



Awareness and Perception of Exclusive Breastfeeding as Birth Control Measure amongst Pregnant Women Attending Antenatal Clinic in Bayelsa State, Nigeria

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Abstract

The study investigates rural pregnant women's perception and understanding of exclusive breastfeeding (EBF) as not just important in a child's early development but also as a birth control measure. The research design was a case study as only one health facility was studied. The population for the study was all the women attending antenatal clinic in Fangbe Community of Bayelsa State in the month of March 2024; and they were 83 women. All the 83 women indicated willingness to be involved in the study (therefore, the population equal the sample size of the study). This study employed a quantitative research method of data collection on the awareness and perception of EBF as a birth control method. The instrument was questionnaire titled Questionnaire on Awareness and Perception of Exclusive Breastfeeding (QAPEBF) that was read out to the participants and their responses were filled in by the researchers. The reliability of the questionnaire was established using Cronbach's Alpha and a coefficient of 0.81 was obtained. The data collected were analysed using descriptive statistics of frequency and percentage. Findings revealed that most of the participants demonstrated high awareness of the importance of breastfeeding as they were able to highlight the benefits of exclusive breastfeeding for infant health and maternal well-being, but there exists a gap in their awareness of its contraceptive efficacy. The authors recommended that the potential for exclusive breastfeeding to delay the return of normal ovarian function needs to be emphasized in educational programmes used in educating expectant mothers during their antenatal classes.

Keywords: Breastfeeding, Health literacy, Reorienting, Maternal and child health, Birth control

Introduction

Globally, breastfeeding is recognized as a vital public health strategy for improving child health and survival, with the World Health Organization (WHO) recommending early initiation within the first hour of birth, exclusive breastfeeding for the first six months, and continued breastfeeding up to two years or beyond with adequate complementary foods. The global breastfeeding collective aims to increase exclusive breastfeeding rates to at least 50% by 2025 and 70% by 2030 (Cai et al., 2023). Social justice, health literacy and health equalities are trajectories and pathways towards healthy status of individuals and communities. In 2012, World Health Organization (WHO) member states endorsed and committed to support the implementation and monitoring of the 'comprehensive implementation plan on maternal, infant and young child nutrition, one of the six targets to increase to 50 per cent, the rate of exclusive breastfeeding for the first six months by 2025 (WHO, 2012). Exclusive breastfeeding (EBF) has long been recognized as a cornerstone of



infant health, providing optimal nutrition and protection against infections during the first six months of life.

Beyond its nutritional benefits, EBF has been identified as a potential method of birth control, known as the lactational amenorrhea method (LAM). Lactational amenorrhea method relies on the suppression of ovulation due to breastfeeding, offering temporary contraception for postpartum women. Exclusive breastfeeding (EBF) means providing a baby with only breast milk, no other foods or drinks for the first six months of life, with the exception of oral rehydration solutions, drops, or syrups of vitamins, minerals, or medicines. This is a key practice for optimal infant health and development, as recommended by the WHO. The guidelines for EBF are: only breast milk (the baby receives breast milk from the mother directly or through expressed milk); no other liquids or solids (this includes water, juice, formula, or other food), exceptions (oral rehydration solutions, drops, or syrups of vitamins, minerals, or medicines are allowed), and duration (EBF is recommended for the first six months of a baby's life). However, the awareness and perception of EBF as a birth control method among pregnant women remain under explored. Bayelsa State, situated in the Niger Delta region of Nigeria, faces significant challenges in maternal and child health. According to the National Demographic Health Survey (NDHS, 2018), Bayelsa had a low prevalence of exclusive breastfeeding, with only 17 per cent of infants under six months exclusively breastfed. Additionally, contraceptive prevalence among postpartum women remains relatively low, with limited options accessible to many women; particularly in rural areas such as this study area. Women in rural areas generally have limited contraceptive options in comparison to women in urban locations. The assertion of rural postpartum women having limited contraceptive options is affirmed by Osuorah et al. (2018) and Otaigbe et al. (2005).

The awareness and perception of exclusive breastfeeding as a method of birth control among pregnant women pose a significant and nuanced problem that warrants attention. Despite lots of evidence, such as studies by Frank-Herrmann et al. (2007), Nwaeze and Oluwasola (2018), and the World Health Organization (2012), highlighting the benefits of exclusive breastfeeding for infant health and maternal well-being, there exist a gap in awareness among pregnant women regarding its contraceptive efficacy. In conceptualising awareness and perception regarding exclusive breastfeeding (EBF), it is crucial to distinguish between simply knowing the benefits of EBF and truly believing in its value and potential impact. Awareness refers to the understanding of the facts, while perception encompasses the subjective interpretation and evaluation of those facts, often influenced by cultural norms, personal experiences, and societal pressures.

