

# Knowledge and Practice of Exclusive Breastfeeding Among Mothers Seen at the University of PortHarcourt Teaching Hospital

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**Abstract:** Exclusive breastfeeding for the first six months of life is a natural, cost effective and feasible intervention that promotes child survival. Exclusive breastfeeding has been promoted severally but its practice has remained poor in Nigeria. This study aims to determine the knowledge and practice of exclusive breastfeeding among mothers who bring their children to the department of Paediatrics University of Port Harcourt Teaching Hospital. This was a descriptive cross-sectional hospital based study carried out from January 2012 to December 2013. A total of three hundred mothers presenting with their children for treatment at the Department of Paediatrics outpatient clinics, emergency and children medical wards were consecutively recruited into the study. Data on demographics, marital status, socioeconomic characteristics, knowledge and practice of breastfeeding were obtained using a structured self-administered questionnaire. The respondents were aged between 18 and 55years with a mean age of  $31.59 \pm 6.6$  years. Most of the women were between 26-35 years, majority (39%) were aged 25-30 years and majority (89.3%) were married. Thirteen percent had no formal education while majority (63.8%) had tertiary education. Ninety eight percent of the respondents had heard about EBF. Knowledge of the correct meaning of EBF was 91.3% while awareness of the benefits of EBF was 69.3%. Thirty five (11.7%) practiced EBF for the first 6 months. More than half (57.7%) of the respondents initiated breastfeeding within 1 hour of delivery while 24.7% did so after 1 hour but within 24 hours of delivery. One hundred and twenty seven (42.3%) of the mothers had given prelacteal feeds to their babies. Of those who gave prelacteal feeds, 8.6% gave plain water, 6.3% glucose water, and 0.3% infant formula and herbs. In conclusion, the practice of exclusive breastfeeding in this study is very low and therefore there is an urgent need to scale up programmes that will promote exclusive breastfeeding in our region.

**Keywords:** Knowledge, Practice, Exclusive Breastfeeding, Mothers

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## 1. Introduction

Breastfeeding is a natural process necessary for optimal growth and development of infants and its benefits are well established [1,2]. Breastmilk has the appropriate balance of nutrients and immunological factors needed for survival in the formative years of life [1-3]. Exclusive breastfeeding (EBF) is defined as feeding an infant with only breastmilk and no additional food, water, or other liquids with the exception of vitamins, mineral supplements or other medicines during the first six months of life [1, 4]. EBF is a

known important determinant factor of the nutritional status of an infant and ultimately impact child survival; it provides an inexpensive complete nutrition for infants, protects them against infections and prolongs lactation amenorrhea thus increasing birth spacing [2, 3, 5]. Researchers have shown that EBF significantly protected infants from dying from infectious diseases in the first few months of life compared to those who were not exclusively breastfed [6-8]. EBF is globally recognized to be the most effective preventive intervention for ensuring child survival and this intervention alone can reduce child mortality by up to 13% in children

under five years in the developing world [9].

World Health Organisation (WHO) and United Nations Children Fund recommends early initiation of breastfeeding within one hour of life, EBF for the first 6months of life followed by breastfeeding along with complimentary foods for up to two years of age and beyond. EBF has been encouraged and propagated by WHO/UNICEF through various ministries and baby friendly initiative [1, 10].

Despite strong evidence to support EBF, the practice of exclusive breastfeeding has remained suboptimal with consequent high child mortality rate in most developing countries. In Nigeria EBF practice is still below the recommendations by WHO/UNICEF, and various studies in different states have reported varied prevalence rates [11-15]. National data from NDHS 2008 and 2013 revealed a national EBF prevalence of 13% and 17% respectively [16, 17].

The aim of this study is to determine the knowledge and practice of exclusive breastfeeding among mothers who bring their children to the Department of Paediatrics University of Port Harcourt Teaching Hospital.

## 2. Materials and Methods

### 2.1. Study Area

The study was carried out at the Department of Paediatrics, University of Port Harcourt Teaching Hospital. The study participants were mothers presenting with their children for treatment at the outpatient clinics, emergency and children medical wards of the Paediatric Department.

### 2.2. Study Design

This was a descriptive cross-sectional hospital based study carried out from January 2012 to December 2013.

#### 2.2.1. Sample Size Determination

The sample size for this study was calculated using the formula for descriptive study.

$$n = z^2 (pq) / e^2$$

n= minimum sample size

z=1.96 at 95% confidence, so that  $z^2=3.8416$

p=known prevalence of exclusive breastfeeding (Prevalence of 82% obtained from a cross sectional survey in Western Nigeria was used)

e=error margin tolerated at 5% = 0.05

n=226.

