

Original Research Article

Exclusive breastfeeding practices and predictors among mothers attending child care immunization services in Ebonyi state, Nigeria

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ABSTRACT

Background: Low adoption of exclusive breast feeding among mothers and its impact on the infants has been attributed to several factors. The im of the study was to assess exclusive breastfeeding practices and predictors among women attending child care immunization services at Alex Ekwueme Federal University Teaching Hospital Abakaliki (AE-FUTHA).

Methods: The design of this study is cross-sectional survey. The population of the study comprised of 2100 women who registered for child care immunization services at Federal Teaching Hospital Abakaliki from the month of January-March, 2023. Convenience sampling technique was used in selecting the participants. Data were analyzed using mean, standard deviation, frequency counts and percentages and t test statistics.

Results: The results showed that the exclusive breastfeeding practices of the women were high (3.33±0.39). Also, EBP of the women was high based on age and parity. Although, there was no significant difference in the exclusive breastfeeding practices based on parity ($p>0.05$). However, there was significant difference in the exclusive breastfeeding practices based on age of the mothers ($p<0.05$).

Conclusions: The study concluded that to sustain the high practices of exclusive breastfeeding among women attending child care immunization services at AE-FUTHA, there is need to continue to engage them on seminars, workshops and conferences by health workers on the days of immunization with special focus to the younger age of the mothers in order to sustain the high EBPs.

Keywords: Exclusive breast feeding, Child care immunization, Predictors, Women, Ebonyi state

INTRODUCTION

Breastfeeding has been accepted as most vital intervention for reducing infant mortality and ensuring optimal growth

and development of children.¹ The beneficial effects of breastfeeding in the prevention of morbidity and mortality from diarrhoea in infants have been documented.² A study, by WHO have observed numerous benefits of

breastfeeding for the infants.³ Infants who are exclusively breastfed for six months are less likely to die of gastrointestinal infections than infants who switched from exclusive to partial breastfeeding. Exclusive breastfeeding is also associated with lower chance of developing diabetes mellitus type 2 later in life. Exclusively breastfed children exhibit greater resistance to infectious diseases and stronger immune system and therefore experience lower rates of chronic diseases. The emphasis on the exclusive breastfeeding of infants was necessitated by the observed consequences of inadequate nutrition among infants such as increasing rate of infant mortality and slow recovery from illnesses.⁴

The term breastfeeding is the feeding of an infant or young child with breast milk directly from female human breast via lactation rather than using infant formula from a feeding bottle or other container.⁵ It is as an unequalled ways of providing ideal food for health and development of infants. It is also an integral part of the reproduction process with important implication for health of mothers.³ In this study, breastfeeding is conceived as feeding of an infant or young child with breast milk rather than using infant formula or any other milk from the baby bottle.

Exclusive breastfeeding means giving infants only breast milk with no addition of other foods or drinks, including water.⁶ Jolly, defined exclusive breastfeeding as the feeding of an infant with breast milk only without giving any other foods, not even water.⁷ It is about an infant's consumption of human milk with no supplementation of anything like (water, juice, human milk and foods) except for vitamins, minerals and medication.⁸ In the context of this study, exclusive breastfeeding means giving the baby only breast milk for the first six months of his life. It is supposed to last for six months from the time of birth. It is usually initiated within 30 minutes and has a wide range of health benefits to the infant and mother.⁹

A study carried out by Essien and Samson, on factors influencing the practices of exclusive breastfeeding among mothers in Ikot Omin, Calabar, Nigeria, found that exclusive breastfeeding between six months and two years of age was associated with decreased incidence of allergic diseases.¹⁰ These include bacterial meningitis, diarrhoea, respiratory tract infection, leukemia, urinary tract infection and infant mortality.¹¹ Exclusive breastfeeding also provides many material benefits such as reducing the chances of developing adverse health outcomes such as obesity, Ovarian and breast cancer in mothers.¹² All these benefits are dependent on the women compliance to exclusive breastfeeding practice.

