

Original Research Article

Determinants of exclusive breastfeeding among mothers attending postnatal clinic at the University of Benin teaching hospital, Benin City, Nigeria

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ABSTRACT

Background: Exclusive breastfeeding (EBF) provides optimal nutrition and protection against common childhood illnesses. Despite its established benefits, EBF practice remains suboptimal in Nigeria. This study assessed the knowledge and practice of EBF and identified factors associated with its practice among mothers attending a postnatal clinic in Benin City, Nigeria.

Methods: A descriptive cross-sectional study was conducted among 137 mothers attending the postnatal clinic of the University of Benin Teaching Hospital. Data were collected using interviewer-administered questionnaires and analysed using SPSS version 26. Chi-square, Fisher's exact tests and logistic regression were applied, with significance set at $p < 0.05$.

Results: Participants' mean age was 30.06 ± 5.73 years and 94.2% were married. Good EBF knowledge and breastfeeding practice were recorded in 81% and 69%, respectively. Current EBF was reported by 61.3%, while 47.4% initiated breastfeeding within one hour of delivery. Antenatal breastfeeding counselling was received by 85.4%. Partner support and relatives' encouragement were reported by 83.2% and 81.8%, respectively. Breastfeeding challenges affected 56.9%, particularly breast/nipple pain (40.4%), perceived insufficient milk (23.4%) and return to work (12.8%). Good breastfeeding practice was significantly associated with antenatal counselling ($p = 0.016$), EBF knowledge ($p = 0.006$), partner support ($p < 0.001$), relatives' encouragement ($p < 0.001$) and peer practices ($p = 0.001$). Partner support independently predicted good practice (OR=6.569; 95% CI: 4.328–37.951; $p = 0.008$).

Conclusions: Knowledge of EBF was high, but gaps remained in recommended practices. Antenatal counselling and social support, particularly from partners and families, were strongly associated with good breastfeeding practice. Interventions should emphasise sustained counselling, management of breastfeeding difficulties and active family involvement.

Keywords: Breastfeeding practice, Exclusive breastfeeding, Family support, Maternal knowledge, Nigeria, Postnatal mothers

INTRODUCTION

Breastfeeding is one of the most effective interventions for promoting infant survival, nutrition and development.

Exclusive breastfeeding is defined as feeding an infant only breast milk, without other foods or liquids, including water, except oral rehydration solution, vitamins, minerals or medicines when indicated. The World Health

Organization (WHO) and United Nations Children's Fund (UNICEF) recommend initiation of breastfeeding within the first hour after birth, exclusive breastfeeding for the first six months and continued breastfeeding with appropriate complementary feeding for two years or beyond.^{1,2} Breast milk provides the energy and nutrients required during early infancy and contains immunological components that protect against common childhood infections. Breastfeeding reduces morbidity from diarrhoeal and respiratory diseases and is associated with benefits extending into later childhood and adulthood.^{3,4} Maternal benefits include reduced risks of breast and ovarian cancers and improved birth spacing.³ WHO estimates that nearly 400,000 deaths among children younger than five years could be prevented annually if infants were exclusively breastfed for six months and breastfeeding continued to two years or beyond.¹

Despite these benefits, optimal breastfeeding remains insufficiently practised. Globally, fewer than half of infants aged 0–6 months are exclusively breastfed.¹ Nigeria has implemented several interventions to improve breastfeeding, including the Baby-Friendly Hospital Initiative and infant and young child feeding programmes. However, breastfeeding practices remain influenced by socioeconomic circumstances, maternal employment, education, cultural beliefs, family expectations and health-service factors.^{5–8}

Knowledge alone may not translate into practice. Mothers may understand the benefits of EBF but encounter practical challenges including delayed lactation, breast or nipple pain, perceived insufficient breast milk, caesarean delivery, early return to work and limited workplace support.^{6,8} Social relationships are also important. Husbands, partners, mothers, mothers-in-law, relatives and peers may either support EBF or encourage the early introduction of water, formula or other feeds.^{5,7} Healthcare contacts during pregnancy and after childbirth provide important opportunities to address these barriers. Breastfeeding counselling can improve mothers' confidence, correct misconceptions and provide practical guidance on breastfeeding initiation and continuation. WHO consequently recommends breastfeeding counselling and support during both antenatal and postnatal contacts.² Evidence from Nigeria has also demonstrated that structured facility-based counselling combined with interpersonal, mobile-phone and community messaging can improve EBF practices.⁹

