Attitude and Practice of Exclusive Breastfeeding (EB) Among Rural Women in Farming Communities of Akwa Ibom State, Nigeria

Emmanuel Edet Umoh, Unyime Robson Etuk, Ini A. Akpabio, and Emmanuel Monday Archibong

Department of Agricultural Extension and Rural Development University of Uyo, Uyo Corresponding Author: <u>unyimeetuk@uniuyo.edu.ng</u>, <u>unyrobet@gmail.com</u>; 080683558834 DOI: 10.56201/ijmepr.v9.no4.2025.pg18.34

Abstract

The study examined the attitude and practice of exclusive breastfeeding (EB) among rural women in farming communities of Akwa Ibom State, Nigeria, with the aim of describing their socio-economic characteristics, examining their awareness, identifying sources of information, assessing their attitudes, and determining the perceived benefits of EB. Using a multi-stage sampling technique, 124 respondents were selected across six farming communities in three LGAs, with data collected via structured face-to-face interviews. Descriptive statistics showed that the majority of the respondents were aged 31–40 years (54.0%), predominantly Christian (96.8%), and highly educated, with 80.6% having tertiary education. Private employment (35.5%) was the most common occupation, and most respondents were married (91.9%) and experienced mothers (68.5%). The findings revealed that 75.57% of the women had high awareness of EB, with strong knowledge of its role in reducing nutrition-related diseases (Mean = 2.32) and its preventive health benefits for infants (Mean = 2.31). Health institutions (Mean = 3.50), friends (Mean = 3.50), and social media (Mean = 3.45) emerged as the major sources of EB information. Attitudinally, respondents agreed that maternal age affects EB capability (Mean = 3.52) and acknowledged that EB may prevent pregnancy (Mean = 3.50), while rejecting negative misconceptions such as EB causing pain or cancer (Mean = 1.78). Key benefits cited included improved child immunity, maternal health recovery, and economic savings. The study concluded that while awareness and attitude toward EB are generally high among rural women in farming communities, there are still areas requiring deeper sensitization, especially regarding misconceptions and the adequacy of EB for infants less than six months. Based on these findings, it was recommended that targeted, community-based health education programs be intensified through trusted health institutions to reinforce correct knowledge and encourage consistent EB practice.

Keywords: Exclusive Breastfeeding, Attitude, Practice, Awareness, Rural Women, Farming Communities

Introduction

Exclusive breastfeeding (EB), defined as the practice of feeding infants only breast milk for the first six months of life without the addition of water, other liquids, or solid food, has been widely endorsed as a critical strategy for improving infant health and reducing child mortality globally. The World Health Organization (WHO) and UNICEF recommend exclusive breastfeeding for

the first six months, followed by continued breastfeeding along with appropriate complementary foods for up to two years or beyond. This practice has been associated with optimal growth, development, and immunity in children, as well as health benefits for mothers (Amzatet al., 2024; Cascone et al., 2019 ;Etuk et al., 2013). Despite these global recommendations and evidence of the protective and developmental benefits of exclusive breastfeeding, its actual practice remains suboptimal in many developing countries, including Nigeria. Cultural norms, misconceptions, low awareness, poor attitudes, and lack of accurate information significantly influence breastfeeding practices among mothers, especially in rural and low-income settings (2020; Alhamediet al., 2025; Bednarek et al., 2023: Dukuzumuremyiet al.). For instance, sociocultural factors such as beliefs in the necessity of water for newborns or early introduction of complementary foods have been identified as major barriers to exclusive breastfeeding across many African societies (Amzatet al., 2024). Studies also highlight that a mother's attitude toward breastfeeding is shaped by her knowledge, previous experiences, perceived benefits, social support, and access to health information (Alhamediet al., 2025; Ogwezzy-Ndisika& Oloruntoba, 2016). Access to information from credible sources, such as health workers, traditional birth attendants, community health volunteers, and media, plays a pivotal role in shaping awareness and encouraging positive attitudes toward exclusive breastfeeding (Basrowiet al., 2024; Carter et al., 2006). However, even when mothers are aware of EB, a gap often exists between knowledge and practice due to prevailing cultural myths, perceived inconvenience, lack of support systems, and misinformation (Akokuwebe &Amaogu, 2015; Jama et al., 2020). Moreover, studies suggest that while many mothers are aware of EB, they may not fully understand its recommended duration or exclusive nature (Dadzie et al., 2023; Ihudiebube-Splendor et al., 2019).

Statement of Research Problem

In Akwa Ibom State, Nigeria, where agricultural livelihoods dominate rural life, the practice of exclusive breastfeeding remains challenged by a complex web of socio-economic and cultural factors (Akpabio et al. 2020). According to Afia et al. (2022), awareness and utilization of maternal and child health services, including EB, are still low among rural women in the state, indicating a significant public health concern. Rural women, particularly those in farming communities, are often constrained by limited access to healthcare services, poor health literacy, and entrenched traditional beliefs that undermine optimal breastfeeding practices. These women frequently return to labor-intensive farm work soon after childbirth, making it difficult to adhere to the six-month exclusive breastfeeding recommendation (Motilewaet al., 2019). The consequences of poor exclusive breastfeeding practices in such communities are far-reaching. Infants face increased risks of malnutrition, infections, and early childhood mortality. Simultaneously, mothers miss out on associated health benefits such as postpartum recovery and birth spacing. Despite the abundance of research underlining the benefits of exclusive breastfeeding, critical gaps remain in understanding how awareness, attitudes, and information sources influence actual practices among rural women in farming communities of Akwa Ibom State. Prior studies like those of Afia et al. (2022), Ishikaku and Elenwa (2022) Motilewaet al. (2019), and Jike-Wai, and Etuk (2013) have not sufficiently examined the intricate relationship between awareness, attitude, and source of information with EB practices in the unique socioeconomic environment of Akwa Ibom's rural agrarian communities. Therefore, this study seeks to fill these gaps by investigating the awareness, information sources, attitudes, and perceived benefits influencing EB practices in these rural settings. Addressing these gaps is essential for informing evidence-based interventions that can enhance maternal and child health outcomes in the state. If these issues are left unaddressed, the persistence of poor breastfeeding practices may continue to undermine health development goals, particularly in vulnerable rural populations.