Previous studies (Omole et al., 2023; Osuorah et al., 2018; Onah et al., 2014) have highlighted the dual benefits of EBF as both a nutritional practice and a contraceptive method. Lactational amenorrhea method, based on the hormonal suppression of ovulation through breastfeeding, has been shown to be effective when practiced correctly. A study by Labbok (2006) demonstrated that the use of lactational amenorrhea method during the first six months postpartum had a contraception failure rate of only 1-2 per cent if breastfeeding patterns were strictly adhered to. However, the success of lactational amenorrhea method hinges on several factors, including the intensity and duration of breastfeeding, the absence of menstrual bleeding, and maternal adherence to EBF guidelines. Misconceptions and lack of knowledge about lactational amenorrhea method may lead to inconsistent or incorrect use, increasing the risk of unintended pregnancies among breastfeeding women (Cai et al., 2023). Cultural beliefs, social norms, and individual perceptions play significant roles in shaping women's attitudes toward EBF and contraception. In many communities, breastfeeding is not only valued for its nutritional benefits but also deeply ingrained in cultural practices and



beliefs surrounding motherhood and child-rearing (Tadesse et al., 2020; Simkhada et al., 2012). Understanding these cultural dynamics is essential for promoting the acceptance and uptake of EBF as a birth control method. Communities, located on the outskirts of Yenagoa, the capital of Bayelsa State, represents a typical rural setting characterized by limited access to healthcare services, low levels of education, and cultural practices that influence reproductive health behaviors. In such contexts, understanding the awareness and perception of EBF as a birth control method among pregnant women is crucial for designing targeted interventions to improve maternal and child health outcomes.

While several studies (Abebe et al., 2019; Adhikari et al., 2020; Cleland, et al., 2012; Okechukwu & Otokpa, 2008) have examined the awareness and perception of EBF and contraception separately, limited research has specifically focused on the intersection of these studies among pregnant women in rural communities. The main problem addressed in this study is the extent of awareness of the role of EBF as a natural contraception method and what pregnant women think of it in terms of its adoption. By investigating the awareness and perception of EBF and contraception among pregnant women, this study seeks to fill the gap in the literature which will in turn inform future targeted interventions to promote maternal and child health. The significance of the study is the fact that awareness may lead to adoption of practice. When pregnant women have the understanding that exclusive breastfeeding can delay the return of ovarian functions which in turn can lead to delay pregnancy, this would enable them space out their birth-rate at no cost and no side effects in terms of medical complications of medication use from family planning medications. The major variables in this study are: pregnant women attendance of antenatal clinic, awareness of EBF as a birth control method, pregnant women perception of EBF as a contraceptive measure, and cultural influences the attitude of pregnant women towards EBF as birth control measure.

Four research questions were posited to guide the study:

1. Do pregnant women attend antenatal clinics regularly?
2. What is the level of awareness of exclusive breastfeeding as a birth control method among pregnant women attending antenatal clinic?
3. What is the perception of pregnant women towards exclusive breastfeeding as birth control method?
4. What are the cultural factors influencing the attitudes of pregnant women towards exclusive breastfeeding as birth control method?

Methods

The research design of the study was descriptive case study research design. This choice stemmed from the inherent nature of the research, which involves sampling opinions and viewpoints of individuals. The study employed a quantitative method of research to elicit responses of pregnant women awareness and perception of EBF as a birth control method in Fangbe Community. Fangbe community is a rural community at the outskirt of Yenagoa metropolis. Fangbe community was selected for this study due to its proximity to the State capital and also for easy accessibility as most of Bayelsa rural communities are in the riverine areas with limited accessibility. Nestled within the Niger Delta, Bayelsa State boasts a landscape characterized by rivers and estuaries. These natural features create challenges for the development of robust road infrastructure.