The university of Benin teaching hospital (UBTH) is a major tertiary health facility serving Benin City, Edo State and surrounding communities. Its postnatal clinic provides an opportunity to assess breastfeeding among mothers who have access to professional health information while still being exposed to family, occupational and sociocultural influences outside the hospital. However, context-specific information on the factors influencing EBF among mothers attending the clinic remains limited. This study therefore assessed knowledge and practice of EBF and

examined the sociodemographic, obstetric, cultural and family factors associated with good breastfeeding practice among mothers attending the postnatal clinic at UBTH.

METHODS

Study design and setting

This was a descriptive cross-sectional study conducted at the postnatal clinic of the department of obstetrics and gynaecology, university of Benin Teaching Hospital, Benin City, Edo State, Nigeria, from January to June 2026. UBTH is a tertiary healthcare institution providing specialist maternal, newborn and child healthcare services to residents of Edo State and neighbouring states. The Postnatal Clinic provides follow-up care for mothers and their babies during the postpartum period, including women who delivered at UBTH and those referred to the hospital for postnatal care.

The clinic is run by a multidisciplinary healthcare team comprising obstetricians and gynaecologists, resident doctors, nurses and other healthcare professionals involved in maternal and newborn care. Routine activities include assessment of maternal recovery following childbirth, identification and management of postpartum complications, review of newborn wellbeing, health education, family planning counselling and breastfeeding counselling and support. The clinic therefore provides an important opportunity for reinforcing appropriate infant-feeding practices, addressing breastfeeding difficulties and promoting exclusive breastfeeding during the postnatal period.

Study population

The study population comprised 137 postnatal mothers attending the clinic during the study period. Mothers who delivered at UBTH or were referred within the postpartum period, recruited consecutively and consented to participate were eligible. Mothers with critically ill infants, medical contraindications to breastfeeding or those who declined participation were excluded.

Sampling technique

A total of 137 eligible participants were recruited consecutively during the study period.

Tools and methods of data collection

Data were collected using a structured, pre-tested, interviewer-administered questionnaire adapted from previous studies on exclusive breastfeeding and modified to suit the objectives and local context of the study. The questionnaire comprised seven sections covering sociodemographic characteristics, obstetric and medical history, knowledge of exclusive breastfeeding, attitudes and breastfeeding practices, cultural beliefs and family support, barriers to exclusive breastfeeding and

suggestions for improving exclusive breastfeeding. The questionnaire was pre-tested among postnatal mothers at the University of Benin Teaching Hospital who were not included in the final study. Necessary modifications were made following the pre-test to improve clarity, comprehensibility and appropriateness of the questions before commencement of data collection.

Assessment of knowledge and breastfeeding practice

Knowledge of exclusive breastfeeding was assessed using eight questions addressing the definition and recommended duration of exclusive breastfeeding, giving water to infants younger than six months, protection against infections, mother-infant bonding, initiation of breastfeeding within one hour of delivery, colostrum use, breastfeeding during mild maternal illness and the effect of breastfeeding on postpartum bleeding. Each correct response was assigned one point, while an incorrect or “don’t know” response was assigned zero, giving a total obtainable score of 0–8. Knowledge scores of 0–3 were classified as poor knowledge, 4–5 as fair knowledge and 6–8 as good knowledge.

Breastfeeding practice was assessed using five key practice parameters: initiation of breastfeeding within one hour of delivery, current exclusive breastfeeding, breastfeeding frequency of at least eight times in 24 hours, intention to exclusively breastfeed for six months and avoidance of other feeds during the first six months. Each appropriate practice was assigned one point and each inappropriate practice zero, giving a total obtainable practice score of 0–5. Participants with scores of 3–5 were classified as having good breastfeeding practice, while those with scores of 0–2 were classified as having poor breastfeeding practice.

Data analysis

Data were analysed using IBM SPSS Statistics version 26. Continuous variables were summarised using means and standard deviations, while categorical variables were presented as frequencies and percentages. Associations between categorical variables and breastfeeding practice were assessed using Chi-square or Fisher's exact test as appropriate. Logistic regression was used to assess predictors of breastfeeding practice. Statistical significance was set at $p < 0.05$.

