

Experiences, Attitudes and Beliefs of Secondary School Students about Breastfeeding

K E O Nkanginieme* and B C Ibe**

Summary

Nkanginieme KEO and Ibe BC. Experiences, Attitudes and Beliefs of Secondary School Students about Breastfeeding. *Nigerian Journal of Paediatrics* 1993; 20: 35. The experiences, knowledge, attitudes and beliefs of 824 teenagers from 18 secondary schools in Enugu and Port Harcourt, about infant feeding and in particular breastfeeding, were investigated, using a questionnaire. The students had good experience of both breast and bottle-feeding as over 75 percent of them had been breast and/or bottle fed and over 80 percent had bottle-fed younger children. The students' knowledge of breastfeeding, breast milk and weaning was poor. Despite their extensive experience with bottle feeding and their poor knowledge of breast milk and breastfeeding, the basic attitudes and beliefs of the students about breastfeeding were positive. To reinforce these positive attitudes and beliefs, it is suggested that formal education on breastfeeding and infant feeding be part of health education programmes in secondary schools. By this means, the breastfeeding culture inherent in the community can be promoted and protected.

Introduction

PREVIOUS investigations on breastfeeding in Nigeria have focussed almost entirely on expectant mothers.^{1,2} To our knowledge, no study has ever been carried out in Nigeria among non-pregnant teenagers, who are 'would-be' parents with respect to

their experiences, knowledge, attitudes and beliefs about breastfeeding. A study carried out in Liverpool,³ a city with a low incidence of breastfeeding, has suggested that attitudes held as children may persist into adulthood and may have important consequences on infant feeding practices. The widespread use of the bottle for infant-feeding in developing countries as shown in a recent demographic and health survey,⁴ probably followed the economic boom of the 1970's and its associated changes in life style, urbanisation and the relatively low cost of breast milk substitutes during that period. In Nigeria today, most urban teenagers seem to have been exposed to bottle feeding, either through having been bottle-fed themselves, or seen a

University of Port Harcourt Teaching Hospital

Department of Paediatrics

*Senior Lecturer

University of Nigeria Teaching Hospital, Enugu

Department of Paediatrics

**Senior Lecturer

Correspondence: B C Ibe

younger sibling being bottle-fed. The influence of this exposure on their knowledge, attitudes and beliefs concerning breastfeeding is unknown. In this communication, therefore, we report a survey carried out on secondary school students in order to investigate their experiences, knowledge, attitudes and beliefs about infant feeding with emphasis on breastfeeding.

Subjects and Methods

Final year senior secondary school (SSS3) students in Enugu, (Enugu State) and Port Harcourt, (Rivers State) formed the subjects of the present study, which was undertaken, using a questionnaire. Eighteen schools (eight in Enugu and 10 in Port Harcourt) were randomly selected from 15 and 21 schools, respectively. Three of the 18 schools were mixed, while the rest were single gender (six boys and nine girls) schools. The questionnaire was administered to all the pupils numbering between 39 - 45 in one SSS3 class in each selected school. The questionnaire consisted of 24 multiple-choice-questions (MCQ) which were designed to find out the students' experiences, knowledge, attitudes and beliefs regarding infant feeding. It was administered in a normal class setting by the class tutor. At commencement, the tutor explained such terms as 'infants', 'breastfeeding', 'bottle-feeding', 'infant feeding' and 'weaning'. The responses were anonymously given as the students' identities were not obtained.

The data obtained at completion were analysed statistically, using the Student 't' test and the 'Chi-squared' test, as appropriate.

Results

A total of 824 students, consisting of 514 females and 310 males, were surveyed. The ages ranged from 15 to 20 years (mean 16.9 years;

mode 17 years). There was no statistical difference between the mean ages of the male and female students (17.1 ± 2.6 vs 16.8 ± 2.2 ; $t = 1.70$, $p > 0.05$).

Experiences

The experiences of the students with regard to infant feeding are shown in Table I.

TABLE I

Recall of Experience on Infant Feeding by 824 Students

<i>Experience</i>	<i>No of Subjects</i>	<i>Percent of Total</i>
Was breastfed	718	87.1
Was bottlefed	651	79.0
Had seen sibling being breastfed	675	81.9
Had seen sibling being bottlefed	715	86.8
Has personally bottlefed younger sibling	693	84.1

The subjects had adequate experience with both breast and bottle-feeding, as 718 (87.1 percent) of the 824 students were either told of, or recalled being breastfeed, while 651 (79 percent) recalled being bottle-fed; 693 (84.1 percent) of the subjects recalled having bottle-fed younger siblings. Significantly higher proportion of girls than boys had bottle-fed younger siblings (467/514 vs 226/310; $p < 0.001$).

Knowledge

The students' knowledge of certain aspects of breast milk, breastfeeding and infant feeding is summarized in Table II. It is evident that 722

(87.6 percent) knew the colour of breast milk, but only a small number, 233 (28.3 percent) knew breast milk alone can be adequate for a baby in the first four to six months of life.

TABLE II

Correct Knowledge expressed by 824 Students about Breast milk, Breastfeeding, Infant formulae and Weaning.

