

# Knowledge, Factors, and Barriers to Exclusive Breastfeeding Among Nursing Mothers Attending an Immunisation Clinic in Abeokuta, Nigeria

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## Abstract

**Introduction:** Exclusive breastfeeding (EBF) remains suboptimal globally despite extensive advocacy, with limited localised evidence on barriers among urban Nigerian mothers. This study assessed knowledge, facilitators, and barriers to EBF among nursing mothers attending an immunisation clinic in Abeokuta, Nigeria.

**Methods:** A cross-sectional study surveyed 118 nursing mothers at Oba Ademola II Maternity Hospital, Abeokuta, Nigeria (August 2025) using a structured questionnaire. We analysed data with SPSS v25 using descriptive statistics and binary logistic regression.

**Results:** Most respondents were aged 20–29 years (87.3%), Yoruba (80.5%), and tertiary-educated (90.7%). EBF knowledge was high (mean score  $7.27 \pm 0.80/8$ ; 89.8% classified as high knowledge). Key facilitators (89–93%) included skin-to-skin contact, family/partner support, and health professional advice. Major barriers were early work return (84.7%), cultural myths (78.8%), maternal exhaustion (80.5%), and public breastfeeding stigma (67.8%). Mothers with high EBF knowledge were significantly more likely to practice EBF (aOR=8.64, 95% CI: 2.37–31.45,  $p=0.001$ ), as were civil servants (aOR=3.50, 95% CI: 1.45–8.45,  $p=0.005$ ).

**Conclusion:** Despite high EBF knowledge, substantial structural and sociocultural barriers persist. Interventions addressing workplace policies, cultural misconceptions, and social support systems are needed.

**Keywords:** Exclusive breastfeeding, Knowledge, Practice, Barriers, Nursing mothers

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## Introduction

Exclusive breastfeeding (EBF) practice was defined according to the World Health Organisation 24-hour recall definition, where infants aged <6 months were considered exclusively breastfed if they had received only breast milk and no other liquids or foods in the preceding 24 hours. Despite growing advocacy, there is scarce localised evidence on knowledge levels and obstacles among urban nursing mothers. Breastfeeding provides essential nutrients and antibodies vital for infant growth, containing bioactive molecules that protect against infections, support immune maturation, and aid organ development (1). It offers benefits like improved neurological development, reduced chronic diseases, and enhanced immunity for infants, while reducing maternal risks of breast/ovarian cancer, aiding postpartum weight loss, and strengthening bonds (2). Globally, EBF rates are below 40%, far from the 70% target by 2030 (3). In Ogun State, rates are 33.2% (3). Positive influences include maternal education, family/healthcare support, extended leave, and self-efficacy; negatives encompass employment, low education, myths, and health issues (4, 5). Barriers include insufficient milk perceptions and work challenges (6). At Oba Ademola II Maternity Hospital, brief antenatal education persists amid myths like early water introduction. Recent Nigerian research highlights knowledge-practice gaps, emphasising multifaceted interventions. This study assesses EBF knowledge, factors, and barriers among nursing mothers at the immunisation clinic, providing evidence for targeted strategies.



**From the South, for the South, with the World**

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**Methods**

*Study Setting and Design*

This study was conducted at Oba Ademola II Maternity Hospital, Abeokuta, Ogun State, Nigeria, a government-owned secondary healthcare facility established in 1929 that provides comprehensive maternal and child health services, including antenatal care, delivery services, immunisation, and family planning. A cross-sectional survey design was

employed to assess knowledge, facilitators, and barriers to exclusive breastfeeding (EBF) among nursing mothers attending the immunisation clinic. Data collection occurred over two weeks in August 2025, following ethical approval. Clinic attendance records from February to July 2025 were reviewed to estimate the average monthly population of nursing mothers, which informed the sample size calculation. Descriptive analyses were conducted using SPSS version 25.0.