Ethical considerations

Ethical approval was obtained from the appropriate Health Research Ethics Committee of the University of Benin Teaching Hospital. Participation was voluntary and written informed consent was obtained before enrolment. Participants' information was treated confidentially and used solely for the purposes of the research.

RESULTS

A total of 137 mothers attending the postnatal clinic of the University of Benin Teaching Hospital participated in the study. The results describe their sociodemographic and obstetric characteristics, knowledge and practice of exclusive breastfeeding, cultural and family support, breastfeeding challenges and factors associated with good breastfeeding practice.

A total of 137 mothers participated in the study. Their mean age was 30.06 ± 5.73 years. The largest age group was 26–30 years (28.5%), followed by 21–25 years and 31–35 years, each accounting for 25.5%. Most participants were married (94.2%) and Christian (92.0%). Benin participants constituted the largest ethnic group (38.0%), followed by Igbo (24.8%) and Esan (16.1%). Nearly half (49.6%) had secondary education, while 44.5% had tertiary education. Traders constituted 54.0% of participants. Overall, 51.9% were classified as upper social class, 39.4% as middle class and 8.7% as lower class. Most participants (94.9%) were from monogamous families (Table 1). Mean parity was 2.25 ± 1.20 and 95.6% had a parity of 1–4. Vaginal delivery accounted for 59.9% of the most recent deliveries, while 38.7% were by caesarean section and 1.5% were assisted vaginal deliveries. Private hospitals accounted for 45.3% of deliveries and UBTH for 44.4% (Table 2). Almost all participants (97.1%) received antenatal care. The mean number of antenatal visits was 7.50 ± 3.34 and 85.4% reported receiving breastfeeding counselling during antenatal care. Postpartum complications were reported by 10.9% of participants, with postpartum haemorrhage accounting for 46.7% of reported complications.

Knowledge of EBF was generally high. Almost all participants (96.4%) correctly identified EBF as feeding a baby only breast milk for six months, 93.4% knew that breast milk protects infants against infection and 97.8% recognised that breastfeeding enhances mother-child bonding. Furthermore, 87.6% knew that breastfeeding should begin within one hour of delivery (Table 3). However, important knowledge gaps remained. Thirty-two per cent believed that water should be given to infants younger than six months, while 17.5% believed that colostrum should be discarded. Only 43.1% knew that breastfeeding could help reduce maternal bleeding following delivery.

Overall, 111 participants (81%) had good knowledge, 23 (17%) had fair knowledge and three (2%) had poor knowledge (Figure 1). Only 65 participants (47.4%) initiated breastfeeding within one hour of delivery. Among the 72 who did not, caesarean section and absence of perceived lactation were the most commonly reported reasons, each accounting for 40.3% (Table 4). At the time of the survey, 84 participants (61.3%) reported exclusively breastfeeding their babies, while 53 (38.7%) were not. Seventy-three participants (53.3%) breastfed more than eight times daily. Health-worker advice was the most frequently reported influence on the decision to breastfeed

(72.3%). Nevertheless, only 43.8% reported receiving breastfeeding support after delivery (Table 4). Overall, 94 participants (69%) were classified as having good breastfeeding practice and 43 (31%) as having poor practice (Figure 2). EBF was considered common within the community by 68.6% of participants. Only 7.3% reported cultural beliefs opposing EBF, predominantly the belief that breast milk alone was insufficient (Table 5). Husband or partner support was reported by 83.2% of participants, while 81.8% reported encouragement from relatives. More than two-thirds (68.6%) reported that their friends or peers practised EBF.

Seventy-eight participants (56.9%) reported having experienced breastfeeding challenges. Among the difficulties reported, breast or nipple pain was the most frequent (40.4%), followed by perceived insufficient milk (23.4%), return to work (12.8%) and lack of time (8.5%). Other reported difficulties included dissatisfaction with the baby's weight gain, cultural pressure, lack of spousal support and illness (Table 6). Most participants (83.9%) reported that their workplace supported breastfeeding, while 63.5% reported maternity-leave policies supportive of EBF. When asked what would help mothers practise EBF, family support was the most frequently identified factor (43.8%), followed by financial support (19.7%), health-worker counselling (16.8%) and workplace crèches (8.8%).

