

## Knowledge of Exclusive Breastfeeding among Nursing Mothers in Port Harcourt Metropolis, Rivers State

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Article History	Abstract
Original Research Article	<p><i>Breastfeeding is an important biological process through which infants receive nourishment in the form of breast milk from their mothers. This study examined how well nursing mothers in the Port Harcourt Metropolis of Rivers State understand exclusive breastfeeding. A cross-sectional research design was used. The study targeted 3,414 nursing mothers, from which a sample of 338 was obtained through a multistage sampling technique. Data were gathered using a structured questionnaire that produced a reliability coefficient of 0.87. The responses were analysed using percentages and Chi-square statistics at the 0.05 significance level with the assistance of the Statistical Package for Social Sciences (SPSS Version 27).</i></p> <p><i>The findings showed that 225 respondents, representing 70.3%, demonstrated good knowledge of exclusive breastfeeding. The analysis also revealed that there was no significant association between mothers' knowledge of exclusive breastfeeding and the support they received from their partners. Based on these findings, the study concluded that nursing mothers in Port Harcourt Metropolis possess adequate knowledge of exclusive breastfeeding, which is essential for its proper practice. It was further recommended that mothers continue to strengthen this knowledge by actively seeking reliable breastfeeding information, including through appropriate social media platforms.</i></p> <p><b>Keywords:</b> Exclusive breastfeeding, Knowledge, Mothers, Port Harcourt.</p>
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### Introduction

Breastfeeding is a vital, naturally occurring process through which infants receive nourishment in the form of breast milk produced by their mothers. This biologically intended method of feeding is fundamental to supporting optimal growth and health during early childhood. Breast milk is regarded as the most appropriate source of nutrition for infants from birth up to 24 months. It may be given directly from the breast or provided to the baby after being manually expressed or pumped. The World Health Organization (WHO) advises that breastfeeding should start within the first hour after delivery and continue frequently based on the infant's needs.

Major health authorities, including WHO, advocate exclusive breastfeeding for the initial six months of life (Johnston et al., 2018). Exclusive breastfeeding means that

infants should not be given any food or liquid other than breast milk, except for vitamin D supplements when needed. WHO further recommends that exclusive breastfeeding be followed by continued breastfeeding, alongside suitable complementary foods, until at least two years of age or longer. Despite these guidelines, global adherence remains low: of the approximately 135 million babies born annually, only 42% are breastfed within their first hour, merely 38% are exclusively breastfed for the first six months, and about 58% continue to receive breast milk through their second year (Kramer & Kakuma, 2018).

United Nation International Children Education Funds (UNICEF) and World Health Organisation (WHO) have provided initiative scheme called "The Baby Friendly

Hospital Initiative' (BFHI), which is a global program to promote and support breastfeeding. The initiative, established in 1991, encourages hospitals and healthcare facilities to adopt practices that create a supportive environment for breastfeeding mothers (Tangsuksan, 2020). But despite these efforts made by all the organizations and countries, some mothers are still not practicing exclusive breast feeding, partners are still ignorant and lack knowledge about exclusive breast feeding, they often believe it's the mother's total responsibilities and most of these partner's do not even make conscious efforts in helping mothers to achieve exclusive breast feeding (WHO, 2018).

Several factors like knowledge and awareness (Ogbo et al., 2018), cultural and societal norms ((Ibrahim et al., 2019), economic factors (Onah et al., 2020), educational attainment (Adejumo et al., 2021), has been identified as challenges for partner support to exclusive breast feeding. Several studies have been done on exclusive breast feeding among nursing mothers, however a few studies have been done on partners support towards exclusive breast feeding in Rivers State. It is in the light of this, that the study seeks to assess determinants of partners' support towards exclusive breast feeding among nursing mothers in Port Harcourt Metropolis, Rivers State.

### Statement of the Problem

Breastfeeding practices in Nigeria continue to fall well below the WHO/UNICEF recommendations and target for developing countries to have over 90% of breast-feeding success rate (National Population Commission, 2018). In 2020 Federal Ministry of Health report show revealed only 29% were exclusively breast fed, indicating that about 71% of the infants are denied from enjoying the benefit of been exclusively breastfed. This report explained the high incidence of health-related challenge like diarrhoea, anaemia, malnutrition among infants not exclusively breast fed. This may likely exist in Rivers State.