**Table 1: Population of nursing mothers**

MONTH	NUMBER OF NURSING MOTHERS
February	169
March	151
April	145
May	137
June	140
July	138
<b>TOTAL</b>	<b>880</b>

Average number of nursing mothers per month =  $(169+151+145+137+140+138) / 6 = 880/6 = 146.6$

This is approximately equal to 147

$$n = \{N\} / \{1 + N(e)^2\}$$

n = required sample size

N = total number of nursing mothers attending the clinics during the study period (147)

e = margin of error, set at (0.05)

$$n = \frac{N}{1 + N(e)^2}$$

where N = 147 and margin of error e = 0.05.

$$\text{Thus } n = \frac{147}{1+147(0.05)^2} = \frac{147}{1+147(0.0025)} = \frac{147}{1.3675}$$

= 107.6, rounded to 108.

Allowing 10% for non-response/attrition gives an adjusted target sample size of 119 (108 + 11).

In the Taro Yamane formula ( $n = N / [1 + N(e^2)]$ ), with N=147 and e=0.05, the base n ≈ 107.55. Rounding to 108 (up) ensures minimum power, but the +10% attrition buffer yields 118.8. The value was rounded up to 108 participants. To account for a possible 10% non-response rate, the sample size was increased to 119 participants. However, 118 completed questionnaires were obtained and included in the final analysis.

*Data Handling*

All 118 questionnaires were completed and retrieved (100% response rate; no questionnaires were started but unfinished).

*Study Population and Sampling*

The study population comprised all eligible nursing mothers registered at the immunisation clinic between 1 February and 31 July 2025. Consecutive sampling was employed, whereby all eligible and consenting mothers with infants aged <6 months attending the clinic during the study period were

invited to participate. Mothers who were ill or unwilling to participate were excluded.

A target sample size of 118 was calculated using Taro Yamane’s formula for a finite population (N = 147) with a margin of error of 0.05 and 95% confidence.

*Data Collection Instrument*

A structured, self-administered questionnaire in English and Yoruba was used to collect data. The questionnaire comprised four sections:

Section A: Socio-demographic characteristics

Section B: Knowledge of exclusive breastfeeding (definition, benefits, myths)

Section C: Facilitating factors for exclusive breastfeeding

Section D: Barriers to exclusive breastfeeding (work-related, cultural, physical)

Content validation was conducted by five experts three from the Department of Nursing at Crescent University, Abeokuta, and two from the Ogun State Ministry of Health maternal health unit, using the Content Validity Index (CVI) method. Each item was rated on relevance, clarity, and comprehensiveness on a 4-point scale, resulting in an overall CVI of 0.92, indicating excellent content validity. The knowledge section included eight items, scored dichotomously: 1 point for each correct response, 0 for incorrect, giving a total score range of 0–8. High knowledge was defined as ≥7 points, based on the median split. All items were translated into Yoruba by a bilingual nurse and back translated by an independent translator to ensure linguistic and conceptual equivalence (e.g., "EBF" translated as “ki iya fun omo loyan dada fun osu mefa akoko lai fi omi ati ikankan si”).

*Statistical Analysis*

Data were analysed using SPSS version 25.0. Descriptive statistics (frequencies, percentages, means ± SD)

summarised participant characteristics and knowledge levels. Associations were tested using chi-square ( $\chi^2$ ) analysis, with significance set at  $p \leq 0.05$ . Binary logistic regression was used to identify independent predictors of current EBF (yes/no), defined as the mother reporting that her infant aged <6 months received only breast milk in the preceding 24 hours. Variables with  $p < 0.20$  in bivariate analysis or considered a priori important (age, parity, maternal education, employment status, place of delivery, partner support) were included in the multivariable model. Model stability was assessed using the events-per-variable (EPV) rule:  $[\text{EPV} = \frac{118}{4} = 29.5]$  This exceeded the recommended threshold of 10 events per predictor. Multicollinearity was evaluated using variance inflation factors (VIF), with all values  $< 5$  indicating acceptable independence. Model fit was assessed using the

Hosmer–Lemeshow goodness-of-fit test, and model discrimination was evaluated by the area under the receiver operating characteristic curve (AUC). Adjusted odds ratios (aOR) with 95% confidence intervals (CI) were reported, with  $p < 0.05$  considered statistically significant.