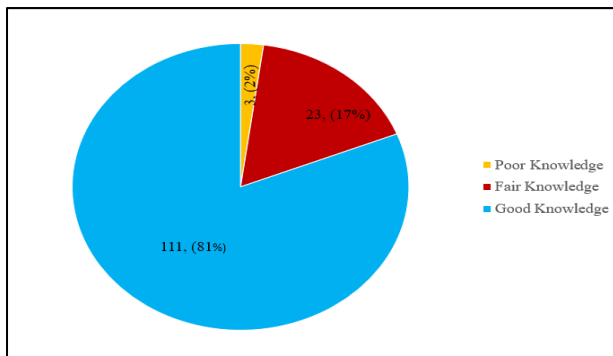


Figure 1: Knowledge of exclusive breastfeeding.

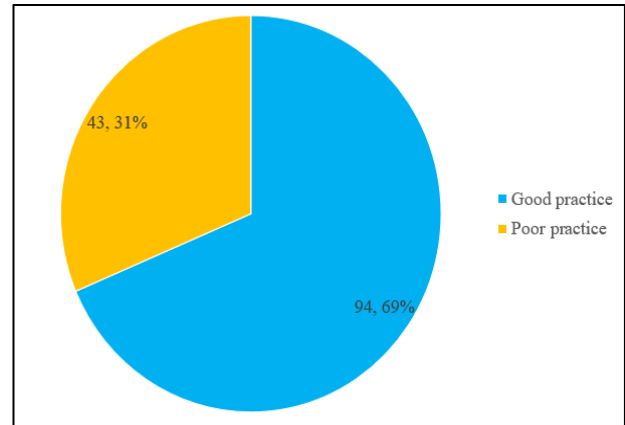


Figure 2: Practice of exclusive breastfeeding.

Good breastfeeding practice was significantly associated with receipt of breastfeeding counselling during antenatal care ($p=0.016$) and knowledge of EBF ($p=0.006$). Among mothers who received antenatal breastfeeding counselling, 72.6% had good practice compared with 45.0% of those who did not. Family and social support showed particularly strong associations. Good practice was observed in 78.1% of mothers whose husbands or partners supported EBF compared with 21.7% among those without partner support ($p<0.001$). Similarly, 77.7% of mothers encouraged by relatives had good practice compared with 28.0% without such encouragement ($p<0.001$).

EBF practice among friends or peers was also significantly associated with good maternal practice ($p=0.001$). Age ($p=0.355$) and social class ($p=0.131$) were not significantly associated with breastfeeding practice (Table 7). In the multivariable model (Table 8), husband/partner support remained statistically significant (OR=6.569; 95% CI: 4.328–37.951; $p=0.008$). Antenatal breastfeeding counselling was also statistically significant in the supplied regression model (OR=0.260; 95% CI: 0.091–0.858; $p=0.026$). The model explained approximately 24.2%–34.0% of the variation in breastfeeding practice.

Table 1: Socio-demographic characteristics of participants.

Variables	Frequency (n=137)	%
Age group (in years)		
≤20	1	0.7
21-25	35	25.5
26-30	39	28.5
31-35	35	25.5
36-40	25	18.2
≥40	2	1.5
Mean+SD=30.06±5.730		
Marital status		
Married	129	94.2
Single	8	5.8
Widowed	0	0

Continued.

Variables	Frequency (n=137)	%
Divorced	0	0
Religion		
Christian	126	92
Islam	11	8
Ethnic group		
Benin	52	38
Igbo	34	24.8
Esan	22	16.1
Yoruba	8	5.8
Urhobo	5	3.6
Ijaw	3	2.2
Others	13	9.5
Level of education		
No formal education	2	1.5
Primary	6	4.4
Secondary	68	49.6
Tertiary	61	44.5
Occupation		
Trader	74	54
Unemployed	17	12.4
Civil servant	15	10.9
Professional	15	10.9
Artisan	10	7.3
Student	6	4.4
Husband's skill level		
Middle level	93	67.9
Professional	39	28.5
Unskilled	5	3.6
Social class		
Upper	71	51.9
Middle	54	39.4
Lower	12	8.7
Type of family		
Monogamous	130	94.9
Polygamous	7	5.1

Table 2: Obstetric and medical history.