The study instrument for data collection was a questionnaire titled Questionnaire on Awareness and Perception of Exclusive Breastfeeding (QAPEBF). It was used to elicit responses on the awareness and perception of EBF as a birth control method among pregnant



women in Fangbe Community. The study is a case study as only one community (Fangbe) is involved in the research. The population of the study comprised of all the pregnant women attending antenatal clinic in Fangbe Community within the month of March 2024. Which according to the hospital health record unit is 83 pregnant women. Given the manageable size of the target population, every pregnant woman attending the antenatal clinic was approached to be involved in the research. Therefore, there was no sampling as the sample size equals the population of 83 pregnant women. The instrument for the study has a total of thirteen questions: three (3) questions on antenatal attendance, three questions on awareness of EBF as birth control method, five questions on perception of pregnant women of EBF as birth control method, and two questions on cultural factors influencing pregnant women's attitude to EBF as birth control method. The questionnaire was validated by three experts in measurement and evaluation, and three from health education in the Faculty of Education, Niger Delta University, Bayelsa State. The reliability of the instrument was determined by the Cronbach's Alpha statistics, by administering the instrument to 20 respondents in another health facility that was not part of the study sample. A correlation value of 0.81 was reliable which is within the acceptable benchmark of reliable instrument. The five authors handled the data collection process by reading out the questions on the questionnaire and filling out the respondents' responses.

Informed consent letter and Institutional Research approval letter were sent to the Fangbe Community Health Centre requesting their willingness to be involved in the research. Details of the research objectives and methodology were outlined in the consent letter. The Health centre was requested to consent in writing. The Matron at the Health Centre signed the consent letter which is an indication of the Centre's willingness to be involved in the study. Furthermore, the consent of the pregnant women to participate in the research were also sought by a pre-informed letter that was read and explained to them by the antenatal nurse; and a show of hand indicated consent. All the women raised their hands as an indication of willingness to be involved in the research.

Upon arriving at the healthcare centre, for the collection of data; the researchers introduced themselves to the head matron and explained the purpose of their visit, which was to conduct the research they consented to by presenting the consent letter to the matron on duty. The researchers were then introduced to the pregnant women and they further explained the reason for their visit. The participants were then ensured of confidentiality and anonymity in their responses. They were also given the opportunity to decline their willingness to be part of the research at the beginning. The researchers read out the questionnaire to each of the participant individually and the responses recorded in the questionnaire. All the responses were then collated and analysed using frequency and percentage.



Results

Table 1: Antenatal Clinic Attendance and Reason for Attending or Not-Attending

S/N	Statement Items	Responses	Frequency	%
1	Do you attend antenatal regularly for check-up?	Yes	71	85
		No	12	15
	If No, why?	No transport	5	6
		I'm Very busy	7	8
		I don't know	0	0
2	Have you missed any antenatal check-up in the past three months?	Yes	3	3.6
		No	80	96.4
	If Yes why?	Farm work	1	1.2
		Very busy	1	1.2
		Attended a function	1	1.2
3	What do you benefit from attending antenatal clinics regularly	I get well informed	83	100
		I don't get well informed	0	0
		I don't know	0	0

Table 1 above shows that majority of the participants indicated that they do attend antenatal clinic regularly (71(85%). The remaining 15% who do not attend antenatal clinic regularly where further asked 'why' and 7(8%) said because they are very busy while 5(6%) said they do not have transport fare (the Health Centre is at the outskirt of the village, about 20-30 minutes' walk). Hundred per cent of the participants indicated that they benefit from attending antenatal classes including those who are not too regular.



Table 2: Level of Awareness of Breastfeeding as a Birth Control Method

S/N	Statement Items	Responses	Frequency	%
1	Have you heard about exclusive breastfeeding?	Yes	80	96.4
		No	3	3.6
		I don't know	0	0
	If Yes what did you hear about exclusive breastfeeding?	a) Breastfeeding new born for six months without water and food	80	96.4
		b) I don't know	3	3.6
2	Are you aware that apart from exclusive breastfeeding being a means of breastfeeding a new born without food and water for six months it can also be a birth control method?	Yes	40	48.2
		No	40	48.2
		I don't know	3	3.6
3	How aware are you of the advantages of exclusive breastfeeding?	a) Child spacing , nutrition, protection from illness	40	48.2
		b) Economic reasons	38	45.5
		c) I don't know	5	6.3

From Table 2 above, almost all the participants 80(96%) indicated that they have heard the term 'exclusive breastfeeding' and are aware of what it means and even practice it, but only half of the participants have heard and aware of its efficacy as a birth control measure.