<i>Knowledge</i>	<i>No of Responses</i>	<i>Percent of Total</i>
Colour of breast milk	722	87.6
Breast milk is sufficient for infant in the first 4 - 6 months	233	28.3
Commencement of weaning	365	44.3
Weaning foods	372	45.1
Breast milk and family planning	483	58.6
Three brands of infant formula in Nigerian market	358	43.4
Average cost of infant formula	540	65.5

There were 365 (44.3 percent) of the subjects who knew that weaning can commence at four months of life, and 372 (45.1 percent) had adequate knowledge of weaning foods. Of the 824 subjects, 483 (58.6 percent) knew that breastfeeding may protect a mother from early pregnancy; significantly higher proportion of girls than boys were aware of this (321/541 vs 162/310; $p < 0.005$). Most of the knowledge on infant feeding were derived from what the subjects had observed themselves and/or been told by their parents and/or guardians. There were 403 (48.6 percent) subjects who had received school lessons on infant feeding at least, once. The proportion of girls who had received such

lessons was significantly higher than that of boys (305/514 vs 98/310 $p < 0.001$).

Attitudes

The students' attitudes to various aspects of infant feeding as indicated by their responses to various questions are summarized in Table III.

TABLE III

Attitudes of Students to Aspects of Infant feeding Practices.

<i>Attitude</i>	<i>Girls</i>	<i>Boys</i>	<i>Total</i>
Future spouse opposed to breastfeeding?			
Call off engagement	60	58	118
Be indifferent	68	55	123
Agree, but hope to persuade to change later	369	188	557
Future spouse insists on bottle feeding from birth			
Agree	77	65	142
Disagree	421	232	653
Most embarrassing spectacle			
Couple kissing in public	40	35	75
Breastfeeding in public	130	68	198
Adult female urinating in public	338	198	536
Will be most embarrassed to breastfeed own child (or wife breastfeed)			
Nowhere	73	81	154
Office or market place	148	110	258
Anywhere outside home	284	105	389
Will be uncomfortable breastfeeding (or have wife breastfeed) in presence of			
Female relation or friend	46	37	83
Any person except (wife or husband)	125	96	221
Male relation or friend	291	97	388

* Non responders to questions were excluded.

If a spouse is opposed to breastfeeding, 118 (14.3 percent) of the subjects would end the relationship, 123 (18.1 percent) would give in or be indifferent, while 557 (67.6 percent) would continue the relationship, but hope to persuade the partner to change later; 653 (79.2 percent) would disagree if a spouse insists on bottle-feeding. There were 198 subjects (24 percent) who regarded breastfeeding in public places as a most embarrassing spectacle, while 389 (47.2 percent) would be most embarrassed to breastfeed (or have the wife breastfeed) anywhere outside the house. Significantly more girls than boys would be so embarrassed (284/505 vs 105/296; $p < 0.001$). There were 221 subjects (26.8 percent) who would be uncomfortable breastfeeding (or have the wife breastfeed) in the presence of any person outside family members while 388 (47 percent) would be uncomfortable in the presence of any adult male. Significantly more girls than boys would be uncomfortable in this situation (291/462 vs 97/230; $p < 0.001$).

Beliefs

The beliefs of the students on some aspects of infant feeding are shown in Table IV. It is clear that 506 subjects (61.4 percent) believed that breastfeeding is better than bottle-feeding with regard to nutrition of infants. Significantly more girls than boys shared this belief (333/514 vs 173/301 $p < 0.025$). There were 402 students (48.7 percent) who believed in exclusive breastfeeding for the first few months of life, while 286 (34.7 percent) believed in combining breast and bottle feeding from birth. Eighty four (10.2 percent) believed in prolonged breastfeeding (>12 months), while only 43 (5.2 percent) did not believe in breastfeeding at all. Working mother (36.2 percent) and ignorance

(25.3 percent) were the two most important factors believed by the students to militate against successful breastfeeding. High cost of milk formula was however, believed to be the single most important factor against bottle feeding.

TABLE IV

Beliefs of the Students on Aspects of Infant feeding.*

Belief	Girls	Boys	Total
Breastfeeding better than bottle feeding			
Yes	333	173	506
No	160	123	283
Don't know	21	5	26
Which practice do you believe in ?			
Exclusive breastfeeding	270	132	402
Combined breast and bottle feeding	193	93	286
Prolonged breastfeeding	37	47	84
No breastfeeding	14	29	43
Most single factor against breastfeeding			
Working mother	196	103	299
Ignorance	130	79	209
Convenience	83	61	144
Education	42	32	74
Unpopularity	27	41	68
Most single factor against bottle feeding			
High cost	347	190	537
Working mother	77	40	117
Education	33	33	66
Convenience	22	23	45
Unpopularity	14	11	25

* Non responders to questions were excluded.