**Results**

*Socio-demographic Characteristics of Respondents*

Table 2 presents demographics (N=118). Most (87.3%) were 20–29 years, female (implied), Yoruba (80.5%), Muslim/Christian (57.6%/41.5%), hospital-delivered (83.1%), vaginal (80.5%), self-employed/civil service (46.6%/35.6%), tertiary-educated (undergraduate or postgraduate) (107, 90.7%), nuclear family (78.8%), 1–2 children (49.2%/50.8%), income  $> \text{₦}150,000$  (45.8%).

**Table 2: Socio-demographic Characteristics of Respondents (n= 118)**

Characteristic	Category	Frequency (n)	Percentage (%)
<b>Age Group</b>	20–24 years	50	42.4
	25–29 years	53	44.9
	30–34 years	11	9.3
	35 years and above	4	3.4
<b>Religion</b>	Islam	68	57.6
	Christianity	49	41.5
<b>Ethnicity</b>	Traditional	1	0.9
	Yoruba	95	80.5
	Igbo	14	11.9
	Hausa	7	5.9
<b>Delivery Place</b>	others	2	1.7
	Hospital	98	83.1
	Home	20	17.0
<b>Delivery Method</b>	Vaginal delivery	95	80.5
	Caesarean section	18	15.3
	Forceps delivery	5	4.2
<b>Occupation</b>	Self-Employed	55	46.6
	Civil Service	42	35.6
	Trading	11	9.3
	Artisan	1	0.9
	Others	9	7.6
<b>Educational Level</b>	Tertiary (Undergraduate)	70	59.3
	Tertiary (Postgraduate)	37	31.4
	High school or below	11	9.3
<b>Family Type</b>	Nuclear family	93	78.8
	Extended family	25	21.2
<b>Number of Children</b>	1 Child	58	49.2
	2 or more children	60	50.9
<b>Income Range</b>	$> \text{₦}150,000$	54	45.8
	$\text{₦}50,000 - \text{₦}150,000$	34	28.8
	$< \text{₦}50,000$	30	25.4s

*Knowledge Of Exclusive Breastfeeding*

High knowledge prevailed (average 90%). Each item was scored dichotomously: 1 point for a correct response, 0 for an incorrect one. Total score range: 0–8 points (maximum 8). Raw scores were calculated per respondent,

with percentages derived as  $(\text{score}/8) \times 100$  for averaging (study mean: 90%).

*Cut-Off for High vs. Low Knowledge*

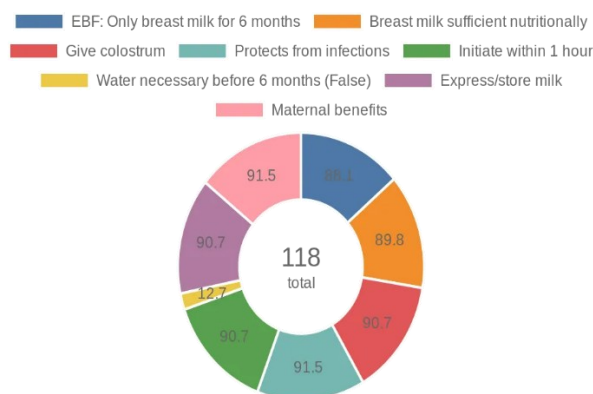
High knowledge:  $\geq 7$  points ( $\geq 87.5\%$  correct); low knowledge:  $< 7$  points ( $< 87.5\%$  correct). This data-driven cut-off used the median split (median score = 7), justified by the distribution (skewed high;  $106/118 = 89.8\%$  above median). A sensitivity analysis using an alternative knowledge threshold ( $\geq 75\%$  correct responses) produced similar

associations with EBF practice, suggesting the findings are robust to different classification cut-offs. Tertiles were considered, but the median provided balanced groups for  $\chi^2$  analysis without arbitrary bias. Table 3 and Figure 1 show 88.1–91.5% correct on definition/benefits; 87.3% rejected water myth (87.3% gap).

**Table 3: Knowledge of Exclusive Breastfeeding (n = 118)**

Statement	True (%)	False (%)
EBF: Only breast milk for 6 months	88.1	11.9
Breast milk is sufficient nutritionally	89.8	10.2
Give colostrum	90.7	9.3
Protects from infections	91.5	8.5
Initiate within 1 hour	90.7	9.3
Water necessary before 6 months (False)	12.7	87.3
Express/store milk	90.7	9.3
Maternal benefits	91.5	8.5

Correct responses indicate accurate knowledge of EBF recommendations



**Figure 1: Knowledge of exclusive breastfeeding**

*Factors Influencing EBF Practice*

Facilitators: Skin-to-skin (89%), family (89%), partner (93%), advice (93%). Table 4 and Figure 2 summarise Likert responses.