Table 3: Perceptions of Pregnant Women towards Exclusive Breastfeeding as Birth Control Measure

S/N	Statement Items	Responses	Frequency	%
1	Can you rely on the effectiveness of exclusive breastfeeding as a birth control method to prevent pregnancy?	Yes	63	76
		No	20	24
2	If Yes why?	a) it is working for me	40	48.2
		b) it is very effective	20	24.1
		c) I like it so much	13	15.7
3	If No Why?	a) it is not working for me	10	12
		b) I see my period while breastfeeding	5	6
		c) I prefer other birth control method	5	6
				6
4	How do you compare the effectiveness of exclusive breastfeeding to other birth control method?	a) exclusive breastfeeding as a birth control method is more effective	70	84
		b) Does not work for me	5	6
		c) 50-50 chances	5	6
		d) cannot risk it	3	4
5	Would you agree that exclusive breastfeeding is safer and effective compare to other birth control methods	Yes	53	63.9
		No	10	12.0
		I am not sure	20	24.1

From Table 3 above, 76% of the women indicated that they could rely on the effectiveness of EBF to prevent pregnancy while only 24% indicated otherwise. Reasons like: 'it works for me', 'I like it very much' and 'It is effective' were given when the participants were probed further for reason(s) for indicating that they would rely on the effectiveness of EBF as birth control method. Reasons like: 'I see my menstrual period when breastfeeding' and 'I prefer other control methods' were some of the reason(s) given for perceiving that EBF is not effective as birth control method. About 63% sees EBF as a safe birth control measure.



Table 4: Cultural Factors Influencing Attitudes towards Exclusive Breastfeeding as Birth Control Method

S/N	Items	Option	Frequency	%
1	Is there any traditional practice in your community that goes against exclusive breastfeeding	Yes	0	00
		No	83	100
2	The community leaders or traditional birth attendance promote pregnant women attitude toward the use of exclusive breastfeeding as a birth control method	Yes	83	100
		No	0	00

From Table 4 above, it is pertinent to appreciate that in the community of Fangbe where the research was conducted; there is an overwhelming response that there are no cultural barriers militating against exclusive breastfeeding. It is rather encouraged by all and sundry.

Discussion

The discussion of findings was done according to the various research questions posited for the study. Research question one explores the extent of awareness among pregnant women regarding the importance of attending regular antenatal clinics, and several key insights emerged. Firstly, the majority of respondents indicated that they attend antenatal check-ups regularly. This suggests a relatively high level of awareness among pregnant women about the importance of seeking regular medical care during pregnancy. This finding aligns with the widely recognized benefits of antenatal care in promoting maternal and foetal health, including early detection and management of pregnancy-related complications outlined in several other research findings of Essien et al. (2013), Osuorah et al. (2018). However, despite the majority indicating regular attendance, a notable proportion of respondents, reported missing antenatal appointments in the past three months. The reasons cited for these missed appointments primarily revolved around logistical challenges such as transportation issues and busy work schedules. This highlights potential barriers that pregnant women may face in accessing antenatal care services, particularly in resource-constrained settings where transportation infrastructure may be inadequate. This finding is consistent with Abebe et al. (2019) who also found transportation as a barrier to attending antenatal clinics in Ethiopia. Additionally, the responses indicate a unanimous agreement among all respondents regarding the benefits derived from attending antenatal clinics regularly. Pregnant women expressed that they felt well-informed about the importance of attending regular antenatal clinics and highlighted various benefits, including receiving education on self-care practices and newborn care. This finding contrast with Adhikari et al. (2020) who found that in Nepal, most pregnant women indicated they do not benefit much from attending antenatal classes. Notably, exclusive breastfeeding emerged as a key focus area, with pregnant women acknowledging its role in preventing illnesses such as diarrhea and typhoid among newborns. These findings underscore the importance of promoting antenatal care utilization among pregnant women and addressing barriers to access.