Nigeria Demographic and Health Survey (2018), showed a decline in exclusive breastfeeding rate in Nigeria from 17% in 2018 to 13% in 2018, they also reported the differences between rural and urban practice of exclusive breastfeeding being higher in the rural areas of 41% compared in the urban areas with 38%. The report concluded that only 29% of babies are exclusively breast fed, while 48% had milk and other liquid, 22% had breast milk and complementary foods. In 2020 Federal Ministry of Health report showed further drop to 29% indicating that about 71% of the infants are denied from enjoying the benefits of been exclusively breastfeed, this report explained the high incidence of health related challenge like diarrhoea, anaemia, malnutrition among infants not-exclusively Breast fed

(WHO, 2018). Which may likely exist in Rivers State. Thus the need for this study to investigate the knowledge and attitude towards exclusive breastfeeding.

### Objectives of the Study

The specific objectives of the study are to:

- i. Assess the knowledge of exclusive breast feeding among nursing mothers in Port Harcourt Metropolis, Rivers State.
- ii. Determine the attitude towards partners' support exclusive breast feeding among nursing mothers in Port Harcourt Metropolis, Rivers State.

### Review of Literature and Theoretical framework

Breastfeeding is a natural and essential practice that involves feeding infants with breast milk, typically from their mothers. This biologically designed method of nourishment serves as the foundation for early childhood health and development. Exclusive breastfeeding" in this study is defined as the practice of providing an infant with only breast milk without the introduction of any other liquids or solids for the first six months of life, in adherence to the World Health Organization (WHO, 2023) guidelines.

### Breastfeeding Self-efficacy theory

This study is based on the Breastfeeding Self-Efficacy Theory, formulated by Dr. Dennis in 2002 during her doctoral work in Nursing Science. The theory builds on principles from Bandura's (1977) Social Cognitive Theory. Breastfeeding self-efficacy describes a mother's belief in her own capability to successfully breastfeed her baby. The model is grounded in four major components: performance accomplishments, which refer to previous breastfeeding experiences; vicarious experiences, such as observing other mothers breastfeed; verbal persuasion, which includes supportive encouragement from significant individuals like relatives, friends, or lactation professionals; and physiological or emotional states, encompassing factors such as stress, tiredness, and anxiety.

### Methodology

The study adopted a descriptive cross-sectional design. The population of the study was 3,414 nursing mothers accessing maternal and child health care services from the health care facilities within the Port Harcourt Metropolis in Rivers State (Hospital Record, 2023). The inclusion criteria include: all nursing mothers who are attending infant welfare clinic in health facilities, and all nursing mothers currently feeding infants exclusively. The exclusion criteria included: nursing mothers who are not living together with their spouses. The sample size was 338 which was calculated using Cochran formula shown below:  $n = \frac{z^2pq}{e^2}$ . Where,  $n$  = Cochran's sample size,  $e$  = desired level

of precision (margin of error) which is 0.05,  $p =$  estimated (proportion) of the population who had the desired attribute (27.9%, Phua et al., 2020).  $q =$  estimated (proportion) of the population whose partner did not support exclusive breast feeding,  $1 - 0.279 = 0.721$ .  $z = z$  value for 95% confidence level which is 1.96. Then, adding 10% non-compliance rate,  $n = 308 + 30 = 338$ .

The study utilized a multi-stage sampling procedure. At Stage 1: clustered sampling technique was used to select two LGAs which are Port Harcourt and Obio/ Akpor. At Stage 2: the simple random sampling technique (balloting without replacement) was used to select four most populated primary Health care facilities (Rumuigbo model health center, Rumuokurushi model Health centre, Ozuoba health care centre and Orogbum model Health centre). At Stage 3: using systemic sampling technique at the interval of two, the researcher then drew 84 participants each from Rumuigbo model Health Centre, Rumuokurushi model Health centre, Ozuoba Health care centre and lastly 86 from

the Orogbum model Health care centre. This brought the total of 338 participants.

The instrument for data collection was a researcher self-structured questionnaire titled 'partners support towards exclusive breastfeeding questionnaire (PSTEBF)'. The instrument had a reliability index of 0.87. The questionnaire was distributed within one month to nursing mothers who met the inclusion criteria to complete by themselves. The analysis was based on all well completed copies, which were 320 questionnaires (return rate = 93.84%) because not all copies of the questionnaire were completely filled, and those not completely filled, were 21 in number, (attrition rate- 6.16%) Therefore, the computed sample size was 320. Data was analyzed with the aid of the Statistical Product for Service Solution (SPSS V-27) using percentage, mean, bivariate and multivariate analysis at 0.05 level of significance.

