

Breastfeeding and weaning practices among Nigerian women

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Abstract

Background: Infant feeding is an important determinant of child well-being. The practice of exclusive breastfeeding over the years is declining despite efforts at all levels to improve it; and with globalization there is concern of possible drift in the traditional weaning practices among Nigerian women. This study, therefore, seeks to determine the breastfeeding and weaning patterns among mothers attending two health facilities in the northern and southern parts of Nigerian. **Materials and Methods:** This was prospective cross-sectional study involving mothers seen in Paediatrics Outpatient and Child Immunization Clinics. This study involved two hospitals in northern and southern Nigeria respectively. **Results:** Two hundred breastfeeding mothers were recruited into this study. 75% of the mothers were in 25–40 years group and the majority of them (40.0%) commenced breastfeeding after 60 min of delivery. 83% of the mothers were aware of exclusive breastfeeding, but only 40.5% practiced it; their main reasons were that: Breastfeeding was not enough for the growth and development of the child (26.1%) and that breast-milk did not contain enough water; however most mothers' breasts fed for >12 months. About 44.5% of the mothers introduced complementary feeds between 4 and 6 months, and most complimentary meals (53.5%) were maize-based. 61½% of the mothers abruptly stopped breastfeeding, and the practice of separating the child from the home during weaning was reported in only 16% of the mothers. **Conclusion:** Exclusive breastfeeding is still unacceptably low among Nigerian women despite an increased level of awareness.

Key words: Exclusive breastfeeding, Nigerian women, weaning practices

INTRODUCTION


Weaning period is a transitional phase in child's feeding.^[1,2] It should commence from the 6th month of life based on recommendations from most academic bodies^[3,4] and this period often coincides with the eruption of the first primary dentition^[5] -a possible indication of the child's readiness for chewing food. At this age, breast milk is not always sufficient in providing adequate nutrition for the growing child hence

the need for additional nonbreast milk based complementary meal.^[6] In our setting, these are usually semi-solids,^[7] and differs in different locales, however in most Nigerian homes, they are often maize-based gruel, but with westernization, increasing maternal occupation^[8-10] and marketing strategies adopted by most food and beverage companies, assorted preparations are readily available and this may influence our feeding practices such as reducing the age at commencement of complementary feeding and early cessation of breastfeeding. Therefore, this study hopes to determine the breastfeeding and weaning patterns and common factors that affect breastfeeding and weaning practices among Nigerian women.

MATERIALS AND METHODS

This was prospective cross-sectional study conducted between June and August 2014 involving mothers seen in pediatrics

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outpatient and child immunization clinics. This was a multicenter study involving Federal Medical Centre Birnin Kebbi and Niger Delta University Teaching Hospital Yenagoa. Breastfeeding mothers with at least a weaning experience were enrolled in this study. Investigators administered pretested questionnaire which contained relevant information such as maternal age, occupation, educational status, time of commencement of breastfeeding, awareness, and practice of exclusive breastfeeding. Ethical clearances were obtained from the Ethics Committee of both institutions. Informed consent was obtained from the subjects and those who declined were excluded from the study. Mothers were grouped into: <25 years, 25–40 years, and >40 years.

Data analysis

Statistical Package for Social Sciences (SPSS for windows, version 19) (Chicago, Illinois III). software was used for data analysis. Frequency distribution of variables was determined, and Chi-square test for judging statistical significance was explored with $P < 0.05$ quoted as statistically significant.

RESULTS

Two hundred breastfeeding mothers were recruited for this study. There were 33 (16.5%) for those <25 years age-group, 150 (75%) for those in 25–40 years age-group and 17 (8.5%) for those >40 years age-group.

Twenty-one (10.5%) of the subjects had only primary school certificate, 71 (35.5%) of them had secondary school certificate, 66 (33.0%) had tertiary school certificate, while 42 (21.0%) had no formal educational qualification.

Sixty-four (32.0%) of the mothers were civil servants, 58 (29.0%) were petty traders, 2 (1.0%) were large scale business women, 72 (36.0%) were unemployed while 4 (2.0%) were unskilled laborers.

Seventy-two (36.0%) of the mothers commenced breastfeeding <30 min after delivery, 48 (24.0%) of them commenced between 30 and 60 min after delivery, while 80 (40.0%) of the mothers commenced breastfeeding after 60 min, after delivery.

One hundred and sixty-six (83.0%) of the mothers were aware of exclusive breastfeeding while 34 (17.0%) were not aware of exclusive breastfeeding. But only 81 (40.5%) practiced exclusive breastfeeding while 119 (59.5%) did not. Among those who did not practice exclusive breastfeeding, 31 (26.1%) believed breastfeeding was not enough for the growth and development of the child, 31 (26.1%) believed breast-milk did not contain enough water to quench a child's thirst, 11 (9.2%) gave their working condition as a reason for not practicing exclusive breastfeeding, 9 (7.6%) did not practice exclusive breastfeeding because of health reasons, 18 (15.1%) of the mothers felt exclusive breastfeeding was difficult practicing while 19 (15.9%) of them complained it was difficult introducing complementary feeds in exclusively breastfed children.