Variables	Frequency (n=137)	%
Parity		
1-4	131	95.6
>4	6	4.4
Mean+SD= 2.25±1.199		
Mode of last delivery		
Vaginal	82	59.9
Caesarean section	53	38.7
Assisted vaginal delivery	2	1.5
Place of delivery		
Private hospital	62	45.3
UBTH	61	44.4
Traditional birth attendant	10	7.3
Others	4	2.9
Received antenatal care during pregnancy		
Yes	133	97.1

Continued.

Variables	Frequency (n=137)	%
No	4	2,9
Number of antenatal care visits		
<4	16	11.7
4-8	70	51.1
>8	51	37.2
Mean+SD= 7.50±3.337		
Received breastfeeding counselling during antenatal clinic		
Yes	117	85.4
No	20	14.6
Postpartum complications		
No	122	89.1
Yes	15	10.9
Types of postpartum complications (n=15)		
Postpartum haemorrhage	7	46.7
Postpartum hypertension and pre-eclampsia	3	20
Prolonged labour	2	13.3
Breast engorgement	1	6.7
Bone pains	1	6.7
Postpartum depression	1	6.7
Baby's age (in months)		
0-3	97	70.8
04-July	27	19.7
>7	13	9.5
Mean+SD= 3.58±5.252		
Baby's sex		
Female	77	56.2
Male	59	43.1

Table 3: Knowledge of exclusive breastfeeding.

Variables (n=137)	True frequency (%)	False frequency (%)	Don't know frequency (%)
Exclusive breastfeeding means feeding the baby only breast milk for 6 months.	132 (96.4)	1 (0.7)	4 (2.9)
Water should be given to a baby less than 6 months	44 (32.1)	90 (65.7)	3 (2.2)
Breast milk protects babies against infections	128 (93.4)	2 (1.5)	7 (5.1)
Exclusive breastfeeding enhances bonding between mother and child	134 (97.8)	0 (0)	3 (2.2)
Breastfeeding should begin within one hour after delivery	120 (87.6)	8 (5.8)	9 (6.6)
Colostrum (first milk) should be discarded before breastfeeding	24 (17.5)	102 (74.5)	11 (8.0)
A mother with mild illness can still breastfeed	88 (64.2)	32 (23.4)	17 (12.4)
Breastfeeding helps reduce maternal bleeding after delivery	59 (43.1)	17 (12.4)	61 (44.5)

Table 4: Attitudes and practice towards exclusive breastfeeding.

Variables	Frequency	%
Respondents who breastfed within one hour of delivery (n=137)		
Yes	65	47.4
No	72	52.6
Reasons for no breastfeeding within one hour of delivery (n=72)		
Had surgery (Caesarean section)	29	40.3
Not lactating	29	40.3

Continued.

Variables	Frequency	%
Postpartum haemorrhage	3	4.2
Episotomy repair	3	4.2
Participant was tired	3	4.2
Baby was in the neonatal care unit	2	2.8
Others*	3	4.2
Currently breastfeeding baby exclusively (n=137)		
Yes	84	61.3
No	53	38.7
Age feeds were introduced (n=53)		
≤6 months	49	35.8
>6 months	4	2.9
Number of times participants breastfed in 24 hours (n=137)		
>8	73	53.3
05-August	45	32.8
<5	19	13.9
Participants' intended duration of exclusive breastfeeding (n=137)		
>6 months	59	43.1
3-6 months	43	31.4
<3 months	35	25.5
Exclusive breastfeeding is sufficient for 6 months (n=137)		
Yes	104	75.9
No	25	5.8
Not sure	8	18.2
What influenced respondents' decision to breastfeed (n=137)		
Health worker advice	99	72.3
Family/friends	15	10.9
Culture	6	4.4
Media	2	1.5
Others	15	10.9
Received any breastfeeding support after delivery (n=137)		
Yes	60	43.8
No	77	56.2

Table 5: Cultural beliefs and family support.

