

Infant Feeding and Nutrition Knowledge of Nursing Mothers in Port Harcourt, Nigeria

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ABSTRACT

Background: Maternal nutritional knowledge can play a critical role in the improvement of infant feeding practice. **Objective:** This study assessed the nutrition knowledge and infant feeding practice of mothers in Port Harcourt city Nigeria. **Methods:** structural questionnaires were administered on 215 lactating mothers with infants 0-8months. The questionnaires were used to collect information on socio-economic and demographic characteristics, nutrition knowledge and breast feeding patterns of the mothers. **Result:** The study showed that 61.0% of the respondents were within the age range of 21-30 years. Only 50% of the mothers practiced exclusive breast feeding, for the first 6 months, though, the awareness was high (90.0%). The main barriers to exclusive breastfeeding was compromised by the beliefs that walk, must be given to infant to reduce thirst of the hot wealther. The nutritional knowledge of the mothers with regard to breast feedings were good but was not practiced on their exclusive breast feeding practice. It is recommended that nutrition education campaign should be designed to women with school age children, in order to improve the breastfeeding patterns of their children.

Key words: Breastfeeding lactation, exclusive breastfeeding, Port Harcourt, qualitative data

INTRODUCTION

Breastfeeding is the most precious gift a mother can give to her infant, where there is illness or malnutrition, it may be a life-giving gift where there is poverty, it may be the only gift.^[1] Breastfeeding has been shown to be the ideal nourishment for the infant.^[2] Recent evidence shows that the benefits of breastfeeding are optimized when it is practical exclusively, for the first 6 months before complimentary foods are given.^[3] Although breastfeeding is widely accepted in Nigeria, exclusive breastfeeding has been reportedly low. Even the breastfeeding practice is gradually been reduced due to the influence of western lifestyle of the mothers. Breastfeeding is the key to survival of infants, especially in developing countries like Nigeria.

Health of the family especially the infants rotates around the mother, so it is essential to assess the knowledge and awareness of lactating mothers regarding dietary practices during lactation. Adequate knowledge and appropriate

nutritional practices play a pivotal role in determining optimal health.^[4]

Exclusive breastfeeding is the key to the survival of infants, especially in developing countries. It has been reported that exclusive breastfeeding can avert up to 13% of under-five deaths in developing countries,^[2] studies in other parts of Nigeria show that exclusive breastfeeding rate was very low. Nwankwo and Brieger^[5] reported (that none of the 411 mothers, they studies practiced exclusive breastfeeding) but 11% practiced predominant breastfeeding (i.e., giving plan water) for 4 months. Considering the benefits of exclusive breastfeeding for developing countries like Nigeria, these reports call for urgent need to institute measures that would not only motivate but also promote and support mothers to breastfeed exclusively. Before this can be done, baseline data are needed to assist in achieving effective interventions. This study, therefore, used qualitative data to get information on the lactating mothers knowledge and practice of breastfeeding in cosmopolitan, Port Harcourt city.

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SUBJECTS AND METHODS

Research design

The study was a descriptive and cross-sectional study.

Study population

The study was carried out in Port Harcourt city, the capital of Rivers State Government, Nigeria. Two communities, Elekahia and Ogbunnabali, were randomly selected. The health centers in these communities were visited on immunization days when the large turnout of mothers is normally obtained with their babies aged between 0 and 18 months. These communities, Elekahia and Ogbunnabali, were randomly sample and were used to select those who were interviewed with questionnaires. Purposive sampling was employed to select the respondents from each community.

Sample size

The prevalence of malnutrition in under 5 years children in Nigeria is 80%.^[6] This was used to determine the sample size,

also using the formula: $n = \frac{Z^2 p(1-p)}{d^2}$

Where: n = Sample size

Z = Confidence interval (1.96)

P = Prevalence from previous study

d = desired level of precision at 5% (0.05)

$$\text{Thus, } n = \frac{(1.96)^2 \times 0.8(0.2)}{(0.05)^2} = 245.86 = 246$$

The sample was rounded up to 246. On the return of the questionnaire, only 200 respondents completed the questionnaires, which were used for final analysis.