Objectives of the Study

The broad objective of the study is to examine the attitude and practice of exclusive breastfeeding among rural women in farming communities of Akwa Ibom State. Specifically, the study aims to:

- 1. Examine the awareness of the respondents towards exclusive breastfeeding.
- 2. Identify the source(s) of information on exclusive breastfeeding practice.
- 3. Examine the respondents' attitudes towards exclusive breastfeeding.
- 4. Identify the benefits of exclusive breastfeeding to the respondents.

Theoretical Framework

This study is anchored on theHealth Belief Model (HBM), developed by social psychologists Hochbaum, Rosenstock, and Kegels in the early 1950s to understand health-related behaviors (Green *et al.*, 2020; Alyafei& Easton-Carr, 2025). The model assumes that individuals are more likely to engage in health-promoting behaviors, such as exclusive breastfeeding, if they: perceive themselves as susceptible to a health condition, believe the condition has serious consequences, believe taking action would reduce their susceptibility or severity, and perceive the benefits of action outweigh the barriers.

HBM comprises six key constructs: perceived susceptibility, perceived severity, perceived benefits, perceived barriers, cues to action, and self-efficacy (Jones *et al.*, 2015; Ogwezzy-Ndisika& Oloruntoba, 2016). In the context of exclusive breastfeeding, a mother's belief in the benefits of EB (e.g., child immunity and development), her perception of barriers (e.g., cultural pressure or work), and exposure to cues to action (e.g., health education or media campaigns) all influence her intention and ability to practice EB.

This model is particularly relevant to the study as it provides a framework for examining how individual beliefs, shaped by awareness, attitudes, and external influences, affect decisions to practice exclusive breastfeeding. Previous research has successfully applied HBM to explore EB practices, highlighting its utility in designing effective health communication interventions (Ogwezzy-Ndisika& Oloruntoba, 2016; Basrowi*et al.*, 2024). Therefore, HBM serves as a suitable theoretical foundation for analyzing the behavioral components underlying exclusive breastfeeding practices among rural women in Akwa Ibom State.

Methodology

The study was conducted in Akwa Ibom State, Nigeria, situated in theSouth-South geopolitical zone of the country. The state is bordered by Cross River State to the east, Rivers State and Abia State to the west, and the Atlantic Ocean to the south. It comprises31 Local Government Areas (LGAs) and lies between latitudes 4⁰ 30¹ and 5⁰ 30¹ North and Longitudes 7⁰ 30¹ and 8⁰ 30¹ East (Etuk, 2014). The climate is tropical, characterized by a wet season (March to October) and a dry

season (November to February). The target population comprised rural women residing in farming communities across selected LGAs of the state.

A multi-stage sampling technique was used to select the respondents.

First, three LGAs with predominantly farming communities were purposively selected due to their high concentration of rural women engaged in farming. Second, two farming communities were randomly selected from each LGA, totaling six communities. Third, a list of rural women attending antenatal, postnatal, or child welfare services at local health centers was obtained with the assistance of community health workers. From this list, 124 respondents were selected via simple random sampling, meeting the inclusion criteria of being expectant mothers, lactating mothers, or experienced mothers with children below two years of age. Primary data were collected using a structured questionnaire administered through face-to-face interviews to accommodate varying literacy levels. The questionnaire was pretested in a nearby rural community to ensure clarity, reliability, and validity. It included closed- and open-ended questions covering socio-economic characteristics, awareness of exclusive breastfeeding, sources of information, attitudes, and perceived benefits.

Data analysis employed descriptive statistics (frequencies, percentages, means, and ranks) to summarize responses. Awareness was measured using a dichotomous scale (aware/not aware). Attitude was assessed via a 4-point Likert scale (strongly agree to strongly disagree). An index categorized awareness levels as high or low, while ranking identified prominent information sources and attitudes.

Results and Discussion

Awareness towards Exclusive Breastfeeding

The result presented in Table 2 reveals that the top three areas of awareness regarding exclusive breastfeeding among rural women in farming communities of Akwa Ibom State include the knowledge that exclusive breastfeeding reduces the risk of nutrition-related diseases (Mean = 2.32; Rank = 1st), awareness that infant milk can prevent illness (Mean = 2.31; Rank = 2nd) and the practice of feeding colostrums to infants (Mean = 2.21; Rank = 3rd). On the other hand, the least ranked awareness items include awareness that a child exclusively breastfed is likely to be more intelligent (Mean = 1.27; Rank = 9th), that exclusive breastfeeding alone is adequate for a child less than 6 months old (Mean = 1.23; Rank = 10th) and knowledge about the timing of complementary feeding (Mean = 1.70; Rank = 8th). Further, Table 3 shows that 75.57% of the respondents exhibited high levels of awareness, while 24.43% demonstrated low awareness, suggesting an overall positive awareness trend toward exclusive breastfeeding.

These findings demonstrate a moderate to high level of awareness among rural mothers, consistent with previous studies that highlight a growing understanding of exclusive breastfeeding across different African contexts. For instance, Mahdi,*et al.* (2020) found high awareness levels among Somali women regarding the benefits of exclusive breastfeeding, aligning with the current study's observation that a significant proportion of respondents recognize its nutritional and health advantages. Similarly, Alhamedi,*et al.* (2025) reported that mothers attending a tertiary hospital in Saudi Arabia exhibited substantial awareness of exclusive breastfeeding practices, which supports the results of this study, particularly the high mean scores associated with disease prevention and colostrum feeding.

However, the low mean ranking related to the adequacy of exclusive breastfeeding for children under six months suggests lingering misconceptions or partial understanding among some respondents. This is consistent with findings by Anruchi,*et al.* (2024), who observed that although awareness levels were generally good, certain critical aspects of exclusive breastfeeding, such as the exclusivity of breast milk for the first six months, were not well understood among mothers in Rivers State, Nigeria. Similarly, Dadzie,*et al.* (2023) noted that despite high awareness in urban Ghanaian hospitals, gaps still existed in mothers' comprehensive knowledge of exclusive breastfeeding timelines and nutritional sufficiency.