Exclusive breastfeeding practice is when a child is given breast milk directly from the breast of the mother for six (6) months.¹³ However, Gribble observed that exclusive breastfeeding practice implies that breast milk must be given for relatively six (6) months but cannot be complemented with other baby formula and meals.¹⁴ Federal Ministry of Health, defines exclusive

breastfeeding practice as the feeding of an infant, only with breast milk including expressed ones and having no provision for feeding him or her with food, drink and water.¹⁵

Practice involves doing something regularly in order to improve your ability at it. Practice is the actual application or use of an idea, belief or method, as opposed to theories relating to it. Breast feeding practices refers to the methods to be followed in breast feeding a baby.¹⁴ The extent or levels at which mothers practice exclusive breastfeeding may include; Full Practices of exclusive breastfeeding, Partial Practices of exclusive breastfeeding and non-Practices of exclusive breastfeeding.

Full practices of exclusive breastfeeding implies that a child is being fed with only breast milk without any other additional supplement, drinks nor water for six months. Partial practice of exclusive breastfeeding means mixed feeding or giving other liquids or foods together with breast milk to infants six months of age, this is widely experienced in many countries. This practice poses risks to an infant health because it can increase the chances of them having diarrhea and other infectious diseases. Partial practices of exclusive breastfeeding especially giving water or other liquids, can also causes the supply of breast milk to decrease as the baby sucks less on the breast.¹⁶

Non- practices of exclusive breastfeeding implies that immediately a baby is born, the mother starts the baby on food, water, drinks or supplement without feeding the baby with only breast milk from birth.¹⁷ The consequences of partial exclusive or non-practice of exclusive breastfeeding for infants is associated with an increased incidence of infections, morbidity, as well as elevated risks of childhood obesity, type 1 and 2 diabetes, Leukemia and sudden infant death syndrome.¹⁸ For mothers, the consequence is associated with an increased incidence of premenopausal, breast cancer, ovarian cancer, retained gestation weight gain, type 2 diabetes and myocardial infarction.¹⁸

Child care immunization services are services given to a child during immunization period. These services provide a platform for health care providers to give information about exclusive breastfeeding practices. The information and counseling provided by health care providers is usually taken to be the most influential because mothers see them as their role models on matters related to exclusive breastfeeding practices. The implication of exclusive breastfeeding practices information for women attending child care immunization services is that women with correct information of exclusive breastfeeding practices tend to know the numerous health benefits to both the mother and the baby, practice exclusive breastfeeding and as well encourage others to practice exclusive breastfeeding.¹⁷ There are many socio-demographic factors that predicts mothers exclusive breastfeeding practices. These may include age, parity, location and educational level of the mother, investigating these

predictors with special focus on age and parity is the thrust of the present study.

Age has been identified as a strong factor that determines the rate of exclusive breastfeeding practice among mothers. Ajayi, identified age as a contributory variable to the determination of the extent of exclusive breastfeeding practice among women in Kogi state in which he pointed out that younger mothers tend to be fashion conscious believing that their breast would sag if they get involved in exclusive breastfeeding practice.¹⁹

The younger mothers may also be over conscious of their body looks and many may not be willing to exclusively breastfeed the baby anywhere as the baby demand. The young mother feels shy to breastfeed and this impairs milk secretion.²⁰ The young women to a large extent perceive their breasts in terms of their attractiveness rather than their function.²⁰ Age above 25 years has been repeatedly associated with longer duration of exclusive breastfeeding practice.²¹ It is probable that older women know more about the benefits of exclusive breastfeeding and have more realistic outcome expectations.²²

Parity (number of children) is also another factor that determined the extent of exclusive breastfeeding practice among mothers. A mother who has had a successful exclusive breastfeeding for the previous babies will realize the benefits and will continue breastfeeding. On the other hand, if the mother has experienced difficulties with previous exclusive breastfeeding practices she may be discouraged. Such problems may include medical conditions like sore nipples, mastitis and even abdominal pains.^{23,24}