Data collection

An interviewer administered structural questionnaire was used since some mothers could not complete questionnaires themselves. Information on socio-economic and demographic characteristics respondents was obtained. Also obtained were their nutritional knowledge and the practice of breastfeeding. Informed consent of the respondents way obtained by signing or thumb printing before inclusion in the study. Participants privacy and confidentiality during, interview as ensured and data obtained from individuals were codified and confidential.

Data analysis

Data were analyzed using SPSS version 13.0. Descriptive statistics such as frequencies and percentages were used to analyze quantitative data.

Table 1: Sociodemographic characteristics of the lactating mothers

Parameters	Frequencies (%)
Age	
15-20	24 (12)
21-30	122 (61)
31-40	40 (20)
>41	14 (7)
Total	200 (100)
Maternal education	
No formal education	10 (5)
Primary education	40 (20)
Secondary education	120 (60)
Tertiary education	30 (15)
Total	200 (100)
Occupation	
Farming	20 (10)
Trading/self-employed	160 (80)
Civil servant	20 (10)
Total	200 (100)
Number of children	
1-5	72 (36)
6-10	100 (50)
>11	28 (14)
Total	200 (100)

Table 2: The knowledge, attitude, and awareness of breastfeeding

Parameters	Frequencies (%)
Awareness of exclusive breastfeeding?	
Yes	180 (90)
No	20 (10)
Total	200 (100)
Does literacy level affect infant feeding patterns?	
Yes	180 (90)
No	20 (10)
Total	200 (100)
Does exclusive breastfeeding make your child healthy?	
Yes	190 (95)
No	10 (5)
Total	200 (100)
Since you started exclusive breastfeeding has your child had diarrhea?	
Yes	195 (97.5)
No	5 (2.5)
Total	200 (100)

RESULTS

Table 1 shows the sociodemographic characteristics of the lactating mothers. Many (61%) were within the age range of 21–30 years. More than half (60%) had up to secondary education. 80% of them were trading/self-employed, while 10% were civil servant.

Table 2 shows the knowledge, attitude, and awareness of breastfeeding and occlusive breastfeeding about 90% was

aware of the exclusive breastfeeding. 95% of the subjects said that exclusive breastfeeding makes the infant healthy.

Data presented in Table 3 on the breastfeeding practices revealed that 97.5% of the mothers gave their infant only breast milk as the first food, while only 5% exclusively fed their baby for the first 1 month. About 60% of the

Table 3: Mothers practice of breastfeeding

Parameters	Frequencies (%)
First food given to baby breast milk	
Yes	190 (97.5)
No	5 (2.5)
Total	200 (100)
How long did you exclusively breastfeed your baby? (Months)	
0–1	10 (5)
1–2	40 (20)
2–3	100 (50)
3–4	30 (15)
4–5	10 (5)
5–6	10 (5)
Total	200 (100)
When did you introduce formula food (complementary feeding to your baby? (Months)	
1–3	120 (60)
2–3	100 (50)
3–4	30 (15)
4–5	10 (5)
5–6	10 (5)
Total	200 (100)
When did you introduce formula food complementary feeding to your baby? (Months)	
1–3	120 (60)
4–6	60 (30)
6–8	20 (10)
Total	200 (100)
When did you introduce your baby to family food?	
1–3	120 (60)
4–8	64 (32)
8–12	16 (8)
Total	200 (100)

Table 4: Nutrition knowledge

Parameters	Frequencies (%)
Does your knowledge of nutrition affect the food quality in your house?	
Yes	120 (60)
No	80 (40)
Total	200 (80)
Does literacy level affect nutrition knowledge?	
Yes	190 (95)
No	10 (5)
Total	200 (100)
Bad drinking water can cause diarrhea?	
Yes	150 (75)
No	50 (25)
Total	200 (100)
Does being fat/obese represent good health?	
Yes	15 (7.5)
No	185 (92.5)
Unhygienic foods can lead to health problems?	
Yes	200 (100)
No	0 (0.00)
List examples of foods in each of the following food groups (energy giving foods)	
Yam	40 (20)
Garri	60 (30)
Rice	90 (45)
Others	10 (5)
Total	200 (100)
Minerals/vitamins	
Banana	60 (30)
Orange	45 (22.4)
Vegetables	90 (45)
Others	5 (2.5)
Total	200 (100)

mothers introduced complementary food within 3 months. Furthermore, within 3 months, most of them (60%) introduced family foods.