## Results

The results of the study are shown below:

**Table 1: Percentage distribution showing the sociodemographic characteristics of the respondents (n = 320)**

Items	Frequency	Percentage
20-29yrs	111	34.7
30-39yrs	166	51.9
40-49yrs	43	13.4
<b>Marital status</b>		
Single	39	12.2
Married	281	87.8
<b>Religion</b>		
Christianity	318	99.4
Muslim	2	0.6
<b>Level of education</b>		
No formal education	3	0.9
Primary	15	4.7
Secondary	134	41.9
Tertiary	168	52.5
<b>Partner's level of education</b>		
No formal education	13	4.1
Primary	25	7.8
Secondary	63	19.7
Tertiary	219	68.4
<b>Employment status</b>		
Working	117	36.6
Not working	126	39.4
Business	77	24.1
<b>Partner's Employment status</b>		
Working	167	52.2
Not working	47	14.7
Business	106	33.1

The result in Table 1 showed that, out of 320 respondents, majority 166(51.9%) of the respondents were aged 30-39 years and the least was 43(13.4%) aged 40-49 years. Majority 281(87.8%) were married, and 318(99.4%) were Christians. More

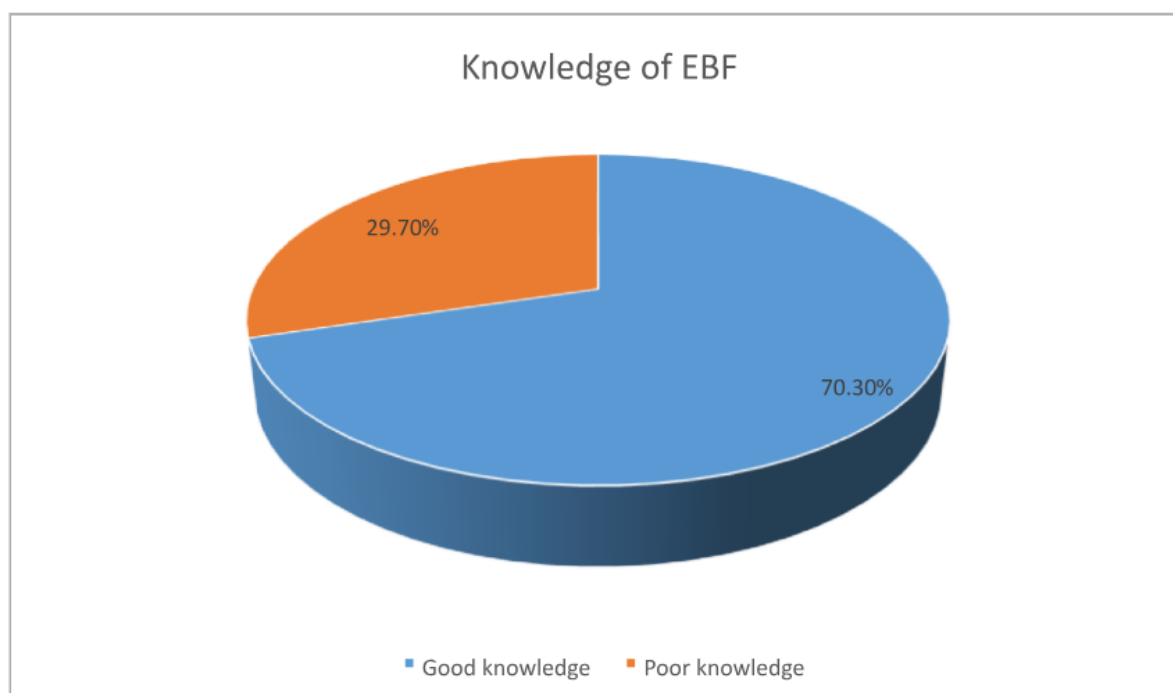
than half 168(52.5%) of the nursing mothers had tertiary education also, 219(68.4%) of their partners also had tertiary education. The result showed that more 126(39.6%) were not working while 77(24.1%) were doing business. For the partners, more than half 167(52.2%) were working.

**Table 2: Knowledge of partners in supporting exclusive breast feeding among nursing mothers in Port Harcourt Metropolis, Rivers State**

SN	Items	Yes F(%)	No F(%)
1	Exclusive breastfeeding is the feeding of newborns with breast milk only in the first six months of life	304(95.0)	16(5.0)
2	Breastfeeding baby with breast milk for the first 6 months is good	207(64.7)	113(35.3)
3	Exclusive breastfeeding prevent diarrhea and respiratory diseases for the infant	222(69.4)	98(30.6)
4	Formula is more convenient than breastfeeding	131(40.9)	189(59.1)
5	Breast milk is the best food for a newborn.	280(87.5)	40(12.5)
6	Exclusive breastfeeding protect the mother from early pregnancy	216(67.5)	104(32.5)
7	Breast milk supply the baby with all the nutrition needed in early life	253(79.1)	67(20.9)
8	Colostrum milk (the first part of the breast milk) is nutritious and good for the newborn	194(60.6)	126(39.4)

**Hint: F = Frequency; % percentage.**

The result showed that of the 320 respondents, majority 304(95.0%) knew that that EBF is the feeding of newborns with breast milk only in the first six months of life, 280(87.5%) knew that breast milk is the best food for a newborn, 253(79.1%) breast milk supplies the baby with all the nutrition needed in early life, 222(69.4%) knew EBF prevent diarrhea and respiratory diseases for the infant, and the least response was on the item that reads that formula is more convenient than breastfeeding 131(40.9%).