**Table 4: Factors Influencing EBF (n= 118)**

Factor / Statement	Agree (n)	Agree (%)	Disagree (n)	Disagree (%)
Skin-to-skin contact	105	89	13	11
Family encouragement	105	89	13	11
Educational materials	105	89	13	11
Cultural norms support	100	84.7	18	15.3
Health professional advice	110	93.2	8	6.8
Partner support	110	93.2	8	6.8
Maternity leave is sufficient	74	62.7	44	37.3
Early initiation	110	93.2	8	6.8

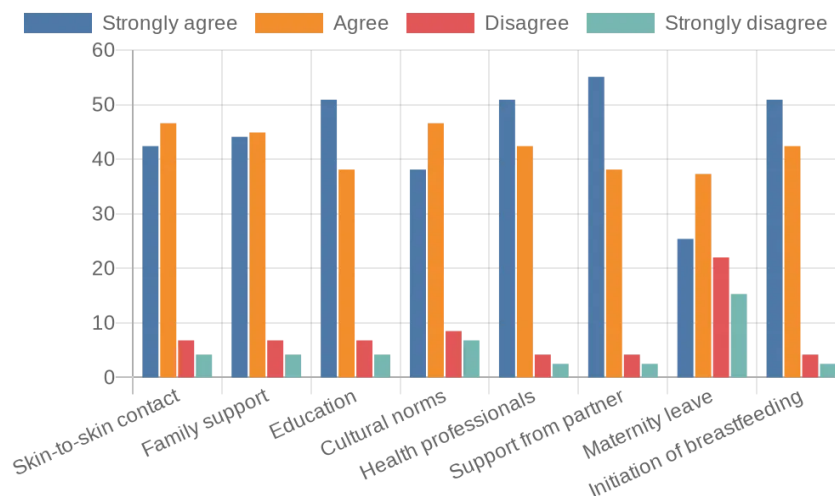


Figure 2: Factors influencing EBF practice

Barriers and Gaps

Work return (84.7%), myths (78.8%), exhaustion (80.5%), stigma (67.8%), 67.8% agreed that lack of workplace facilities prevents EBF. See Table 5 and Figure 3.

Table 5: Barriers to EBF (n = 118)

Barrier / Gap Statement	Agree (n)	Agree(%)	Disagree (n)	Disagree (%)
Early work return barrier	100	84.7	18	15.3
Cultural myths barrier	93	78.8	25	21.2
Breastfeeding exhausting	95	80.5	23	19.5
Public embarrassment	80	67.8	38	32.2
Technique knowledge gap	75	63.6	43	36.4
Social media confusion	85	72.0	33	28.0
Lack of adequate workplace breastfeeding facilities prevents exclusive breastfeeding	80	67.8	38	32.2

An agreement indicates the presence of the stated barrier

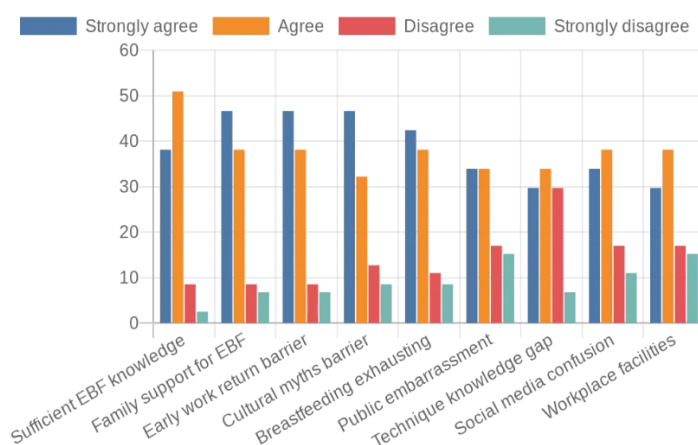


Figure 3: Barriers and gaps

Bivariate Associations

Multivariable logistic regression analysis showed that mothers with high knowledge of exclusive breastfeeding were significantly more likely to practice EBF compared with those with low knowledge (aOR = 8.64, 95% CI: 2.37–31.45, p = 0.001). Employment status was also a significant

predictor; mothers working in the civil service were more likely to practice EBF than self-employed mothers (aOR = 3.50, 95% CI: 1.45–8.45, p = 0.005). However, age group and educational level were not significantly associated with EBF practice. See Table 6