The findings also reflect the Health Belief Model (HBM), which posits that individuals are more likely to take health-related actions when they perceive a high risk of adverse outcomes and see clear benefits in preventive behavior. The high awareness ranking related to disease prevention suggests that rural women may perceive tangible health threats to their children and recognize exclusive breastfeeding as a protective measure, thus reinforcing perceived benefits over barriers, a core principle of the HBM (Green,*et al.*, 2020; Alyafeiand Easton-Carr, 2025).

Nevertheless, the lower rankings on statements concerning intelligence outcomes and adequacy of breast milk may indicate that while the perceived severity and susceptibility to disease are understood, the perceived benefits regarding cognitive development and dietary sufficiency remain underestimated. This aligns with perceptions from Amzat,*et al.* (2024), who emphasized the influence of sociocultural settings on knowledge depth and breastfeeding practices in Africa. Furthermore, the low awareness of the cognitive benefits of exclusive breastfeeding may suggest a need for more targeted educational efforts, a point supported by Mugabo,*et al.* (2025), who identified poor knowledge as a limiting factor among adolescent mothers in Rwanda.

	Awareness	Aware	Not Aware	Mean	Rank	Remark
1	Are you aware that exclusive breastfeeding alone is adequate for a child less than 6 month old?	90 (72.6%)	34 (27.4)	1.23	10 th	Low Aware
2	Are you aware that it is important to give breast milk to an infant after birth?	86 (69.4%)	38 (30.6%)	2.21	4 th	High Aware
3	I always feed my child with colostrums.	86 (69.4%)	38 (30.6%)	2.21	3 rd	High Aware
4	Am aware that breast milk alone can sustain my child for 6 months.	88 (71.0%)	36 (29.0%)	1.80	6 th	High Aware
5	Am aware that infant milk can prevent children from illness.	84 (67.7%)	40 (32.3%)	2.31	2 nd	High Aware
6	Exclusive breastfeeding to some extent may prevent mothers from	87 (70.2%)	37 (29.8%)	1.90	5 th	High Aware

 Table 2: Awareness of Respondent towards Exclusive Breastfeeding

7	pregnancy. Are you aware that a child that is exclusively breastfed is likely to be more intelligent than the	89 (71.8%)	34 (27.4%)	1.27	9 th	Low Aware
8	Colostrum is more nutritious than processed milk.	89 (71.8%)	35 (28.2%)	1.71	7 th	High Aware
9	Am aware that it is not necessary to start complementary feeding in the first 6 months.	84 (67.7%)	40 (32.3%)	1.70	8 th	High Aware
10	Are you aware that nutrition related diseases can be reduced if you fully practice Exclusive Breastfeeding?	90 (72.6%)	34 (27.4%)	2.32	1 st	High Aware

Indicators	Index range	Frequency	Percentage
High	1.50-3.00	96	75.57
Low	0.00-1.49	28	24.43
~ ~ ~ ~			

Source of Information on Exclusive Breastfeeding

Based on the results presented in Table 4, the top three major sources of information on exclusive breastfeeding among rural women in farming communities of Akwa Ibom State were health institutions (Mean = 3.50; Rank = 1st), friends (Mean = 3.50; Rank = 2nd) and social media (Mean = 3.45; Rank = 3rd). These were followed closely by mass media and newspapers. Conversely, the least three sources of information were textbooks (Mean = 1.94; Rank = 7th), journals (Mean = 2.26; Rank = 9th) and extension agents (Mean = 2.37; Rank = 10th), which were categorized as minor sources.

The dominance of health institutions as the top-ranked source aligns with findings by Dadzie *et al.* (2023), who emphasized the critical role of health workers and facilities in influencing mothers' decisions regarding exclusive breastfeeding. Their study in Ghana similarly reported that mothers often rely on direct information from healthcare providers due to the trust and credibility associated with formal health institutions. The high ranking of friends as an information source also supports the conclusion by Ain *et al.* (2024), who found that informal interpersonal communication among peers plays a significant role in shaping knowledge and attitudes about breastfeeding in rural settings. This finding suggests that peer influence may carry considerable weight in community-based health behavior, especially in environments where formal education or professional guidance may be less accessible or frequent. Social media's position among the top three sources corresponds with recent literature on digital health communication. For instance, Kington *et al.* (2021) and Afful-Dadzie *et al.* (2021) highlighted the growing relevance of social media as a source of health information, especially among women of reproductive age. These platforms offer accessible, visual and relatable content that

may appeal more to rural audiences with mobile internet access. This reinforces the importance of credible, accurate content delivery through social media to improve health outcomes, as noted in Alduraywish*et al.* (2020), who reported that users' perceptions of online health information are closely tied to trust and clarity.

On the other hand, the low ranking of extension agents, journals and textbooks as information sources reflects existing gaps in the agricultural extension system's role in maternal health communication. The minimal influence of extension agents contradicts the potential posited by Makamane*et al.* (2024) and Sahu *et al.* (2024), who reported that extension systems, when effectively mobilized, can play a valuable role in delivering diversified content, including health and nutrition. However, the current findings resonate with the observations of Nwabugwu*et al.* (2019) and Idris-Adeniyi *et al.* (2024), who noted poor utilization of e-extension and print-based resources among agricultural stakeholders in Nigeria due to infrastructural and operational challenges. These limitations may explain the weak impact of traditional print and professional-based channels like journals and textbooks in this context.

S/N	Information	SA	Α	D	SD	Mean	Rank	Remarks
	Sources							
1	Friends	77(62.1)	36(29.0)	7 (5.6)	4(3.3)	3.50	2 nd	major source
2	Mass Media	77	36 (29.0)	9 (7.3)	2(1.6)	3.52	5^{th}	major source
		(62.1%)						
3	Health	78	37 (29.8)	7 (5.6)	2(1.6)	3.50	1^{st}	major source
	Institution	(62.9%)						
4	Husband	39	2 (1.6%)	76 (61.3)	7(5.5)	2.59	4 th	major source
		(31.5%)						
5	Magazine	75	8 (6.8%)	39 (31.5)	2(1.6)	3.26	6 th	major source
		(60.0%)					4	
6	News Paper	7 (5.6%)	78 (62.9)	37 (29.8)	2(1.6)	3.45	8 th	major source
7	Social Media	73	41 (33.1)	3 (2.1)	7(5.6)	3.45	3^{rd}	major source
		(58.9%)						
8	Journals	2 (1.6%)	35 (28.2)	80 (64.5)	7(5.6)	2.26	9^{th}	minor source
9	Textbook	77	36 (29.0)	7 (5.6)	4(3.2)	1.94	7 th	minor source
		(62.1%)						
10	Extension Agen	3(2.4%)	7 (5.6%)	37	77(62.1) 2.37	10^{th}	minor source
				(2.98%)				

