feeding with mothers?	1 (1.1)	2 (3.2)	1 (5.0)
4. Have you ever advised a mother on this subject?	80 (89.9)	55 (88.7)	19 (95.0)
5. Weaning should be by:			
a. drying of breast with drugs	0 (0)	0 (0)	0 (0)
b. gradual reduction of the number of breast feeds per day	86 (96.6)	62 (100.0)	18 (90.0)
c. use of bitters on nipples	0 (0)	0 (0)	0 (0)
d. refusing to offer breast suddenly	2 (2.2)	0 (0)	1 (5.0)

CHO = Community Health Officers

\*Numbers in parenthesis = Percentages

*Respondents' views on duration of breast-feeding*

A higher proportion (27.4%) of the nursing students, than medical students (11.2%) and CHO-in-training (5%) were in favour of early weaning at between 0-40 days after birth. However, when asked how long a mother should continue to breast-feed after weaning her child on to semi-solids, 49.4% of the medical students, 56.5% of the nurses and 75% of the CHOs were in favour of periods longer than 6 months (Table II).

*Respondents' views on the use of EBM*

Although a majority (84.8%) of all respondents believed that a woman should breast-feed ex-

clusively, only 37.1% of the medical students and 32.3% of the nursing students would be willing to refrigerate or advise nursing mothers to refrigerate EBM for their baby's feed when they/ mothers need to be separated from their babies. The most expressed reason for not wanting to use or advise a mother to keep EBM in a working refrigerator was the fear of contamination. Of all the respondents, only 2 nurses (3.2%) felt that a woman should not go outside the home if her baby is breast-fed. Only one respondent, a medical student, claimed that it was better to use artificial milk when a mother was not around (Table III). Others did not state what to give in place of breast-milk.

Table II

*Duration of Breast-feeding suggested by Health Personnel-in-Training*

Duration	Proportions Responding		
	Medical Students (N = 89)	Nursing Students (N = 62)	CHO-in-training (N = 20)
<i>To breast-feed exclusively</i>			
0 - 7 days	2 (2.2)*	2 (3.2)	1 (5.0)
8 - 40 days	8 (9.0)	15 (24.2)	-
About 2 months	14 (15.7)	5 (8.1)	5 (25.0)
Up to 3 months	28 (31.5)	15 (24.2)	8 (40.0)
Up to 4 months	14 (15.7)	5 (8.1)	2 (10.0)
Up to 6 months	23 (25.8)	20 (32.2)	4 (20.0)
<i>To complete weaning off breast</i>			
Up to 6 months	45 (50.6)	23 (37.1)	5 (25.0)
7 months to 1 year	34 (38.2)	22 (35.5)	8 (40.0)
1½ years	6 (6.7)	9 (14.5)	6 (30.0)
2 years	4 (4.5)	4 (6.5)	1 (5.0)
No response	-	4 (6.5)	-

CHO = Community Health Officer

\*Numbers in parenthesis = Percentages

**Table III**  
Reasons for objecting to the use of Expressed Breast-milk

Reasons	Proportions Responding		
	Medical Students (N=89)	Nursing Students (N=62)	CHO-in-Training (N=20)
1. Fear of contamination	31 (34.8)*	41 (66.1)	6 (30.0)
2. Just don't like the idea or, not natural	17 (19.1)	8 (12.9)	3 (15.0)
3. Better to have the milk fresh or taste/appearance will be altered	9 (10.1)	9 (14.5)	3 (15.0)
4. Fear that it will be given at the wrong temperature	3 (3.4)	17 (27.4)	2 (10.0)
5. The nutritional value is decreased	3 (3.4)	2 (3.2)	3 (15.0)
6. Baby-mother contact and affection are not promoted	5 (5.6)	6 (9.7)	1 (5.0)
7. Fear that someone else may drink the milk or that amount left may not be sufficient for baby	7 (7.0)	2 (3.2)	2 (10.0)
8. Child may refuse the milk	—	3 (4.8)	—
9. Natural components may be destroyed by storage or warming	3 (3.4)	—	—
10. A mother should not go out if the baby is breast-fed	—	2 (3.2)	—
11. Better to use artificial milk when mother is not around	1 (1.1)	—	—

CHO = Community Health Officers  
\*Numbers in parenthesis = Percentages

### Discussion

The fact that breast-milk is best for the baby is not doubted by most people especially those in the medical field. The idea of a woman expressing her breast-milk and keeping it for feeding the baby at another time may be recent but the negative attitude that health personnel who are at the end of their training, have to it, is a cause for concern.