Variables	Frequency	%
Exclusive breastfeeding is common in the participants' community (n=137)		
Yes	94	68.6
No	43	31.4
Cultural beliefs against exclusive breastfeeding (n=137)		
No	127	92.7
Yes	10	7.3
Cultural beliefs highlighted against exclusive breastfeeding (n=10)		
Breastmilk is not sufficient	8	5.8
Adding water to baby's diet	2	1.5
Husband/Partner support exclusive breastfeeding (n=137)		
Yes	114	83.2
No	23	16.8
Relatives encourage exclusive breastfeeding (n=137)		
Yes	112	81.8
No	25	18.2
Friends/Peers practice exclusive breastfeeding (n=137)		
Yes	94	68.6
No	43	31.4

Table 6: Barriers to exclusive breastfeeding.

Variables	Frequency	%
Ever faced challenges with breastfeeding (n=137)		
Yes	78	56.9
No	59	43.1
Major difficulties experienced with breastfeeding*		
Lack of time	8	8.5
Return to work	12	12.8
Breast/nipple pain	38	40.4
Insufficient milk	22	23.4
Cultural pressure	2	2.1
Illness	1	1.1
Unsatisfied with baby's weight gain	4	4.3
Lack of spousal support	2	2.1
Others	5	5.3
Workplace supports breastfeeding (n=137)		
Yes	115	83.9
No	22	16.1
Maternity leave policies that support exclusive breastfeeding (n=137)		
Yes	87	63.5
No	50	36.5
What would help mothers practice exclusive breastfeeding (n=137)		
Family support	60	43.8
Workplace creche	12	8.8
Health worker counselling	23	16.8
Financial support	27	19.7
Others	15	10.9

*Multiple choice question.

Table 7: Practice of exclusive breastfeeding and its associations.

Variable	Practice (n=137)		Test statistics	P value
	Good practice	Poor practice		
	Frequency (%)	Frequency (%)		
Age group (in years)				
18-35	73 (66.4)	37 (33.6)	1.311 ^a	0.355
>35	21 (77.8)	6 (22.2)		
Social class				
Upper class	88 (70.4)	37 (29.6)	2.100 ^b	0.131
Lower class	6 (50.0)	6 (50.0)		
Receive breastfeeding counsel during antenatal care				
Yes	85 (72.6)	32 (27.4)	6.063 ^a	0.016
No	9 (45.0)	11 (55.0)		
Knowledge of exclusive breastfeeding				
Poor knowledge	0 (0.0)	3 (100)	7.599 ^b	0.006
Fair knowledge	13 (56.5)	10 (43.5)		
Good knowledge	81 (73.0)	30 (27.0)		
Husband/partner support exclusive breastfeeding				
Yes	89 (78.1)	25 (21.9)	28.200 ^a	<0.001
No	5 (21.7)	18 (78.3)		
Relatives encourage exclusive breastfeeding				
Yes	87 (77.7)	25 (22.3)	23.422 ^a	<0.001
No	7 (28.0)	18 (72.0)		
Friends/peer practice exclusive breastfeeding				
Yes	73 (77.7)	25 (21.9)	11.381 ^a	0.001
No	21 (48.8)	18 (78.3)		

^aChi-square. ^bFisher's exact.

Table 8: Predictors of exclusive breastfeeding among participants.

Predictors	Coefficient ratio (β)	Odds ratio (OR)	P value	95% Confidence interval (C.I)	
				Lower	Upper
Age group (in years)	0.047	1.485	0.136	0.334	3.292
Social class	0.439	1.552	0.603	0.297	8.114
Received breastfeeding counsel	-1.349	0.26	0.026	0.091	0.858
Knowledge of exclusive breastfeeding					
Poor knowledge	-22.927	0	0.121	0.000	0.191
Fair knowledge		0.481	0.999		1.214
Good knowledge*		1			
Husband/partner support exclusive breastfeeding					
Yes	1.882	6.569	0.008	4.328	37.951
No*		1			
Relatives encourage exclusive breastfeeding					
Yes		3.479	0.054	3.359	23.838
No*	1.247	1			
Friends/peer practice exclusive breastfeeding					
Yes	-0.084	0.919		1.686	7.866
No*		1	0.882		

*Reference category, R²= 0.242-0.340.