The findings from Table 2 which is on research question two revealed varying levels of awareness among pregnant women regarding exclusive breastfeeding as a method of birth control in Fangbe community. While a majority of respondents demonstrated awareness of exclusive breastfeeding, a notable proportion expressed a desire to learn more about this practice. This finding agrees with Ogbonna and Daboer (2007) and Cleland et al. (2013). Additionally, a small percentage admitted to being aware of exclusive breastfeeding, indicating a need for targeted educational interventions to improve awareness levels. Furthermore, the results indicate that a significant number of respondents were aware that exclusive breastfeeding can serve as a method of birth control, highlighting a fundamental understanding of this dual benefit. This finding is consistent with Omole et al (2023) findings. However, a considerable proportion disagreed with this notion, suggesting potential misconceptions or gaps in awareness regarding the contraceptive efficacy of exclusive breastfeeding. These findings underscore the importance of comprehensive health education programs targeting pregnant women to enhance awareness and understanding of exclusive breastfeeding as both a nutritional practice and a method of birth control. The Table 2 finding revealed that most of the respondents are aware of the EBF and even practice it but only half of the respondents have heard and aware of its efficacy as a birth control measure, this is worrisome and as it questions what is taught and emphasized in antenatal classes especially with population control which is at the fore burner of global and planetary health discuss. One reason why the participants indicated that they engage in Exclusive breastfeeding, some is because of economy as they cannot afford baby formula. Reason like economy given as advantage of exclusive breastfeeding is also worrisome. When probed further, some of the participant said they do not have enough money to buy baby formula so is economical for them to obey what the nurses have told and breastfeed exclusively for the first six months and then introduce the baby to the normal house food prepared for everyone and still augmenting with breast milk.

The findings from Table 3 which is on research question three shed light on the perceptions of pregnant women towards the effectiveness of exclusive breastfeeding as a birth control method. The majority of respondents expressed confidence in relying on exclusive breastfeeding to prevent pregnancy, citing its dual benefits of providing newborns with essential nutrition while serving as a method of contraception. However, a significant proportion disagreed with this notion, citing concerns about its effectiveness for their individual circumstances. This finding contrasted with Tadesse et al. (2020) finding. Regarding the effectiveness of exclusive breastfeeding compared to other birth control methods, a substantial proportion perceived it as more effective, safe, and comfortable for spacing their children. Some respondents acknowledged its effectiveness but noted variability in its success, while a smaller fraction reported that it did not work for them due to personal experiences. This finding collaborated with Otaigbe et al. (2005). Overall, the unanimous agreement among respondents regarding the safety and effectiveness of exclusive breastfeeding underscores its perceived value as a preferred contraceptive option, despite variations in individual experiences and perceptions. The results in Table 3 is a clarion call for a health education intervention that will inculcate the knowledge of exclusive breastfeeding not just for the health of the baby but also as a measure of birth control; to reorient rural women health literacy and narrative of the advantages of exclusive breastfeeding.

The findings from Table 4 which is on research question four, allured to the fact that there are no cultural hindrances which could influence the attitude of pregnant women towards adoption of exclusive breastfeeding as a birth control method, as all eighty three respondents



indicating that there were no traditional practices in their community that is against exclusive breastfeeding. This finding is consistent with Onah et al. (2014). Additionally, participants indicated that community leaders and traditional birth attendants help to promote positive attitudes towards exclusive breastfeeding and other contraceptives by encouraging them to exclusively breastfeed their babies. This finding buttresses the emphasis of breastfeeding as 'women's reproductive right' and should be encouraged as contain in Sabo et al. (2023).

Conclusion

In conclusion, the pregnant women attending antenatal clinic in Fangbe community health facility demonstrated high awareness of the benefits of exclusive breastfeeding but as a birth control measure, the awareness was low, whilst their perception of exclusive breastfeeding was more from an economic point of view of not being able to afford baby formula. The efficacy of exclusive breastfeeding in the delay of the next pregnancy was also attested to. This is pivotal for maternal and child health outcomes. Educating women about the benefits and effectiveness of exclusive breastfeeding as a natural birth control method is crucial in promoting family planning and healthy spacing of pregnancies. Emphasizing this knowledge and information during antenatal classes can enhance women's confidence in using this method and contribute to positive health outcomes for both mothers and infants. Enhancing awareness and perception among pregnant women regarding exclusive breastfeeding as a contraceptive method is essential for promoting optimal maternal and child health. Exclusive breastfeeding which is a public health intervention and one of the most important strategies for improving infant survival rates is also vital as a birth control measure. This understanding is germane for women of reproductive age so as to engage in it for their own health and wellbeing. The Fangbe community culture does not hinder the adoption of exclusive breastfeeding by nursing mothers of the community.

Recommendations

Based on the findings from this study, the following recommendations are therefore made:

1. The awareness of exclusive breastfeeding as birth control measured should be sustained through continuous emphasis during antenatal classes
2. Community should make provisions for transport incentive to encourage and help those who cannot afford them
3. Attendance of antenatal clinic should be compulsory for all pregnant women reason being that it will help to detect early any complication and also afford pregnant women health awareness given during antenatal clinic
4. The Fangbe Community culture as it favours exclusive breastfeeding should continue and be encouraged.



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