**Fig 1: Pie chart showing knowledge of Exclusive Breastfeeding by Mothers**

The Fig above showed that, 225(70.3%) had good knowledge of exclusive breastfeeding while 95(29.7%) had poor knowledge of exclusive breastfeeding.

**Table 3: Chi-square test showing association between Knowledge and partners support for exclusive breast feeding among nursing mothers in Port Harcourt Metropolis, Rivers State**

Knowledge of Exclusive breastfeeding	Partner Support		$\chi^2$	p-value
	No F(%)	Yes F(%)		
Knowledge			3.05	0.08*
Poor	39(34.5)	56(56)		
Good	74(65.5)	151(72.9)		

**\*Not Significant.  $p > 0.05$**

Table 3 showed the Chi-square test of relationship between knowledge of exclusive breastfeeding and partners support for EBF. The findings showed a non-significant relationship between knowledge and partners support for EBF ( $\chi^2 = 3.05$ ,  $p = 0.08$ ), as the p-value was greater than 0.05. Thus, the null hypothesis which showed that there is no significant relationship between knowledge and partners support for exclusive breast feeding among nursing mothers in Port Harcourt Metropolis, Rivers State was not rejected.

### Discussion of findings

The results of the study are presented as follows:

The analysis showed that 70.3% of the respondents demonstrated adequate knowledge of exclusive breastfeeding (EBF). A significant association was also observed between mothers' knowledge of EBF and the level of support provided by their partners. This outcome aligns with the findings of Yan Ojong (2021), who examined how knowledge, attitudes, and spousal support shape breastfeeding practices among Bangladeshi parents. That study reported that increased awareness of EBF strengthened partners' involvement, thereby enhancing the likelihood that mothers would practise exclusive breastfeeding. The congruence between the two studies may be attributed to their similar research designs and to the general tendency of fathers who understand the value and benefits of breastfeeding to offer stronger support.

No study contradicting this finding was identified. The present result also aligns with that of Mbwana et al. (2018), who explored mothers' understanding of breastfeeding benefits for both infants and mothers. Their research revealed that although mothers were well informed about the nutritional advantages of breastfeeding, they were less aware of additional benefits such as reduced risks of respiratory infections in infants, improved dental and gum development, and lower occurrence of breast-related health problems among breastfeeding women. Despite being carried out in different contexts, the studies produced similar outcomes, likely due to the comparable research designs and data collection procedures applied.

The study found that exclusive breastfeeding was associated with several socio-demographic characteristics, including being older, married, having only primary education, and not being employed. The analysis further showed that these socio-demographic factors had a significant link with the level of support mothers received from their partners. This outcome is consistent with the report of Muluneh (2023), whose investigation into factors predicting exclusive breastfeeding among Ethiopian mothers revealed that age, marital status, and educational level were significantly related to partner support for exclusive breastfeeding.

The present findings also align with those of Emmanuel (2018), who examined determinants of infant feeding practices and arrived at similar conclusions. In addition, the results agree with the work of Mundagowa et al. (2019), which explored maternal, infant, household, environmental, and cultural influences on exclusive breastfeeding in Gwanda District and identified a significant association between socio-demographic characteristics and partner support. The findings of this study are equally supported by Tangsuksan et al. (2020), whose research on maternal, social, and workplace factors affecting six-month exclusive breastfeeding among urban employed mothers in Bangkok demonstrated that socio-demographic variables significantly shaped partner involvement.

### Conclusion

Based on the findings of the study it was concluded that, nursing mothers in Port Harcourt Metropolis of Rivers State had good knowledge of exclusive breast feeding which is a prerequisite for its successful practice

### Recommendations

The following recommendations were made based on the findings of the study:

1. Nursing mothers should maintain the good knowledge found by making conscious effort to



search for necessary information by taking advantage of the social media.

2. Also the government need to extend the period of maternity leave or reduced working hours for nursing mothers, to enable them have enough time to breastfeed their babies before resumption of work.
3. Also, of great importance is for pregnant women to attend antenatal clinics with their partners in order to acquire the necessary knowledge regarding breastfeeding, thereby ensuring a successful practice.

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