Table 4: Source of Information on Exclusive Breast Feeding

Attitude Towards Exclusive Breastfeeding

Table 5 reveals that the three highest-ranked indicators of attitude toward exclusive breastfeeding among rural women in farming communities of Akwa Ibom State are: "Mother's age affects her capacity for exclusive breastfeeding" (Mean = 3.52, Rank = 1st), "Exclusive breastfeeding may prevent pregnancy" (Mean = 3.50, Rank = 2nd) and "Infants need locally made herbs to survive" (reverse-scored, Mean = 2.44, Rank = 3rd). These indicate strong agreement with maternal age as a relevant factor in exclusive breastfeeding (EB), a positive view of EB's role in child spacing and a general disagreement with traditional beliefs about herbal supplementation.

Conversely, the three least-ranked indicators are: "Exclusive breastfeeding may lead to pain and cancer" (Mean = 1.78, Rank = 20th), "Recommended duration is too lengthy" (Mean = 3.27,

Rank = 19th) and "Starting complementary feeding before six months is not necessary" (Mean = 1.70, Rank = 18th). These responses suggest that misconceptions about the health risks and optimal duration of exclusive breastfeeding still exist among a segment of the respondents.

From Table 6, 71.77% of respondents demonstrated a positive attitude toward exclusive breastfeeding, while 28.23% exhibited a negative attitude, indicating a generally favorable disposition towards exclusive breastfeeding among the majority.

The findings indicate that most rural women in farming communities of Akwalbom State hold a positive attitude towards exclusive breastfeeding, which aligns with the Health Belief Model (HBM) used in this study. According to the HBM, positive health behaviors are adopted when individuals believe in the susceptibility to and severity of health outcomes, perceive benefits and recognize fewer barriers. The high agreement with the statement that exclusive breastfeeding may prevent pregnancy and that maternal age influences breastfeeding capacity reflects perceived benefits and susceptibility components of the model, supporting its applicability in this context.

This result is consistent with the study by Sabo, *et al.* (2023), which found that Nigerian women who were knowledgeable about exclusive breastfeeding also tended to exhibit positive attitudes towards its practice. Similarly, the finding that mothers rejected the idea that exclusive breastfeeding causes pain or cancer aligns with the results of Mohamed, *et al.* (2024), who reported that myths and misconceptions are not widely held among mothers who have received adequate postnatal counseling.

Furthermore, the finding that the majority did not agree with the need for locally made herbs to aid infant survival is supported by Ogban,*et al.* (2020), who emphasized the influence of maternal knowledge in shaping infant feeding attitudes. Their study highlighted how proper information dispels traditional misconceptions, reinforcing the observed disagreement with herbal supplementation in this study.

However, the low mean score for the statement "Starting complementary feeding before six months is not necessary" suggests a misconception that may challenge the WHO-recommended six-month period of exclusive breastfeeding. This is partially inconsistent with the findings of Ezechi, *et al.* (2021), who reported high alignment of maternal attitudes with global guidelines when mothers possessed sufficient knowledge. This inconsistency may point to a knowledge-attitude gap among some women in the study area, possibly due to variability in access to quality health information.

Additionally, the result showing that some women consider the recommended duration of exclusive breastfeeding too long is aligned with the findings of Mitchell,*et al.* (2023), who observed that cultural and familial expectations could hinder adherence to prolonged exclusive breastfeeding among Indigenous populations, including concerns about maternal burden and social norms.

Moreover, the generally high mean scores on most indicators of positive attitudes underscore the effectiveness of communication strategies. This aligns with the argument by Wakefield *et al.*

(2010), Jike-wai *et al.* (2020) and Nancy and Dongre (2021) that targeted health communication and media campaigns can significantly influence public health attitudes and practices when designed appropriately. In this context, respondents' access to credible information may have played a role in fostering favorable perceptions of exclusive breastfeeding, as also emphasized by Kington*et al.* (2021) and Alduraywish,*et al.* (2020) in their discussions on the impact of credible health information sources on behavior change.

International Journal of Medical Evaluation and Physical Report E-ISSN 2579-0498 P-ISSN 2695-2181 Vol 9. No. 4 2025<u>www.iiardjournals.org</u>online version

Tabl	Table 5: Attitude towards Exclusive Breastfeeding							
S/N	Indicators of the Attitude	SA	Α	D	SD	Mean	Rank	
-	of Exclusive Breastfeeding					2.40	1 oth	
1	Formula feeding is more			0(1.0)	7(5.6)	3.48	10 ^m	
	convenient than exclusive	76(61.3)	39(31.5)	2(1.6)				
•	breastfeeding				((1,0))	2 40	oth	
2	It is embarrassing to	74(59.7)	32(25.8)	12(9.7)	6(4.8)	3.40	9 ^m	
•	breastfeed in public places.	()	- ()			2 40	oth	
3	The infant can survive on				8(6.5)	3.40	8 ^m	
	exclusive breast feeding only	73(58.9)	36(29.0)	7(5.6)				
	for six months of age.						t oth	
4	Recommended duration is	68(54.8)	33(26.6)	12(97)	11(8.9)	3.27	19 th	
	too lengthy	00(0 110)	55(2010)	12().()			4	
5	There is no difference	67(54.0)	37(29.8)	13(10.5)	7(5.6)	3.32	17^{tn}	
	between growth rate and							
	intellectual capacity between							
	exclusively breastfed infants							
	and formula fed infants							
6	Infants need locally made	11(8.9)	34(27.4)	77(62.1)	2(1.6)	2.44	3 rd	
	herbs to survive	11(0.5)	51(27.1)	//(02.1)				
7	It is important for a new born	75(60.5)	35(28.2)	10(8.1)	4(3.2)	3.45	4 th	
	to breastfeed within one hour							
	of birth							
8	The first milk (colostrum) is	67(54.0)	30(31.5)	13(10.5)	5(4.0)	3.35	13 th	
	very vital for the child	07(34.0)	57(51.5)	13(10.3)				
9	Starting complementary	69(55.6)	32(25.8)	14(11.3)	9(7.3)	1.70	18^{th}	
	feeding before six months is							
	not necessary							
10	I prefer to feed my baby on	68(54.8)	38(30.4)	12(9.7)	6(4.8)	3.35	12 th	
	exclusive breastfeeding for							
	six months							
11	I believe that exclusive	69(55.6)	36(29.0)	13(10.5)	6(4.8)	3.35	11 th	
	breastfeeding is highly							
	beneficial to a child							
12	Mother's age affects her	80(64.5)	35(28.2)	7(5.6)	2(1.6)	3.52	1^{st}	
	capacity for exclusive							
	breastfeeding							
13	Breastfed babies are always	74(59.7)	35(28.2)	7(5.8)	8(6.5)	3.41	7^{th}	
	better in health							
14	Exclusive breastfeeding may	76(61.3)	38(30.6)	3(2.4)	7(5.8)	3.5	2^{nd}	
	prevent pregnancy							
15	Exclusive breastfeeding may	66(53.2)	33(26.6)	11(8.9)	14(11.3)	1.78	20^{th}	
	lead to pain and cancer							
16	Exclusive breastfeeding is	74(59.7)	31(25.0)	17(13.7)	2(1.6)	3.42	6 th	
	tedious but useful							
17	Exclusive breastfeeding	72(58.1)	33(26.6)	7(5.6)	12(9.7)	3.33	15^{th}	