Table 4 presented nutrition knowledge profile of the subjected. The summary of the knowledge assessments showed that the subjects had good nutrition knowledge.

DISCUSSION

The study showed that the mothers had heard about exclusive breastfeeding at 1 time or the other. With their seemingly high knowledge and awareness, one would expect them to practice it. However, only very few did it for the first 6 months. Poor socioeconomic status coupled with their low education level could be responsible for the low rate obtained. The NDHS (2015) survey showed that only 13% of children <6 months are exclusively breastfed, while 87% of Nigeria infants <6 months of age receive complementary foods and liquids. This appears to be the case with mothers in this study. Other studies^[7] conducted in various health facilities showed a prevalence of 19% among rural mothers in South West Nigeria. This shows that the rate of exclusive breastfeeding is still low in Nigeria and remains a source of concern. It could be because the mothers were not yet convinced of the practicality of exclusive breastfeeding. This corroborates report of Nwosu and Eace^[8] that complementary foods are introduced as early as 2 months due to perceived lactation insufficiency.

From Table 4, this study revealed that 92.5% does not believe that being fat/obese represents good health and that energy giving food makes them strong and give that energy nutrition education an stimulate the demand for certain foods, but the individual must have means and opportunities to act on that knowledge. Inadequate intakes are often caused by household's lack of access to amounts of food of the right quality to satisfy the dietary needs of all its members throughout the year. 60% of the respondents agreed that knowledge of nutrition affects food quality 83.5% accented that knowledge makes them eat balanced diet, but 45% agrees that money affects the use of the knowledge in the preparation of the family food.

Bad drinking water can cause diarrhea as said by 75% the study group and unhygienic foods lead to health problems^[9]

agreed to this as the agree that adequate dietary intake is essential good nutrition and health.

CONCLUSION

Nutrition promotion intervention strategy, information, and education should be targeted on these mothers using opinion leaders, women leaders, and local informed health workers to allay the fears of these mothers and improve their understanding of the benefits of breastfeeding to increase exclusive breastfeeding rates in these communities. Additional motivations and effective support through adequate feeding and reduction of workload by providing extra helping hands should be accorded the mothers.

REFERENCES

1. Latham MC. Human Nutrition in Tropical Africa. Rome: FAO; 2009.
2. Gupta N, Katende C, Bessinger R. An evaluation of post-campaign knowledge and practices of exclusive breastfeeding in uganda. *J Health Popul Nutr* 2004;22:429-39.
3. WHO. The Optimal Duration of Exclusive Breastfeeding: A Systematic Review. Geneva: World Health Organization; 2002. p. 47.
4. Thompson, J. Manure, M, Vangham L. The Science of Nutrition San Francisco. California, U.S.A: Pearson Education; 2008.
5. Nwankwo BO, Brieger WR. Exclusive breastfeeding is undermined by use of other liquids in rural South-West Nigeria. *J Trop Pediatr* 2002;48:109-12.
6. Yamane T. Sample Size Determination Involving the use of Prevalence from Previous Study, Desired Level of Precision and Confidence Level; 1967.
7. Agunbiade OM, Ogunleye OU. Constraints to Exclusive Breastfeeding Practice among Breastfeeding Mother in South West Nigeria: Implications for scaling up. *Int Breastfeed J* 2012;7:5.
8. Nwosu UM, Eke RA. Knowledge and practice of exclusive breast feeding: effects and health promotion intervention in Nigeria. *TAF Prev Med Bull* 2012;10:657-64.
9. Green SR, Elian M. Disease. Related Malnutrition. An Evidence Based Approach to Treatment. UK: CABI Publishing; 2003.

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