#### 2.2.2. Sampling Method

The mothers were consecutively recruited until the minimum sample size was met.

### 2.3. Study Instrument and Data Management

A pre-tested structured self-administered questionnaire was used for data collection. Data on demographics, marital status, socioeconomic characteristics, knowledge and practice of breastfeeding were obtained from the mothers.

Data collected was analysed using the Statistical Package for Social Sciences (SPSS) version 20.0 software.

### 2.4. Ethical Considerations

Informed consent was obtained from the mothers prior to the onset of the study. Those mothers who declined participating were excluded. All information obtained was strictly confidential.

## 3. Result

### 3.1. Socio-demographics of the Respondents

A total of three hundred mothers participated in the study. The socio-demographic characteristics of the study population are as shown in Table1. The respondents were aged between 18 and 55 years with a mean age of  $31.59 \pm 6.6$  years. Most of the child bearing women were between 26-35 years, majority (39%) were aged 25-30 years while 27.3% were 31-35 years and the least group were less than 20 years (0.01%). Most of them (89.3%) were married. Thirteen percent had no formal education while majority (63.8%) had tertiary education. Most of the respondents were engaged in skilled labour while 11.2% were house wives.

Table1. Socio-demographics of respondents.

| Ages of mothers (in years) | Number | Percentage (%) |
|----------------------------|--------|----------------|
| <20                        | 3      | 0.01           |
| 20-25                      | 28     | 9.3            |
| 26-30                      | 117    | 39             |
| 31-35                      | 82     | 27.3           |
| 36-40                      | 36     | 12             |
| 41-45                      | 15     | 5              |
| 46-50                      | 11     | 3.7            |
| 51-55                      | 4      | 1.3            |
| Missing Age                | 4      | 1.3            |
| <b>Marital status</b>      |        |                |
| Married                    | 268    | 89.3           |
| Single                     | 20     | 6.7            |
| Divorced                   | 5      | 1.7            |
| Widowed                    | 6      | 2.0            |
| Separated                  | 1      | 0.3            |
| <b>Educational status</b>  |        |                |
| None                       | 44     | 1.3            |
| Primary                    | 17     | 5.7            |
| Secondary                  | 82     | 27.3           |
| Tertiary                   | 191    | 63.7           |
| Not indicated              | 6      | 2.0            |
| <b>Occupation</b>          |        |                |
| Medical Practitioners      | 91     | 30.4           |
| Business                   | 29     | 9.8            |
| Civil Servant              | 25     | 8.4            |
| Accountant                 | 23     | 7.5            |
| Petty Trader               | 41     | 13.6           |
| House wife                 | 34     | 11.2           |
| Not indicated              | 57     | 19.1           |

### 3.2. Knowledge and Attitude Towards Exclusive Breastfeeding

Table 2 shows the respondent's knowledge and attitude towards EBF. Ninety eight percent of the respondents had

heard about EBF. Knowledge of the correct meaning of EBF was 91.3% while awareness of the benefits of EBF was 69.3%.

**Table2.** Knowledge and attitude towards Exclusive breastfeeding.

| Knowledge/Attitude                     | Number | Percentage |
|--|--------|------------|
| Had heard                              | 295    | 98.3       |
| Knew correct meaning                   | 274    | 91.3       |
| Knew benefits to mother                | 208    | 69.3       |
| Agree that EBF is good                 | 291    | 97.0       |
| Would encourage others to practice EBF | 280    | 93.3       |

### 3.3 Breastfeeding Practices of the Respondents

Table 3 shows the breastfeeding practices of respondents. Thirty five (11.7%) practiced EBF for the first 6months. Thirty three (3.3%) of the respondents introduced complimentary feeds by the first month while 122 (40.9%) introduced complimentary feeds by the fifth month. More than half (57.7%) of the respondents initiated breastfeeding within 1hour of delivery while 24.7% did so after 1hour but within 24hours of delivery. One hundred and twenty seven (42.3%) of the mothers had given prelacteal feeds to their babies. Of those who gave prelacteal feeds, 8.6% gave plainwater, 6.3% glucose water, and 0.3% infant formula and herbs.