International Journal of Medical Evaluation and Physical Report E-ISSN 2579-04	98
P-ISSN 2695-2181 Vol 9. No. 4 2025 <u>www.iiardjournals.org</u> online version	

	helps	in ability	developing						
18	Artificial	feeding	g is easier	10(8.1)	35(28.2)	70(56.5)	9(7.3)	3.33	14^{th}
20	Breast mi than form	treeding lk can d ula	g ligest easily	78(62.9)	36(29.0)	7(5.6)	3(2.4)	3.42	5 th

I abie V. Extent VI Attitude towards Exclusive Dicasticcumz

Indicators	Index range	Frequency	Percentage
Positive Attitude	2.50 - 5.00	89	71.77
Negative Attitude	0.00 -2.49	39	28.23

Perceived Benefits of Exclusive Breastfeeding

The findings presented in Table 7 reveal the top three perceived benefits of exclusive breastfeeding (EB) among rural women in farming communities of Akwa Ibom State as: the belief that exclusively breastfed infants have stronger immune systems than formula-fed infants (Mean = 3.58; Rank = 1st), that mothers who breastfeed exclusively have a lower risk of breast and ovarian cancer (Mean = 3.56; Rank = 2nd), and that exclusive breastfeeding increases mother-infant bonding (Mean = 3.54; Rank = 3rd). On the other hand, the three least ranked benefits were: exclusive breastfeeding reduces healthcare costs (Mean = 3.43; Rank = 10th), helps in child spacing among women not using contraceptives (Mean = 3.43; Rank = 9th), and lowers the risk of asthma (Mean = 3.47; Rank = 8th). Furthermore, Table 8 shows that 75% of the respondents were categorized as highly benefited from exclusive breastfeeding, indicating a generally positive perception. Table 9 shows that 66.1% of respondents exclusively breastfeed their infants, while the remainder supplemented breastfeeding with other liquids or foods.

These results underscore a strong awareness and favorable attitude toward the health benefits of exclusive breastfeeding, particularly in areas of immunity, maternal health, and emotional bonding. The high ranking of perceived immune benefits aligns with findings by the National Research Council (2004), which emphasized the foundational role of early childhood health practices in building strong immunity. Similarly, the belief in the protective effect of EB against maternal cancers is consistent with findings from Sabo *et al.* (2023), who reported that increased awareness of maternal health benefits positively influences EB practices.

The perception that exclusive breastfeeding fosters maternal-infant bonding reflects findings by National Academies of Sciences *et al.* (2016), who indicated that emotionally responsive parenting practices, such as breastfeeding, enhance parent-child bonding. This psychological and emotional dimension also aligns with the observations of Salamon *et al.* (2025), who emphasized the significance of functional and emotional well-being in caregiving behaviors, reinforcing the importance of perceived emotional benefits in health decision-making.

In contrast, the lower rankings for benefits such as reduction in healthcare costs, natural child spacing, and lower risk of asthma may suggest that such benefits are either less well understood or less emphasized in health messaging within these communities. This mirrors the findings of Mohamed *et al.* (2024), who observed that while core health benefits of EB were widely recognized among mothers, secondary benefits such as cost-effectiveness and fertility regulation were less frequently acknowledged. Similarly, Ogban*et al.* (2020) found that mothers' knowledge of EB often centered on immediate and observable health outcomes, rather than long-term or indirect benefits.

Moreover, the fact that only 66.1% of mothers exclusively breastfed, despite the high awareness and perceived benefits, points to a potential gap between attitude and actual practice. This discrepancy is echoed in the study by Ezechi*et al.* (2021), which reported that while many Nigerian mothers expressed positive attitudes toward EB, practical adherence was often hindered by socio-cultural norms and logistical barriers. The Health Belief Model (HBM), which frames this study, supports this gap by positing that perceived barriers can override perceived benefits if not adequately addressed (Abraham and Sheeran, 2015).

Furthermore, the results from this study support Liu *et al.* (2023), who emphasized that attitudes toward breastfeeding are shaped not only by knowledge but also by perceived efficacy and social influence. The prevalence of partial breastfeeding practices, as indicated in Table 9, may therefore reflect the influence of traditional norms, misinformation, or economic constraints, as previously discussed in Mitchell *et al.* (2023) in their analysis of indigenous communities' infant feeding decisions.