Table 6: Multivariable Logistic Regression for EBF Practice (N=118)<sup>i</sup>

Variable	Category	EBF Yes n (%)	EBF No n (%)	Adjusted OR (aOR)	95% CI	p-value
Knowledge Level	High	106 (89.8)	12 (10.2)	8.64	2.37–31.45	0.001
	Low	12 (10.2)	106 (89.8)	1.00	-	-
Age Group	20–29 years	103 (87.3)	15 (12.7)	1.00	-	-
	≥30 years	15 (12.7)	103 (87.3)	0.45	0.18–1.12	0.089
Educational Level	Tertiary (Ref)	107 (90.7)	11 (9.3)	1.00	-	-
	Below tertiary	11 (9.3)	107 (90.7)	0.32	0.09–1.15	0.082
Employment Status	Self-employed (Ref)	55 (46.6)	63 (53.4)	1.00	-	-
	Civil service	42 (35.6)	76 (64.4)	3.50	1.45–8.45	0.005
	Others (Trading/Artisan	21 (17.8)	97 (82.2)	1.89	0.72–4.95	0.199

Independent variables considered were high knowledge (1 = yes, 0 = no), age group (categorical: 20–29 years as reference), education (tertiary as ref), and employment (self-employed as ref). Variable selection was a priori based on literature, with knowledge and key socio-demographic characteristics included as potential confounders of exclusive breastfeeding (EBF) practice. Categorical variables were dummy coded with reference categories as indicated in Table 6. Multicollinearity among predictors was assessed using variance inflation factors (VIF), with values below 5 indicating acceptable independence among variables. Model fit was evaluated using the Hosmer–Lemeshow goodness-of-fit test, and model discrimination was assessed using the area under the receiver operating characteristic curve (AUC). The logistic regression model demonstrated acceptable discrimination (AUC = 0.81, 95% CI: 0.72–0.90). The Hosmer–Lemeshow goodness-of-fit test indicated good model fit ( $\chi^2 = 5.36$ ,  $p = 0.72$ ). Variance inflation factors ranged from 1.12 to 2.04, indicating no evidence of problematic multicollinearity among predictors (all VIF < 5).

## Discussion

### *Level of Knowledge of Exclusive Breastfeeding*

This study found a high level of knowledge about exclusive breastfeeding (EBF), with an average score of 90% among the 118 nursing mothers attending the immunisation clinic at Oba Ademola II Maternity Hospital, Abeokuta. This finding is consistent with studies conducted in rural primary health facilities in southwestern Nigeria, where 77% of mothers correctly defined EBF. However, those studies also reported a decline in practice from 91% for any breastfeeding to 58% for EBF at six months, with gaps such as 18% of mothers introducing water and only 66–88% recognizing key benefits (7).

In the present study, more than 88% of respondents correctly identified EBF as feeding an infant only breast milk for the first six months. Similarly, 89.8% recognized that breast milk provides sufficient nutrition, while 91.5% acknowledged its protective role against infections such as diarrhoea and respiratory illnesses. These results suggest that exposure to health education during antenatal care and immunisation visits contributes significantly to maternal awareness.

The knowledge level observed in this study is higher than that reported in some rural settings but remains within the broader Nigerian range of 70–95% documented in recent reviews (8). Differences in knowledge levels may reflect variations in educational attainment, healthcare access, and urban exposure to health promotion programs. In this study, the high proportion of tertiary-educated mothers (90.7%) likely contributed to greater awareness of practices such as colostrum feeding and early initiation of breastfeeding. Despite the generally high knowledge levels, some misconceptions persist. For instance, 12.7% of respondents believed that infants require water before six months. Such beliefs highlight the continuing influence of cultural practices even among educated urban mothers. Most knowledgeable respondents were young (87.3% aged 20–29 years). Although younger mothers may benefit from recent health education, limited parenting experience and competing responsibilities, such as employment, may affect the application of knowledge. Similar observations were reported by Uchendu et al., who found that young urban Nigerian mothers often demonstrate high awareness of EBF but inconsistent practice due to social and economic pressures (9).