The consequences of poor exclusive or non-practice of exclusive breastfeeding for infants is associated with an increased incidence of infections, as well as elevated risks of childhood obesity, type 1 and type 2 diabetes, leukemia and infant death syndrome. For mothers, poor exclusive or non-practice of exclusive breastfeeding is associated with breast cancer, ovarian cancer, and retained gestation weight and premenopausal. This therefore underscores the need to study the factors predicting mother's exclusive breastfeeding practices among women attending child care immunization services at Alex Ekwueme Federal University Teaching Hospital Abakaliki (AE-FUTHA).

The present study therefore assessed exclusive breastfeeding practices and predictors such as age and parity among mothers attending child care immunization services in Ebonyi state, Nigeria. Moreover, studies have been conducted on exclusive breastfeeding practices in many parts of the world including Nigeria, however, no such study has been carried out among women attending child care immunization services in AE-FUTHA, Ebonyi state. The problems call for investigations so as to mount an appropriate health intervention programme for the mothers by the concerned stakeholders.

METHODS

Research design

We adopted descriptive cross-sectional survey research design to assess exclusive breastfeeding practices and predictors among women attending child care immunization services at Alex Ekwueme Federal University Teaching Hospital Abakaliki. This design was employed successfully in a related studies hence, the present study adopted it.^{25,26}

Area of the study

The study was conducted in Ebonyi state which was created from the old Enugu and Abia States on 1st October 1996. It is one of the states in the South-East Zone of the Federal Republic of Nigeria. Ebonyi State occupies a land mass of 5,539 square kilometers, with a population of 2,864,776.²⁷ The state lies on approximately latitude 7°30'E to 8°30'E and longitude 5°40'N to 6°45'N. It is bordered in the east by Cross River State, in the North by Benue State, in the west by Enugu and in the south by Abia state. Ebonyi state indigenes are mainly farmers with few traders and civil servants.²⁷

Population of the study

The population for the study comprised all the registered nursing women attending child care immunization services at AE-FUTHA for a period of three months (January-March 2019). Based on the medical record from Institute of child health (ICH) department, the total number of registered pregnant women that attended child care immunization services for three months was two thousand one hundred (2100). This thus justified the population size. They all were attending child care immunization services at AE-FUTHA at the time of study.²⁸

Sample and sampling techniques

The sample of the study was 210. This represented 10% of the total population, 2100. It was in accordance with Nwanas' rule of thumb which state that when the population is a few thousands, 10% will suffice.²⁵ The sampling technique used was convenience sample technique. This permit the researchers to administer the research instrument to the respondents at anytime and anywhere the respondents is reached. At the end, two hundred and ten (210) registered nursing women attending child care immunization services at AE-FUTHA were assessed.

Selection criteria /inclusion and exclusion criteria

All the pregnant women attending child care immunization services within the time of the study at AE-FUTHA, and those who consented to participate in the study were all selected and included for the study. The exclusion criteria were based on the pregnant mothers who are either sick or

absent during the period of the study, and those who refuse to participate including those who attend other places instead of AE-FUTHA for child care immunization services in Ebonyi state were all excluded.

Instrument for data collection

A self-structured instrument titled: Exclusive breastfeeding practices and sources of information questionnaire (EBFPSOIQ) was used for data collection. The questionnaire contained three sections 'A', 'B' and 'C'. Section 'A' sought responses on the demographic data of the respondents which contains age and parity while section B contains 17 items seeking women responses on the extent of exclusive breastfeeding practices. Section C contains 12 items on sources of information of exclusive breastfeeding practices among women attending child care immunization services at AE-FUTHA. Four point scale as never (1) often (2) occasionally (3) and always (4) was used to elicit information on the extent of exclusive breastfeeding practices from the respondents.