Many working mothers would like to breast-feed exclusively at least, for the first 3 months but have found this difficult because of the contradictory information from their husbands,

other relations, neighbours and even health personnel. The fear of contamination during storage, seems to be the most frequent reason for reluctance to keep EBM for baby's feed while the mother is not around. This is expected not only because of the unreliability of electricity supply but also because of the possibility of unhygienic milk collection methods. Egri-Okwaji, Bamisaiye and Ahmed<sup>2</sup> have shown that there is no basis for the fear of contamination of EBM even in this tropical environment if the mother expresses her breast-milk in a hygienic way and stores it in a sterile way. The finding that there



was no bacterial growth or at the worst, minimal growth, in EBM even after 24 hours refrigeration under the usual home conditions, is encouraging.<sup>3</sup> It is worth the effort, and safer for mothers who are mostly away for less than 12 hours, to breast-feed exclusively.

In the present study, the fear that EBM will be given at the wrong temperature was also expressed by some respondents, majority of whom were nurses. Babies vary in their likes and dislikes but the best temperature is that at which breast-milk itself comes out. There is no known advantage of hot or cold milk over the other. Boiling and pasteurisation to a lesser extent, affect absorption of fat and no wonder the poorer weight gain of babies on such milk compared with those on raw milk.<sup>5</sup> Furthermore, milk jaundice is a theoretical risk associated with the use of raw milk kept in the refrigerator for a long period<sup>6</sup> but this problem needs not arise for the mother who needs to keep the milk for only 24 hours; longer periods must be discouraged.

Some of the responses to questions posed on breast-feeding in general, confirmed the fears that medical personnel because of deficiencies in their own knowledge of breast-feeding may advise mothers wrongly. Twenty-five percent of medical students and 20% of the Community Health Officers-in-training would advise a mother not to breast-feed for cosmetic reasons. This is not strange because it is the belief of many people especially men, even though not documented, that sagging of breast is solely a result of breast-feeding. The assumption can be justified to some extent in that a lactating breast is heavier and lengthens the supporting ligaments. What should be known however, is that as they advance in age, all women develop some slackness in the ligaments making the breast sag a little.

A high proportion (31.5%) of medical students and 40% of the CHOs would advise exclusive breast-feeding only up to 3 months. However, up to 32.2% of the nurses, 25.8% of medical students and 20% of CHOs would encourage

a mother to do so for up to 6 months. Some authors claim that mothers' milk alone is, in some cases sufficient for some babies during the first 12 months<sup>7</sup> whilst others have claimed that in developing countries, the average growth of wholly breast-fed babies is satisfactory only up to about 3 months of age, after which it begins to fall sharply.<sup>8</sup> This has not been proved and many experts still abide by the WHO recommendation of 4 to 6 months exclusive breast-feeding. The growth graph of each baby and baby's satisfaction after feeds should indicate when supplements should be given.

Breast-feeding is so important in the life of a child that glossing over it during the training of medical personnel is dangerous. Such personnel should know the importance of breast-feeding and learn not only how to help a mother breast-feed successfully, but also how to collect and preserve her breast-milk, especially during the pre-weaning period.

#### References

1. Abosede OA and Adesanya SK. Breastfeeding dilemma of the working mother (In Press). *Nig J Nutr Sci* 1986; 7.
2. Egri-Okwaji MTC, Bamisaiye A and Ahmed I. Setting up a Breast-milk bank; Some social and psychological considerations. *Nig J Paediatr* 1984; 11: 23-7.
3. Olowe SA, Ahmed I, Lawal S, Ransome-Kuti S and Dosumu-Ogunbi O. Bacterial content of raw human milk: effects of refrigeration (Abstract). *Nig J Paediatr* 1985; 12: 70.
4. Narayanan I, Piakash K and Gujral VV. The value of human milk in the prevention of infection in the high-risk, low birth weight infant. *J Pediatr* 1981; 99: 496-9.
5. Williamson S, Hewitt JH, Finucane E and Gamsu H. Organisation of bank of raw and pasteurised human milk for neonatal intensive care. *Br Med J* 1978; 1: 393-7.
6. Cole AP and Hawgreaves T. Conjugation inhibitors and early neonatal hyperbilirubinaemia. *Arch Dis Child* 1972; 47: 415-8.
7. Ahn CH. Growth of the exclusively breast fed infant. *Am J Clin Nutr* 1980; 33: 183-92.
8. Habicht JP, Martorell R, Yarbough C, Malina RM and Klein RE. Height and weight standards for preschool children. How relevant are ethnic differences in growth potential? *Lancet* 1974; 1: 611-5.

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