### *Factors Influencing Exclusive Breastfeeding Practice*

Several facilitators of EBF practice were identified in this study. Skin-to-skin contact, family and partner support, health education, and advice from healthcare professionals were widely recognised as important enabling factors, with agreement rates ranging from 89% to 93%. These findings are consistent with previous studies by Folami et al. and Mukora et al., which emphasise the combined influence of immediate postnatal practices and social support on maternal breastfeeding behaviours (10, 11, 12).

Partner support and professional advice were particularly influential, with 93% of respondents acknowledging their role in sustaining breastfeeding. This highlights the importance of family involvement in maternal health practices, especially in nuclear family settings, which accounted for 78.8% of respondents in this study.

Early initiation of breastfeeding also emerged as an important facilitator. About 93% of mothers associated early initiation with continued breastfeeding practice. This may be linked to

the high rate of hospital deliveries observed in the study (83.1%), where healthcare providers often promote the “golden hour” of breastfeeding immediately after birth. Early mother–infant contact is known to stimulate milk production and improve breastfeeding confidence.

Although knowledge levels were high, the presence of supportive cultural attitudes toward breastfeeding (reported by 85% of respondents) may have further encouraged practice. However, structural factors such as maternity leave policies and workplace conditions remain influential. Only 62.7% of respondents considered maternity leave sufficient, indicating that employment demands may still hinder optimal breastfeeding practices. Similar findings have been reported in studies conducted in low- and middle-income countries, where economic pressures often limit the ability of mothers to sustain exclusive breastfeeding (12, 13).

#### *Barriers and Gaps in Exclusive Breastfeeding*

Despite high awareness and supportive factors, several barriers to EBF were identified. Early return to work or school was the most reported obstacle, with 84.7% of mothers agreeing that it interferes with exclusive breastfeeding. This finding aligns with the work of Ahmadu-Ali and Aliyu-Paiko, who reported that employment-related pressures often lead to early breastfeeding cessation and increased reliance on supplementary feeding among Nigerian mothers (14).

Cultural myths also remain an important barrier. In this study, 78.8% of respondents indicated that cultural beliefs discourage exclusive breastfeeding. Interestingly, while many mothers acknowledged that general community attitudes support breastfeeding, specific myths, such as the rejection of colostrum or the perceived need for early water supplementation, continue to influence infant feeding practices.

Physical exhaustion associated with frequent breastfeeding was reported by 80.5% of respondents, suggesting that the physical demands of infant care may reduce maternal motivation or persistence. In addition, 67.8% of mothers reported embarrassment about breastfeeding in public, highlighting the role of social stigma in shaping maternal behaviour.

These barriers have important implications for child health and maternal well-being. Reduced adherence to EBF increases the risk of infant infections and may contribute to maternal stress and frustration. Statistical analysis in this study confirmed a significant association between knowledge and EBF practice ( $\chi^2 = 10.70$ ,  $p = 0.001$ ). Approximately 89.6% of mothers with high knowledge practised EBF compared with 50% of those with lower knowledge. However, the presence of non-adherence even among knowledgeable mothers suggests that structural and cultural factors remain influential. These findings emphasise the need for comprehensive interventions that extend beyond health education alone (15, 16).

#### *Implications for Intervention*

The findings highlight the need for targeted and multifaceted interventions to promote EBF. Structured educational programs such as myth-dispelling workshops, practical demonstrations of breastfeeding techniques, and counselling sessions could help address persistent misconceptions and improve maternal confidence (17). Institutional support is also essential. Workplace policies should include breastfeeding-friendly environments, such as lactation rooms and flexible work arrangements, to support employed mothers. Strengthening peer-support networks and community education programs may further reinforce positive breastfeeding practices (18). Additionally, integrating EBF monitoring into routine immunisation services could provide an effective platform for tracking breastfeeding practices and identifying mothers who require additional support. Expanding initiatives aligned with the Baby-Friendly Hospital Initiative may also improve breastfeeding outcomes through sustained healthcare provider engagement.