Discussion

The present study has shown that teenage

students have extensive experience of both breast and bottle feeding and a good percentage (84.1 percent) have younger sibs who were bottle fed. Earlier studies^{5,6} have indicated that previous experiences have strong influence on choice of infant feeding. We can only speculate on how this experience will influence the students when they become mothers. The students' knowledge of various aspects of infant feeding including breastfeeding and weaning was poor. This poor knowledge probably reflects a lack of formal lessons on infant feeding in schools which, as shown in this study, was not widely practised. Similarly, poor knowledge about infant feeding has been reported in the larger society where insufficiency of breast milk is often given by mothers as the reason for early introduction of artificial milk.²

The attitudes of the students to breastfeeding were essentially positive. The embarrassment which the students associate with breastfeeding may be related to their evolving sexuality and the way they regard the breast as a purely sexual organ. This embarrassment was also noted in a study in Liverpool,³ and among Canadian youths.⁷ It may not persist when the teenagers grow into full adulthood and come to terms with the full functions of their bodies. However, more open discussion of breastfeeding in schools may reduce the embarrassment and modify their perception of the breast.

Although most of the students believed that breastfeeding was superior to bottlefeeding, only a small percentage believed in prolonged breastfeeding and a significant number would introduce bottlefeeding early. The negative influence of working outside the home on successful breastfeeding which has been noted in other studies,^{2,8} was highlighted in the present study. It is very significant that teenage students rated it as the most important factor against

breastfeeding. **It underscores the need to address this issue in any campaign on breastfeeding and consider such issues as job security during pregnancy and childbirth, paid maternity leave and provision of creches at work places. Also significant is the perception that ignorance has negative influence on breastfeeding. This seems to indicate that with education, the level of breastfeeding may improve, a trend already being seen in some developing countries.⁹ On the other hand, high cost was noted as the single most important factor against bottle feeding. It is thus, likely that if the cost of artificial milk falls, bottlefeeding may become more widely practised.**

The advantages to health, of breastfeeding were reemphasized in a recent review by Cunningham, Jellife and Jellife.¹⁰ Breastfeeding is one of the key elements in the child survival revolution.¹¹ UNICEF has, as one of its goals for the 1990's and beyond, the arrest of the decline in breastfeeding.¹² The aspirations of Government and International Agencies regarding breastfeeding are contained in the Innocenti Declaration on the protection, promotion and support of breastfeeding.¹³ It is our opinion that for the successful promotion of breastfeeding, some attention should be focussed on teenage students, the future parents. The students have positive attitudes towards breastfeeding, but their knowledge was poor. These attitudes should be reinforced by education, highlighting the advantages of breastfeeding and dispelling any misconceptions and prejudices that may exist. Such education should be given in secondary schools as part of health education, or as home management lessons. In this way, breastfeeding culture inherent in the community can be protected from the incursions of bottle feeding culture, a culture that is detrimental to child survival in developing countries.

Acknowledgements

We thank the staff and students of the 18 participating schools in Enugu and Port Harcourt for their immense cooperation; Mrs Celina Ezeoka and Mrs Florence Nwokike for the secretarial assistance.

References

- 1 Oruamabo RS and Mbuagbaw LT. Attitudes of mothers admitted to a maternity ward in Port-Harcourt to breastfeeding. *Nig J Paediatr* 1985, 12: 81 - 5.
- 2 Ibe BC and Nkanginieme KEO. Breastfeeding in a developing country. Influence of maternal time spent away from child on duration of breastfeeding. *Orient J Med* 1990; 2: 56 - 9.
- 3 Greg JEM. Attitudes of teenagers in Liverpool to breastfeeding. *Br Med J* 1989; 299: 147 - 8.
- 4 Ties Boerma J, Rutstein SO, Sommerfelt E and Bicego GJ. Bottle use for infant feeding in developing countries. Data from the Demographic and Health Surveys. *J Trop Pediatr* 1991, 37: 116 - 20.
- 5 Jones DA. The choice to breastfeed or bottle-feed and influences upon the choice: a survey of 1925 mothers. *Child Care Health Dev* 1987; 13: 75 - 85.
- 6 Shapiro J and Saltzer EB. Attitudes towards breastfeeding among Mexican - American women. *J Trop Pediatr* 1985; 31: 13 - 6.
- 7 Ellis DJ. Secondary school students' attitudes and beliefs about breastfeeding. *School Health* 1983; 53: 600 - 4.
- 8 Omolulu A. Breast milk and infant nutrition in Nigeria. *Nig J Pediatr* 1985; 12: 37 - 40.
- 9 Monteiro CA, Zuniga H P P, Benicio HDA and Rea MF. Breastfeeding patterns and socio-economic status in the city of Sao Paulo. *J Trop Pediatr* 1988; 34 : 186 - 92.
- 10 Cunningham AS, Jelliffe DB and Jelliffe EFP. Breastfeeding and health in the 1980s: A global epidemiologic review. *J Pediatr* 1991; 118: 659 - 66.
- 11 Grant JP. A Revolution for children. In: State of the World's Children. Oxford: Oxford University Press, 1984.
- 12 Grant JP. Breastfeeding: reversing the decline. In: State of the World's Children . Oxford: Oxford University Press, 1991: 24.
- 13 Kyenkya - Isabirye M. Mother's Milk: A global initiative. Unicef Intercom 1991; 50: 9.