S/N	Indicators of Benefit of	SA	Δ	D	SD	Mean	Rank
5/11	Exclusive Breastfeeding	51 I	1 2	ν	50	1,10411	1141111
1	Breastfeeding increases	81(65.3)	34(27.4)	7(5.6)	2(1.6)	3.54	3 rd
2	Exclusively breastfed infants have stronger immune system than formula fed infants	78(62.9)	37(29.8)	2(1.6)	7(5.6)	3.58	1 st
3	Exclusively breastfed infants have reduced risk of infectious and chronic diseases.	83(66.9)	32(25.8)	2(1.6)	7(5.6)	3.53	7 th
4	Mothers who breastfeed exclusively have lower risk of breast and ovarian cancer.	78(62.9)	37(29.8)	7(5.6)	2(1.6)	3.56	2 nd
5	Exclusive breastfed infants have higher cognitive development and intellectual capacity.	77(62.1)	36(29.0)	9(7.3)	2(1.6)	3.53	6 th
6	Exclusive breastfeeding reduces health care cost	77(62.1)	36(29.0)	7(5.6)	4(3.2)	3.43	10^{th}
7	Exclusive breastfeeding helps in child spacing among women who do not use contraceptives.	75(60.5)	33(26.6)	11(8.9)	5(4.0)	3.43	9 th
8	Lower risk of asthma	75(60.5)	35(28.2)	7(5.6)	7(5.6)	3.47	8 th
9	Lower risk of Obesity	78(62.9)	37(29.8)	7(5.6)	2(1.6)	3.54	5^{th}
10	Lower risk of type 1 diabetes	73(58.9)	38(30.6)	9(7.3)	4(3.2)	3.54	4 th

Table 7: Benefits of Exclusive Breastfeeding

Breastfeeding				
Indicators	Index range	Frequency	Percentage	
Highly Benefited	2.50 - 5.00	93	75.00	
Low Benefited	0.00 -2.49	31	25.00	

Table 8: Categorization of Respondents Based on Perceived Benefits of Exclusive Breastfeeding

Table 9: Category of Exclusive Breast Feeding Practices

S/N	Category	Frequency	Percent
1	Exclusive Breastfeeding.	82	66.1
2	Breastfeeding plus concomitant use of other types	20	17.1
3	Breastfeeding plus concomitant use of other types of milk and or liquid.	22	17.7

Conclusion and Recommendations

The study concludes that rural women in farming communities of Akwa Ibom State exhibit a generally high level of awareness and positive attitude toward exclusive breastfeeding (EB). A significant majority were aware that exclusive breastfeeding reduces nutrition-related diseases and that colostrums is vital for infants. Health institutions, friends, and social media were identified as the primary sources of information. However, notable gaps in knowledge persist, particularly regarding the sufficiency of exclusive breastfeeding for infants under six months and misconceptions about its duration and health effects. While attitudes were largely favorable, some traditional beliefs and misinformation remained. These findings suggest the need for intensified and targeted efforts to bridge awareness gaps and correct lingering misconceptions to enhance EB practices among rural women.

Based on the findings, the following recommendations are proposed to improve and sustain exclusive breastfeeding practices among rural women in farming communities of Akwa Ibom State:

i. Targeted Community Education Campaigns: Although overall awareness of exclusive breastfeeding is high, specific knowledge gaps remain, particularly concerning the adequacy of EB for the first six months and its cognitive benefits for children. Government health agencies and NGOs should develop community-based education campaigns using local dialects and trusted platforms such as churches, village associations, and women's groups. Messages should be culturally sensitive, easy to understand, and focus on correcting myths while reinforcing scientifically supported benefits of EB.

ii. Strengthening Health Institution Outreach: Since health institutions were identified as the most influential source of EB information, the government should ensure that all primary health workers are trained to deliver standardized EB messages. Health talks, take-home flyers, and demonstrations on proper breastfeeding techniques should be integrated into antenatal, postnatal, and immunization sessions.

iii. Leveraging Social Media and Peer Networks: Social media and friends ranked as key information sources, presenting an opportunity for formalized behavior change interventions. Community health workers and peer counselors should be trained to manage WhatsApp groups, Facebook pages, or local radio programs to share testimonials, expert advice, and weekly EB tips. Mother-to-mother support groups should be encouraged to enhance peer learning and emotional support.

Vi. Addressing Cultural Beliefs through Gender-Sensitive Advocacy: Persistent cultural beliefs (e.g., use of herbs for infants, misconceptions about EB causing cancer or being too lengthy) require consistent, gender-sensitive advocacy. Programs should engage men, elders, and traditional birth attendants, who often influence maternal decisions. Community dialogues, theatre-for-development, and storytelling can challenge harmful norms while reinforcing positive practices.

V. Engaging Agricultural Extension Agents: Despite their strategic reach in rural areas, extension agents were the least-used source of EB information. Agricultural and rural development agencies should integrate maternal and child nutrition into their training modules. Equipping extension agents with accurate breastfeeding knowledge will expand EB advocacy during farm visits and community meetings.