#### *Study Limitations*

This study has several limitations. First, the use of a self-administered questionnaire may introduce recall and social desirability bias in reporting knowledge, practices, and barriers. Second, the study was conducted in a single secondary healthcare facility in southwestern Nigeria, which may limit the generalizability of the findings to other regions or healthcare settings. Third, the cross-sectional design prevents causal conclusions about the relationship between knowledge and EBF practice. Finally, the reliance on self-reported practices without direct observation or clinical verification may result in underestimation or overestimation of breastfeeding behaviours. Despite these limitations, the study provides valuable insights into EBF knowledge and practices among urban Nigerian mothers.

#### **Conclusion**

This study highlights the continuing challenges associated with exclusive breastfeeding among nursing mothers in Nigerian clinical settings. Although knowledge levels were generally high, important structural and cultural barriers still limit optimal practice. Addressing these challenges requires coordinated efforts from healthcare providers, policymakers, and community stakeholders. Strengthening maternal support systems, improving workplace policies, and expanding breastfeeding education programs will be essential for improving EBF rates and promoting infant health. Future studies should explore the impact of structured interventions through longitudinal or interventional research designs.

#### **Abbreviations**

CDC: Centres for Disease Control and Prevention

CVI: Content Validity Index

EBF: Exclusive Breastfeeding

HREC: Health Research Ethics Committee  
IRB: Institutional Review Board  
SPSS: Statistical Package for the Social Sciences  
UNICEF: United Nations Children's Fund  
WHO: World Health Organisation  
 $\chi^2$ : Chi-square

## Declarations

**Ethics Approval and Consent to Participate:** Ethical clearance was secured from the Health Research Ethics Committee (HREC) of Oba Ademola Maternity Hospital, Ijemo, Abeokuta, Ogun State, Nigeria (Reference Number: OAMH/RES/72; Approval Date: August 21, 2025). Participation was entirely voluntary, and written informed consent was obtained from all participants before data collection. The consent form, provided in English and Yoruba, explained the study's purpose, procedures, potential risks and benefits, confidentiality measures, and the right to withdraw at any time without consequences. For illiterate participants, verbal consent was supplemented with thumbprints and witness signatures. Participation was entirely voluntary, and informed consent was obtained in writing from all participants before data collection. The consent form, provided in English and Yoruba, explained the study's purpose, procedures, potential risks and benefits, confidentiality measures, and the right to withdraw at any time without consequences. For illiterate participants, verbal consent was supplemented with thumbprints and witness signatures. No compensation or incentives were offered to participants.

**Data Availability:** The de-identified dataset supporting the findings of this study is available from the corresponding author upon reasonable request.

**Competing Interests:** The authors declare no competing interests.

**Funding sources:** No external funding was received for this research.

**Author contributions:** AOT: Methodology, Project administration, Resources, Visualisation, Writing – review & editing.

AOO: Conceptualisation, Data curation, Investigation, Methodology, Resources, Supervision, Validation, Writing – original draft, Writing – review & editing.

Both authors approved the final draft.

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## References

1. Centers for Disease Control and Prevention (CDC). Breastfeeding data and recommendations [Internet].

Atlanta (GA): CDC; 2025 [cited 2025 Dec 5]. Available from: <https://www.cdc.gov/breastfeeding-data/about/index.html>