DISCUSSION

This study demonstrated generally high knowledge of EBF among mothers attending the UBTH postnatal clinic, with majority classified as having good knowledge. However, this knowledge was not completely reflected in practice. While 69% were classified as having good breastfeeding practice, only 61.3% reported currently practising EBF and fewer than half initiated breastfeeding within one hour after delivery. The findings highlight an important knowledge-practice gap and suggest that information alone may be insufficient to achieve optimal breastfeeding.

The proportion currently practising EBF was higher than some previously reported Nigerian population estimates and may partly reflect the characteristics of the study population. Participants were attending a tertiary hospital postnatal clinic, 97.1% had received antenatal care and 85.4% had received breastfeeding counselling during pregnancy. Previous Nigerian studies have demonstrated considerable variation in EBF prevalence according to setting, maternal characteristics and study methodology.⁵⁻⁸ The relatively favourable practice observed in this study should therefore be interpreted within its predominantly married, educated and antenatal-care-exposed population. Knowledge was strongly associated with breastfeeding practice. Almost all mothers understood the basic definition of EBF and recognised important benefits such as protection against infection and improved bonding. Nevertheless, approximately one-third believed that water should be given to an infant younger than six months, while some believed colostrum should be discarded. These

misconceptions remain important in tropical environments where family members may consider breast milk insufficient to satisfy an infant's thirst. WHO guidance emphasises that breast milk provides the water required during the first six months, even in hot climates.¹⁰

Correcting these specific misconceptions may therefore be more useful than providing general breastfeeding information alone. Only less than half of mothers-initiated breastfeeding within one hour of birth despite majority knowing that breastfeeding should begin within this period. This discrepancy again illustrates that knowledge does not automatically translate into practice. Caesarean section and perceived absence of lactation were the leading reasons for delayed initiation. Mothers undergoing caesarean delivery may experience postoperative pain, delayed mother-infant contact and difficulty positioning the infant.

Maternity services should therefore provide practical assistance for early breastfeeding following operative delivery rather than assuming that counselling during pregnancy will be sufficient. Antenatal breastfeeding counselling was significantly associated with good practice. Almost three-quarters of women who received counselling had good breastfeeding practice compared with less than half of those who did not. This supports the continued use of antenatal contacts as opportunities for breastfeeding education and preparation. WHO recommends counselling during antenatal and postnatal contacts and Nigerian evidence has shown that interventions combining health-worker counselling with

continued interpersonal and mobile support can improve EBF.^{2,9} The regression estimate for antenatal counselling in the supplied dataset was also statistically significant, although its direction should be interpreted cautiously because of the coding of the regression categories.

Husband/partner support emerged as an important determinant of good breastfeeding practice in this study. This finding is consistent with evidence from Port Harcourt, Nigeria, where support from a spouse or partner was a strong independent predictor of adherence to exclusive breastfeeding.¹¹ Similarly, a recent Nigerian integrative review identified lack of spousal and family support as an important barrier to exclusive breastfeeding and highlighted social support as a facilitator of successful practice.¹² The finding is also supported by a systematic review and meta-analysis which showed that mothers receiving high levels of husband support were more likely to practise exclusive breastfeeding.¹³ Collectively, these findings emphasise that breastfeeding should not be viewed solely as the mother's responsibility. Partners can positively influence infant-feeding decisions and provide emotional, financial and practical assistance that facilitates the initiation and continuation of exclusive breastfeeding.

The influence extended beyond partners. Encouragement from relatives and EBF practice among friends and peers were significantly associated with good practice. In many Nigerian households, mothers, mothers-in-law and other relatives play important roles in postpartum care and infant-feeding decisions. Breastfeeding programmes directed exclusively at pregnant women may therefore fail to address the social environment in which feeding decisions are actually made. Family-inclusive counselling during antenatal and postnatal periods may help reinforce appropriate practices and reduce pressure to introduce water or complementary feeds prematurely.