Complimentary meals were introduced between 0 and 3 months after delivery by 30 (15.0%) of the mothers, 89 (44.5%) of them introduced complementary feeds between 4 and 6 months and 81 (40.5%) of them commenced complementary feeding after 6 months of delivery.

Common complementary meals used by the mothers were mostly pap-maize based in 107 (53.5%) of them, cereal based packaged meals were used by 84 (42.0%) of the mothers, mashed potato or yam by 8 (4.0%) of the mothers while only 1 (0.5%) practiced combination of meals.

Only 4 (2%) of the mothers breastfed for <6 months, 21 (10.5%) of them breastfed for between 6 and 11 months, 112 (56%) of them breastfed for between 12 and 17 months, 49 (24.5%) of the mothers breastfed for between 18 and 23 months while 14 (7%) of the mothers breastfed for 24 months and more.

One hundred and twenty-three (61.5%) of the mothers abruptly stopped breastfeeding while 77 (38.5%) of them gradually weaned their children; and the practice of sending the child away from home during weaning was reported by 32 (16%) of the mothers while 168 (84%) remained with their mothers during the weaning process.

Table 1 shows mothers who had secondary and tertiary educational qualification were most aware of exclusive breastfeeding and also practiced exclusive breastfeeding and these observations were statistically significant, respectively ($\chi^2 = 17.920$; $df = 4$; $P = 0.00$; $\chi^2 = 41.263$; $df = 4$; $P = 0.00$, respectively). However, mothers with tertiary educational qualification used more of packaged meals as complementary meals.

Table 2 shows civil servants were most aware of exclusive breastfeeding and also practiced exclusive breastfeeding more than the other groups of mothers. Homemade maize gruel meals were mostly used by mothers however almost equal numbers of mothers who were civil servants used homemade meals and packaged tin foods as complementary feeds.

Table 3 shows the awareness and practice of exclusive breastfeeding are not different between the northern and southern part of Nigeria.

Mothers of the 25–40 years age-group were most aware of exclusive breastfeeding, but most of them did not practice exclusive breastfeeding [Table 4].

DISCUSSION

Most of the mothers were in the 25–40-years age-group which was similar to that of Abasiattai *et al.*,^[11] and it represents the reproductive age-group.

Thirty-six percent of mothers commenced breastfeeding within 30-min of delivery while 60% of the mothers initiated

Table 1: Relationship of educational status and awareness, practice of exclusive breastfeeding, and choice of complementary feeds

| | Education status | | | | Total |
|-----------------------------------|------------------|-----------|----------|------|-------|
| | Primary | Secondary | Tertiary | None | |
| Aware of exclusive breastfeeding* | | | | | |
| Yes | 14 | 60 | 63 | 29 | 166 |
| No | 7 | 11 | 3 | 13 | 34 |
| Total | 21 | 71 | 69 | 42 | 200 |
| Practice exclusive breastfeeding† | | | | | |
| Yes | 5 | 24 | 46 | 6 | 81 |
| No | 16 | 47 | 20 | 36 | 119 |
| Total | 21 | 71 | 66 | 42 | 200 |
| Feeds‡ | | | | | |
| Homemade meals | 14 | 37 | 27 | 38 | 116 |
| Prepacked meal | 7 | 34 | 39 | 4 | 84 |
| Total | 21 | 71 | 66 | 42 | 200 |

* $\chi^2=17.920$; $df=4$; $P=0.00$, † $\chi^2=41.263$; $df=4$; $P=0.00$, ‡ $\chi^2=27.756$; $df=3$; $P=0.00$.
Feeds - Types of complementary feeds, df - Degree of freedom

Table 2: Occupation and its relationship with awareness, practice of exclusive breastfeeding, and choice of complementary feeds

| | Employment status | | | | Total |
|-----------------------------------|------------------------|---------------|------------|-----------|-------|
| | Civil servant employed | Self-employed | Unemployed | Unskilled | |
| Aware of exclusive breastfeeding* | | | | | |
| Yes | 59 | 52 | 53 | 2 | 166 |
| No | 5 | 8 | 19 | 2 | 34 |
| Total | 64 | 60 | 72 | 4 | 200 |
| Practice-exclusive breastfeeding† | | | | | |
| Yes | 41 | 22 | 17 | 1 | 81 |
| No | 23 | 38 | 55 | 3 | 119 |
| Total | 64 | 60 | 72 | 4 | 200 |
| Feeds‡ | | | | | |
| Home-made meals | 33 | 33 | 50 | 0 | 116 |
| Prepacked meals | 31 | 27 | 22 | 4 | 84 |
| Total | 64 | 60 | 72 | 4 | 200 |

* $\chi^2=11.986$; $df=3$; $P=0.01$, † $\chi^2=24.032$; $df=3$; $P=0.00$, ‡ $\chi^2=10.705$; $df=3$; $P=0.013$.
Feeds - Types of complementary feeds, df - Degree of freedom