**Table 3.** Breastfeeding practices of respondents.

| Breastfeeding Practice   | Number | Percentage |
|--|--------|------------|
| <b>Exclusive breastfeeding for first 6months</b>               | 35     | 11.7       |
| <b>Time of commencement of complementary feeds</b>             |        |            |
| Commencement of complementary feeds in first month of life     | 33     | 3.3        |
| Commencement of complementary feeds by the fifth month of life | 122    | 40.6       |
| Commencement of complementary feeds by the sixth month of life | 134    | 44.6       |
| Continued breastfeeding till at least two years of age         | 12     | 4.0        |
| <b>Initiation of Breastfeeding</b>                             |        |            |
| Within 1hour of delivery                                       | 173    | 57.7       |
| Within >1hour – 24hours of delivery                            | 74     | 24.7       |
| Pre-lacteal feeds  | 127    | 42.3       |
| <b>Types of Pre-lacteal feeds</b>                              |        |            |
| Plain water  | 25     | 8.6        |
| Glucose water  | 19     | 6.3        |
| Infant formula   | 1      | 0.3        |
| Native herbs   | 1      | 0.3        |
| Not indicated  | 81     | 63.8       |

## 4. Discussion

This study reveals that there was a high level of awareness about EBF among the respondents which is similar to the findings by other authors in Nigeria [14,18] and supports the aim of the Baby Friendly Hospital Initiative. This finding of high level of awareness contrasts with what was obtained in studies carried out in Northern Nigeria by Oche et al [3] in Sokoto and Illayasu et al [12] in Kano who reported a low level of awareness of 30% and 31% respectively. The

observed differences between the findings from this study and that of Oche et al [3] and Illayasu et al [12] may be due to differences in the socio-cultural background and level of education of the study population. In the present study, most of the respondents had tertiary education compared to those in the studies by Oche et al [3] and Illayasu et al [12]. Most of the respondents in the present study were married and in their active reproductive periods between 26-35years as reported in similar studies [13,19, 20]. The prevalence of EBF in this study of 11.7% for the first 6months is comparable to the national prevalence of 13% and 17% reported by NDHS 2008 and 2013 respectively [16,17]. On the contrary, other studies in Nigeria and other developing countries reported much higher prevalence rates. In a study by Essien et al [14] in Calabar the prevalence of EBF was 60% while Okafor et al [13] in Lagos reported a prevalence of 52.9%, while Oche and Umar [21] reported a prevalence of 79% in their study. Pam and Okolo [15] in Plateau state however reported a lower prevalence of 6% in their study. These are still far below the widely accepted universal coverage target of 90% [9] suggesting the need to scale up efforts towards promoting exclusive breastfeeding in Nigeria. The disparities in the prevalence rates may be attributed to differences in cultural practices and values in the different populations studied, the occupation of the respondents may also be a contributing factor. The low prevalence of EBF in this study despite that majority had tertiary education and a good number were even medical practitioners is of concern considering that these population should have better knowledge of all the benefits of EBF and thus higher practice of EBF in comparison with the respondents in the study by Oche and Umar [21] where most of them had no formal education and all were full time housewives thus giving them enough time to carry on breastfeeding. This therefore highlights that educational status and knowledge about EBF may not be good predictors of EBF practice in a mother but other factors like working conditions and other social constraints may play key roles.

In this study more than half (57.7%) of the women initiated breastfeeding within 1hour of delivery which is comparable with the findings in the studies by Okafor et al [13] in Lagos, Oche et al [3] in Sokoto and Anoshirike et al [11] in Enugu but lower than the 72.2% reported by Chandrashekhar et al [22] in Western Nepal, India. On the other hand, Oche and Umar [21] in Sokoto and Illayasu et al [12] in Gwale Kano in their studies obtained lower rates of 8% and 26% respectively. There is growing evidence that early initiation of breastfeeding within one hour of life reduces mortality rate in babies as late initiation of breastfeeding deprives babies from colostrums which has anti-infective properties [6-8, 23]. The practice of prelacteal feeding in this study was high compared to those obtained from previous studies in Nigeria [24] but lower than the 77% reported in a study conducted at Bangladesh [25]. This high prevalence of prelacteal feeding highlights the need for health workers to emphasize the dangers of prelacteal feeds and clarify misconceptions about EBF among mothers. There

is also need to educate mothers on the importance of early initiation of breastfeeding within the 1<sup>st</sup> hour of life as recommended by WHO and UNICEF in order to improve the neonatal mortality indices in our country. The administration of water as the main prelacteal feeds noted in this study is consistent with those noted by Ibadin et al [24] in Benin but at variance with that reported in a previous study carried out by Akuse and Obinya [26] in Kaduna where infant formula was the main prelacteal feed and water the least. This difference could also be attributed to variations in the socio-cultural beliefs of the subjects.

## 5. Conclusion

The practice of exclusive breastfeeding in this study was very low despite the high level of awareness and educational status of the respondents. There is need to strengthen exclusive breastfeeding campaigns and advocate that mothers continue exclusive breastfeeding after resuming work by providing crèches at work places, good working conditions and possibly extending maternity leave to 6months in order to achieve the universal acceptable coverage target of 90%.

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