Breastfeeding challenges were common among participants, particularly breast or nipple pain, perceived insufficient milk and return to work. Similar findings were reported in Southwest Nigeria, where perceived infant hunger, breast pain, perceived inadequate breast-milk production and return to work or business were prominent constraints to exclusive breastfeeding.¹⁴ A recent integrative review of Nigerian studies also identified nipple pain, perceived low milk supply and early return to work as recurrent barriers to initiating and sustaining exclusive breastfeeding.¹⁵

These similarities suggest that breastfeeding difficulties extend beyond maternal knowledge and reflect practical, physiological and occupational challenges. Breast and nipple pain may interfere with continued breastfeeding, particularly where mothers lack timely assistance with positioning and attachment, while concerns about insufficient milk may encourage the premature introduction of supplementary feeds. Employment-related constraints may further compromise exclusive breastfeeding when mothers return to work without

adequate maternity leave, breastfeeding breaks or facilities for expressing and storing breast milk. These findings underscore the need to complement breastfeeding education with practical lactation support and breastfeeding-friendly workplace policies. Postnatal support was reported by only 43.8% of participants despite 85.4% having received antenatal breastfeeding counselling. This represents an important service gap. Breastfeeding difficulties frequently become apparent only after delivery, when mothers begin feeding independently.

Strengthening continuity between antenatal counselling and postnatal support may therefore have greater impact than concentrating education during pregnancy alone. WHO specifically recommends continuing breastfeeding counselling and support during postnatal contacts.² Employment-related barriers were also evident. Return to work accounted for 12.8% of reported breastfeeding difficulties, while 36.5% of participants reported absence of maternity-leave policies supportive of EBF. Workplace support, maternity protection, breastfeeding breaks, facilities for expressing and storing breast milk and accessible crèches may be important for sustaining EBF among employed mothers. These measures are particularly relevant as increasing numbers of Nigerian women combine employment with childcare responsibilities.

Age and social class were not significantly associated with breastfeeding practice in this study. The finding regarding maternal age is consistent with a study from a semi-urban setting in Southwest Nigeria, which found that maternal age did not confer an advantage in exclusive breastfeeding practice.¹⁶ Similarly, an analysis of Nigerian demographic and health survey data found no significant association between maternal age and exclusive breastfeeding after adjustment for other factors.¹⁷ However, findings regarding socioeconomic status have been inconsistent.

A study in Nnewi, Southeast Nigeria identified socioeconomic class as an independent determinant of exclusive breastfeeding, while a study across three north-western Nigerian states reported socioeconomic inequalities in exclusive breastfeeding, with women from wealthier households more likely to practise it.¹⁸ These differences may reflect variations in study populations, socioeconomic composition and healthcare settings.

The absence of significant associations with age and social class in the present study may therefore indicate that more immediate and potentially modifiable factors, particularly breastfeeding knowledge, counselling and family support, were more influential within this relatively homogeneous tertiary hospital population. Overall, the findings support a shift from breastfeeding education alone towards a broader support model. Mothers require accurate information, but they also need skilled assistance after delivery, partner and family involvement, support following caesarean section, early management of breastfeeding difficulties and enabling workplace

environments. Such an approach is consistent with the baby-friendly hospital initiative and current recommendations for breastfeeding support across the continuum from pregnancy to the postnatal period.^{1,2}

Strengths and limitations

The study assessed several dimensions of breastfeeding simultaneously, including knowledge, practice, obstetric characteristics, cultural beliefs, family support and practical barriers, allowing a broader understanding of factors associated with EBF. The use of multivariable analysis also allowed assessment of independent predictors. However, the cross-sectional design limits causal inference. Breastfeeding practices were self-reported and may have been affected by recall or social desirability bias.

The study was conducted among mothers attending a tertiary hospital postnatal clinic and may therefore not represent mothers who do not access postnatal services or those in rural communities. The sample analysed was also smaller than the sample originally proposed. Finally, the wide confidence intervals for some regression estimates indicate limited precision and warrant cautious interpretation.

CONCLUSION

Knowledge of exclusive breastfeeding among mothers attending the UBTH postnatal clinic was high and more than two-thirds were classified as having good breastfeeding practice. Nevertheless, important gaps remained, particularly in early initiation, current exclusive breastfeeding and receipt of postnatal breastfeeding support.

Antenatal breastfeeding counselling, knowledge, partner support, encouragement from relatives and peer breastfeeding practices were significantly associated with good practice, with husband/partner support remaining an important predictor in multivariable analysis. Breastfeeding promotion should therefore extend beyond providing information to mothers and include partners and families, practical postnatal breastfeeding support, early management of breast and nipple problems, support following caesarean delivery and workplace measures that enable mothers to sustain exclusive breastfeeding for six months.

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