References

- Abraham, C. and Sheeran, P. (2015). The Health Belief Model. In M. Conner and P. Norman (Eds.), *Predicting and changing health behaviour* (3rd ed.). McGraw-Hill.
- Afful-Dadzie, E., Afful-Dadzie, A. andEgala, S. B. (2023). Social media in health communication: A literature review of information quality. *Health Information Management*, 52(1), 3–17.
- Afia, U. U., Obot, V. O. and Johnson, N. I. (2022). Awareness and utilization of maternal and child health services among women of reproductive age in rural areas of AkwaIbom State, Nigeria. *International Journal of Nursing, Midwife and Health Related Cases, 8*(4), 1–19.
- Ain, N., Kamaruddin, M., Zainudin, E., Zainudin, H., Soe, M. and Mohammad, K. A. (2024). Awareness and knowledge of exclusive breastfeeding among mothers in Malaysia: A systematic review. *Pharmaceutical Sciences*, 3(2), 119 – 135.
- Akpabio, I. A., Etuk, U. R., and Akpheokhai, L. I. (2020) The Fourth Industrial Revolution and Agricultural Development in Nigeria, in: Udom, N. G., Akpabio, I. A., Akpheokhai, L. I., Etuk, U. R., Ebong, V. O., Ekot, M. O (Eds). Agricultural and Allied Variables for Sustainable Development in Nigeria. Publication of Faculty of Agriculture, University of Uyo Pp 1-21
- Alduraywish, S. A., Altamimi, L. A., Aldhuwayhi, R. A., AlZamil, L. R., Alzeghayer, L. Y., Alsaleh, F. S., Aldakheel, F. M. andTharkar, S. (2020). Sources of health information and their impacts on medical knowledge perception among the Saudi Arabian population: Cross-sectional study. *Journal of Medical Internet Research*, 22(3), 1 – 12.
- Alhamedi, N. M., Alshoaibi, N. F., Alamri, R. M. S., Alamri, S. A., Alsulami, S. S., Ghulam, E. andShawish, S. H. (2025). Knowledge, attitude and practice of breastfeeding among mothers attending King Abdulaziz University Hospital, Jeddah, Saudi Arabia. *Journal of Family Medicine and Primary Care*, 14(4), 1295–1306.
- Alnasser, Y., Almasoud, N., Aljohni, D., Almisned, R., Alsuwaine, B., Alohali, R., Almutairi, O. andAlhezayen, R. (2018). Impact of attitude and knowledge on intention to breastfeed: Can mHealth based education influence decision to breastfeed exclusively? *Annals of Medicine and Surgery*, 35, 6–12.
- Alyafei, A. and Easton-Carr, R. (2024). The Health Belief Model of behavior change. In *StatPearls*. StatPearls Publishing. <u>https://www.ncbi.nlm.nih.gov/books/NBK606120/</u>
- Amaogu Q. I. and Akokuwebe, M. E. (2016). Knowledge, attitude, practice of exclusive breastfeeding as a nutrition among lactating mothers of Odo-Otin and Ifelodun local government areas of Osun State. A B.sc research project ,Osun State University, Okuku campus, Nigeria.
- Amzat, J., Aminu, K., Matankari, B., Ismail, A., Almu, B. andKanmodi, K. K. (2024). Sociocultural context of exclusive breastfeeding in Africa: A narrative review. *Health Science Reports*, 7(5), 1-7.
- Anruchi, A. A., Ibe, A., Onuah, C. F., Okpilike, M. I. and Michael-Nwajei, E. I. (2024). Knowledge and attitudes towards breastfeeding among nursing mothers in Aluu Community, Rivers State, Nigeria. *Journal of Women Health Care and Gynecology*, 3(6), 1–11.
- Balogun, M. R., Okpalugo, O. A., Ogunyemi, A. O. andSekoni, A. O. (2017). Knowledge, attitude and practice of breastfeeding: A comparative study of mothers in urban and rural communities of Lagos, Southwest Nigeria. *Nigerian Medical Journal*, 58(4), 123–130.

- Basrowi, R., Soemarko, D., Darus, F. andGamalliel, N. (2024). Breastfeeding and working mothers: A review from health belief model perspective. *Bali Medical Journal*, 13(2), 1510–1515.
- Bednarek, A., Bodys-Cupak, I., Serwin, A. andCipora, E. (2023). Mothers' attitudes towards breastfeeding in terms of health safety and professional lactation education: A national survey of women. *Journal of Multidisciplinary Healthcare*, *16*, 3273–3286.
- Carter, S., Garfield, S., Newbould, J., Taylor, D., Bury, M. andCampling, N. (2006). A review of the use of the Health Belief Model (HBM), the Theory of Reasoned Action (TRA), the Theory of Planned Behaviour (TPB) and the Trans-Theoretical Model (TTM) to study and predict health-related behaviour change. National Institute for Health and Clinical Excellence. <u>https://www.nice.org.uk/guidance/ph6/documents/behaviour-change-review-1</u>
- Cascone, D., Tomassoni, D., Napolitano, F. and Di Giuseppe, G. (2019). Evaluation of knowledge, attitudes and practices about exclusive breastfeeding among women in Italy. *International Journal of Environmental Research and Public Health*, 16(12), 2118 – 2127.
- Dadzie, B., Bayor, F., Doat, A. R., Kappiah, J. B., Akayuure, C. A., Lamptey, A. A., Yakong, V. N. andKampo, S. (2023). Investigating factors that influence the practice of exclusive breastfeeding among mothers in an urban general hospital in Ghana: A cross-sectional study. *BMC Women's Health*, 23(1), 24 36.
- Dukuzumuremyi, J. P. C., Acheampong, K. andAbesig, J. (2020). Knowledge, attitude and practice of exclusive breastfeeding among mothers in East Africa: A systematic review. *International Breastfeeding Journal*, 15, 70-81.
- Etuk, U. R and I. Umoh, (2014) Adoption of Pro-Vitamin A Cassava Technology among cassava farmers in Akwa Ibom State, Nigeria. *Nigerian Journal of Agriculture, Food and Environment.* 10(4) :135-138
- Etuk, U. R., S. O. Olatunji, and I. Ekong, (2013). Analysis of Health Extension Needs on Self Medication Among Rural Farmers In Akwa Ibom State, Nigeria. Nigerian Journal of Agriculture, Food and Environment. 9(1):63-66.
- Ezechi, L. O., Otobo, V., Mbah, P. E. andEzechi, O. C. (2021). Breastfeeding knowledge and attitudes of Nigerian mothers assessed by the Iowa infant feeding attitudes scale. *International Journal of Community Medicine and Public Health*, 8(12), 5722–5728.
- Green, E., Murphy, E., Gryboski, K., Sweeny, K., Robbins, M. and Cohen, L. (2020). The Health Belief Model. In *The International Encyclopedia of Media Psychology* (pp. 211–214).
- Idris-Adeniyi, K. M., Olanrewaju, K. O., Olatinnwo, L. K. andAbdulrahman, O. L. (2024). Contextualizing the new normal: Crop farmers' utilization of e-extension resources in Osun State, Nigeria. *Tanzania Journal of Agricultural Sciences*, 23(1), 141–152.
- Ihudiebube-Splendor, C.N., Okafor, C.B., Anarado, A.N., Jisieike-Onuigbo, N.N., Chinweuba, A.U., Nwaneri, A.C., Arinze, J.C. and Chikeme, P.C. (2019) Exclusive Breastfeeding Knowledge, Intention to Practice and Predictors among Primiparous Women in Enugu South-East, Nigeria. *Journal of Pregnancy*, 2019, Article ID: 9832075. https://doi.org/10.1155/2019/9832075
- Ipinnimo, T. M., Olasehinde, O. K., Sanni, T. A., Omotoso, A. A., Alabi, R. O., Ajayi, P. O. (2024). Attitude and predictors of exclusive breastfeeding practice among mothers attending under-five welfare clinics in a rural community in Southwestern Nigeria. *PLoS ONE*, 19(3), 1-7.