Table 3: Study location and its relationship with awareness, practice of exclusive breastfeeding, and choice of complementary feeds

| | Study location | | | Total |
|------------------------------------|----------------|--------------|--|-------|
| | Bayelsa | Birnin Kebbi | | |
| Aware of exclusive breastfeeding* | | | | |
| Yes | 85 | 81 | | 166 |
| No | 15 | 19 | | 34 |
| Total | 100 | 100 | | 200 |
| Practice exclusive breast-feeding† | | | | |
| Yes | 42 | 39 | | 81 |
| No | 58 | 61 | | 119 |
| Total | 100 | 100 | | 200 |
| Feed‡ | | | | |
| Homemade | 39 | 77 | | 116 |
| Prepacked meal | 61 | 23 | | 84 |
| Total | 100 | 100 | | 200 |

* $\chi^2=0.567$; $df=1$; $P=0.45$, † $\chi^2=0.187$; $df=1$; $P=0.67$, ‡ $\chi^2=29.639$; $df=1$; $P=0.00$.
Feeds - Types of complementary feeds, df - Degree of freedom

breastfeeding within 60 min these findings are similar to that reported by Chudasama *et al.*^[12]

Most the mothers in this study were aware of exclusive breastfeeding, but only 40% practiced it; this observation was similar to that of Onah *et al.*,^[13] and Otaigbe *et al.*,^[14] but higher than that of Uchendu *et al.*,^[15] who reported in only 22% of their subjects and that of Lawan *et al.*,^[16] who reported that no mother exclusively breastfeeding their babies in the first 6 months of life in their study; however, our observation was lower than that of Chudasama *et al.*,^[12] Several reasons were given for not practicing exclusive breastfeeding; topmost among them were that breast milk does not contain enough nutrient to support adequate growth and development and that it does not contain sufficient water to quench their children's taste. Maternal educational status is an important factor in reducing childhood morbidity and mortality because educated mothers are likely to have better health seeking behaviors; though most of the educated mothers in this study were aware of exclusive breastfeeding, unfortunately, many did not practice it; similarly most of those with tertiary education who were gainfully employed also used more of packaged meals. Health care professionals should, therefore, ensure effective public enlightenment on the advantages of exclusive breastfeeding and feedback mechanisms should be put in place to provide avenues for treating misgiving parents have about exclusive breastfeeding. Though only about 9% of mothers attributed nonacceptance of exclusive breastfeeding to work-related constrains such as early resumption from maternity leave, lack of crèches, expressing and storing of breast-milk-addressing these problems and extending the duration of maternity leave is essential for effectiveness of exclusive breastfeeding. Duration of breastfeeding exceeded 12 months in 87.5% of the mothers which was similar to that of Oche *et al.*,^[17] who reported in 85% of the mothers.

Forty-four and a half percent of mothers introduced complementary feeds within 4–6 months; this is similar to that of Kikafunda *et al.*,^[18] who reported 45.2% of mothers commencing complementary feeds by 4–6 months. Complementary feeds vary in different regions and countries, however in Nigeria, it is mainly cereal-based.^[16,19,20] There were almost equal distribution of those using home-made gruel and prepacked meals among the civil servants and self-employed mothers except for those who were unemployed who used mainly home-made meals; amazingly all four of the unskilled laborers used prepacked meals-this may be attributable to their smaller number in this study therefore, it may not be a true reflection of what is obtainable in the general population. Most mothers in this study (87.5%) breastfed for >12 months which was the similar experience in the study of Jitta *et al.*,^[21] while the practice of abrupt weaning is still of concern as was observed in 61.5% of the mothers.

Table 4: Maternal age and its relationship with awareness, practice of exclusive breastfeeding, and choice of complementary feeds

| | Age-range | | | Total |
|----------------|-----------|-------------|-----------|-------|
| | <25 years | 25-40 years | >40 years | |
| Awareness* | | | | |
| Yes | 23 | 130 | 13 | 166 |
| No | 10 | 20 | 4 | 34 |
| Total | 33 | 150 | 17 | 200 |
| Practice† | | | | |
| Yes | 8 | 67 | 6 | 81 |
| No | 25 | 83 | 11 | 119 |
| Total | 33 | 150 | 17 | 200 |
| Feeds‡ | | | | |
| Homemade | 17 | 86 | 13 | 116 |
| Prepacked meal | 16 | 64 | 4 | 84 |
| Total | 33 | 150 | 17 | 200 |

* $\chi^2=6.082$; $df=2$; $P=0.05$, † $\chi^2=4.891$; $df=2$; $P=0.09$, ‡ $\chi^2=2.978$; $df=2$; $P=0.23$.
Awareness - Awareness of exclusive breastfeeding, Practice - Practice of exclusive breastfeeding, Feeds - Types of complementary feeds

CONCLUSION

The practice of exclusive breastfeeding is still unacceptably low in both the northern and southern parts of Nigeria despite increased level of awareness; therefore, identified hindrances such as work interferences and unfounded believes about the breastfeeding should be tackled and effective measures such as public enlightenment campaigns should be adopted that will convince mothers of the importance of exclusive breastfeeding and proper weaning practices. Furthermore, the feeding pattern was similar in both region and educated working class mothers prefer using prepacked meals, and they practiced shorter period of exclusive breastfeeding.

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