- Restrepo-Gualteros SM, Buitrago-Gómez MP, Rodríguez-Martínez A, et al. Neurological benefits of breastfeeding: a systematic review. *Nutrients*. 2022;14(12):2456. <https://doi.org/10.3390/nu14122456>
- UNICEF. Global breastfeeding scorecard 2024 [Internet]. New York: UNICEF; 2024 [cited 2025 Dec 24]. Available from: <https://clearinghouse.unicef.org/sites/ch/files/ch/sites-PD-Nutrition-Child%20Nutrition%20and%20Development%20KU-GBC-Breastfeeding-scorecard-2024-10.0.pdf>
- Oktarianita O, Wulandari RD, Supriyanto S. Exploring the determinants of exclusive breastfeeding practices among first-time mothers: a narrative review. *Afr J Reprod Health*. 2024;28(10):239-248. <https://doi.org/10.29063/ajrh2024/v28i10s.28>
- Omoge A, Abioye R, Ajao O, Olatunji B, Olatunji E, Olamide O, Dada A. Factors affecting exclusive breastfeeding practices among working-class women attending antenatal clinic in Egbedore Local Government Area, Osun State, Nigeria. *Preprints*. 2023. <https://doi.org/10.20944/preprints202310.0786.v1>
- Agunbiade OM. Cultural and socioeconomic determinants of exclusive breastfeeding practices in Port Harcourt, Nigeria. *Afr J Reprod Health*. 2021;25(3):45-58.
- Aderibigbe T, Adewunmi A. Knowledge, practice and perceptions on exclusive breastfeeding among lactating mothers in rural primary health facilities in southwestern Nigeria. *Afr J Midwifery Women's Health*. 2022;16:1-12. <https://doi.org/10.12968/ajmw.2021.0006>
- Uchendu UO, Ilesanmi RE, Ogunleye OA. Maternal age and adoption of modern health practices, including exclusive breastfeeding in Nigeria. *J Nutr Educ Behav*. 2021;53(6):512-519. <https://doi.org/10.1016/j.jneb.2021.02.005>
- Ogunleye OV, Adeyemi AA, Balogun OO. Factors influencing nursing mothers' exclusive breastfeeding practices and their effects on infants aged zero to six months in Nigeria: a review. *Sci Afr*. 2024;24:e02154. <https://doi.org/10.1016/j.sciaf.2024.e02154>
- Mukora C, Munyaka S, Mhlanga M. Health system support and exclusive breastfeeding: a qualitative study in Zimbabwe. *Matern Child Nutr*. 2020;16(4):e12945. <https://doi.org/10.1111/mcn.12945>
- Cheah WL, Wan J, John W. Work and breastfeeding: challenges and recommendations for maternal health in Nigeria. *Am J Prev Med*. 2021;60(1):142-150. <https://doi.org/10.1016/j.amepre.2020.08.015>
- Oritogun KS, Oyewole OO, Mautin GJ, Ekundayo AA, Gbadebo AA. Exclusive breastfeeding practice and associated factors among mothers in northern Nigeria: Probit regression model approach. Babcock University

- Medical Journal. 2025 Dec 31;8(2):319-27. <https://doi.org/10.38029/babcockuniv.med.j..v8i2.729>
13. Ahmadu-Ali U, Aliyu-Paiko M. A qualitative exploration of the sociocultural determinants of exclusive breastfeeding practices among rural mothers in North-West Nigeria. *Int Breastfeed J.* 2021;16(1):60.
14. Ohaeri BM, Bello SO. Perceived barriers to exclusive breastfeeding in northern Nigeria: insufficient milk and cultural influences. *BMC Pregnancy Childbirth.* 2021;21(1):456. doi:10.1186/s12884-021-03945-7.
15. Ibor GO, Atulomah NO, Lawal SA, Oyakhilome V. Effect of community-based social-behavioural intervention on determinants of maternal care-seeking for under-five children in Cross River State, Nigeria. *Global South Health Horizons.* 2026 Feb 28;2(1):21-33. <https://doi.org/10.63950/gshh.2026.2.1.35>
16. Abiodun O, Olu-Abiodun O, Faturoti A. Charting a New Course for Global South Health Research: Equity, Evidence, and Action. *Global South Health Horizons.* 2025 Jun 29;1(1):1-7. <https://doi.org/10.63950/gshh.2025.1.1.8>
17. Nkamare M, Anokwuru R, Ademuyiwa I. Effect of mHealth educational intervention on intention of exclusive breastfeeding among mothers in Diете-Koki Memorial Hospital, Opolo, Bayelsa State, Nigeria: A One-Group Pretest/Post-Test Quasi-Experimental Study. *Babcock University Medical Journal.* 2025 Jun 29;8(1):181-8. <https://doi.org/10.38029/babcockuniv.med.j..v8i1.557>
18. World Health Organization. Indicators for assessing infant and young child feeding practices: Part 1-Definitions. Geneva: World Health Organization; 2008. Available from: <https://www.who.int/publications/i/item/9789241596664>
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