- Jama, A., Gebreyesus, H., Wubayehu, T. (2020). Exclusive breastfeeding for the first six months of life and its associated factors among children age 6–24 months in Burao district, Somaliland. *International Breastfeeding Journal*, 15, 5–16.
- Jike-wai, O., Etuk, U. R. and Duke, J. I. (2020) Knowledge of infant complementary feeding farm Families in Rivers State, Nigeria. *Journal of Agricultural Economics, Extension and Science* 6(2) :129-141.
- Jike-Wai, O and Etuk. U.R. (2013) Complementary feeding for infants in rural communities :Needs for Awareness among Rural Dwellers in Nigeria. In: Etim, L, Udo, J. P, Etim, N and Ekwu, A(Eds). *Contemporary Issues in Sustainable Tropical Agriculture*. A publication of Faculty of Agriculture, University of Uyo, pp. 136-143
- Jones, C. L., Jensen, J. D., Scherr, C. L., Brown, N. R., Christy, K. and Weaver, J. (2015). The Health Belief Model as an explanatory framework in communication research: Exploring parallel, serial and moderated mediation. *Health Communication*, *30*(6), 566–576.
- Kington, R. S., Arnesen, S., Chou, W. S., Curry, S. J., Lazer, D. andVillarruel, A. M. (2021). Identifying credible sources of health information in social media: Principles and attributes. *NAM Perspectives*, 2021, 10.31478/202107a. <u>https://doi.org/10.31478/202107a</u>
- Liu, L., Xiao, G., Zhang, T., Zhou, M., Li, X., Zhang, Y., Owusua, T., Chen, Y. and Qin, C. (2023). Levels and determinants of antenatal breastfeeding attitudes among pregnant women: A cross-sectional study. *Children*, 10, 275 – 284.
- Mahdi, A. Y., Nzioki, J. M. andKubende, P. (2020). Prevalence, level of awareness and sociodemographic predictors of exclusive breastfeeding among women of reproductive age in Waberi District, Mogadishu, Somalia. *African Journal of Health Sciences*, 33(5), 110– 116.
- Makamane, A., Swanepoel, J. W. and Loki, O. (2024). Communication channels and information sources utilised by agricultural extension practitioners to communicate agricultural-related information to farmers in the Eastern Cape Province. *South African Journal of Agricultural Extension*, 52(5), 151–169.
- Mitchell, F., Walker, T. and Hill, K. (2023). Factors influencing infant feeding for Aboriginal and Torres Strait Islander women and their families: A systematic review of qualitative evidence. *BMC Public Health*, 23, 297 304.
- Mohamed, A., Rashid, B. and Lawrence, S. (2024). Evaluating the knowledge, attitudes and practices of exclusive breastfeeding among mothers attending postnatal at the Kenema Government Referral Hospital. *African Journal of Health, Nursing and Midwifery,* 7, 202–221.
- Motilewa, O., Ekanem, A. andIyanam, V. (2019). Awareness and determinants of exclusive breastfeeding practices among nursing mothers attending primary health care facilities in Uyo, Nigeria. *Asian Journal of Medicine and Health*, 14, 1–12.
- Mugabo, J., Nishimwe, C., Marete, O. andKubahoniyesu, T. (2025). Knowledge, attitude and practice towards exclusive breastfeeding and associated factors among adolescent mothers in Nyagatare district, Rwanda. *International Journal of Community Medicine and Public Health*, *12*(2), 683–693.
- Nancy, S. andDongre, A. R. (2021). Behavior change communication: Past, present and future. *Indian Journal of Community Medicine*, 46(2), 186–190.

- National Academies of Sciences, Engineering and Medicine. (2016). *Parenting matters:* Supporting parents of children ages 0–8. Washington, DC: National Academies Press. https://www.ncbi.nlm.nih.gov/books/NBK402020/
- National Research Council (US); Institute of Medicine (US). (2004). *Children's health, the nation's wealth: Assessing and improving child health*. Washington, DC: National Academies Press. <u>https://www.ncbi.nlm.nih.gov/books/NBK92200/</u>
- Nwabugwu, T. S., Nwobodo, C. E. and Okoro, J. C. (2019). Awareness and use of e-resources among public extension personnel in Anambra State, Nigeria. *Journal of Agricultural Extension*, 23(1), 161 174.
- Ogban, E. O., Agam, E. A., Bisong, E. M. and Nwafor, K. N. (2020). Maternal knowledge of effective breastfeeding and its benefits, as potential determinant of attitudes to infant feeding: A survey in Calabar, Nigeria. *African Journal of Reproductive Health*, 24(3), 69 91.
- Ogwezzy-Ndisika, A. andOloruntoba, F. (2016). Application of the Health Belief Model to the practice of exclusive breastfeeding among women in Lagos State, Nigeria. *Journal of Communication and Media Research*, 8(1), 46 65
- Sabo, A., Abba, J., Usman, S. U., Ibrahim, M. S., Alzoubi, M. M., Al-Mugheed, K., Alsenany, S. A. andFarghaly, S. M. (2023). Knowledge, attitude and practice of exclusive breastfeeding among mothers of childbearing age. *Frontiers in Public Health*, 1, 1 6.
- Sahu, S., Bishnoi, S., Sharma, P. R., Satyapriya, Mahra, G. S., Burman, R. R. (2024). Exploring popular information sources and determinants of farmers' access to agricultural extension services in the Indo-Gangetic plains. *Frontiers in Sustainable Food Systems*, 8, 1–9.
- Salamon, G., Strobl, S., Matschnig, M. S. (2025). The physical, emotional, social and functional dimensions of epidermolysisbullosa: An interview study on burdens and helpful aspects from a patients' perspective. Orphanet Journal of Rare Diseases, 20, 3 – 14.
- Tahiru, R., Amoako, M. andApprey, C. (2024). Exclusive breastfeeding: An exploratory thematic analysis of the perspectives of breastfeeding mothers and significant others in the Tamale metropolis of Northern Ghana. *BMC Nutrition, 10.* [Online ahead of print].
- Wakefield, M. A., Loken, B. andHornik, R. C. (2010). Use of mass media campaigns to change health behaviour. *The Lancet*, *376*(9748), 1261–1271.