Validity of the instrument

The instrument was validated by three experts in the department of Human Kinetics and Health Education of Ebonyi state University, Abakaliki. This is to ensure the appropriateness and clarity of the instrument and proper wording of items to the respondents.

Reliability of the instrument

To determine the reliability of the instruments, it was administered on thirty respondents at Mile Four Hospital, Abakaliki. The consistency of the instruments was computed using Cronbach alpha and Guttman split-half coefficient.

The reliability co-efficient gave 0.89 and 0.75 respectively, which showed that the reliability co-efficient was above 0.60 hence the instruments was reliable and good for this study. This was in line with Ogbazi and Okpala, who observed that if the correlation coefficient obtained in an instrument for data collection in a study is up to 0.60 and above, the instrument should be considered reliable enough for the study.²⁹

Method of data collection

Prior to the distribution of questionnaires to the respondents, formal introduction of the study was given by the researchers and informed consent obtained from all the prospective participants.

The researchers conducted the administration and distribution of the questionnaire to all the participants. The items of the questionnaire were organized to elicit responses from the participants without any bias.

Data analysis

In analyzing the data, mean and standard deviation was used to answer research questions on the extent of exclusive breastfeeding practices, while frequency and percentages was used to answer research question on the sources of information on exclusive breastfeeding practices. A criterion mean of 2.50 and above was set for the study. Hence any mean that is up to 2.50 was high while below 2.50 is low extent of practices.

T test was used to test the hypothesis that there was no significant difference of EBF practices by age and parity. The hypotheses were tested at 0.05 alpha level significance. The results were presented using tables.

RESULTS

Table 1 shows the grand mean of 3.33 ± 0.39 . This indicates high practices of exclusive breastfeeding practices among women attending child care immunization services at Alex Ekwueme Federal University Teaching Hospital Abakaliki. Specifically, all the items number 1-9 and 12, 14-17 obtained mean scores above 2.50, which shows high level practices of exclusive breastfeeding. However, items number 10, 11 and 13 indicates low exclusive breastfeeding practices among women attending child care immunization services at AE-FUTHA.

Data presented on Table 2 indicates that age bracket 15-34 years obtained a mean score of above 2.50 except on item 13, while ages 35 years and above obtained a mean score of 2.50 and above in all the items except on item 10, 11 and 13. In the overall, age 15-34 years and 35 years and above obtained a mean of 3.37 ± 0.39 and 3.19 ± 0.32 respectively. This means that women attending child care immunization services at AE-FUTHA have high exclusive breastfeeding practices by age.

Data in Table 3 indicates that women with children 1-4 obtain a mean score of above 2.50 except on items 10, 11 and 13, while those with (5 children and above) have a mean score of 2.50 and above in all the items except on item 10 and 13. In the overall, those with 1-4 children and 5 children and above obtain a mean of 3.34 ± 0.39 and 3.26 ± 0.32 respectively. This implies that women attending child care immunization services at Alex Ekwueme Federal University Teaching Hospital Abakaliki have high exclusive breastfeeding practices by parity.

Table 4 shows the summary of t test analysis on the extent of EBF practices by age. The analysis indicate that there was a significant difference in the extent of EBF practices among women attending child care immunization services at Federal Teaching Hospital Abakaliki based on age. This can be seen clearly on the Table where t value of 2.801 is significant at p value of 0.006. Thus, the hypothesis which stated that there is no significant difference in extent of EBF practices among women attending child care immunization services at AE-FUTHA by age was rejected.

Table 5 show the summary of t test analysis in the EBF practices by parity. The analysis indicate that there was no significant difference in the extent of EBF practices among women attending child care immunization services at Federal Teaching Hospital, Abakaliki based on parity. This is clearly seen on the Table where the t value of 1.041 was

not significant at p value of 0.299 alpha level of significance. Thus, the hypothesis which stated that there was no significant difference in extent of EBF practices among women attending child care immunization services at Federal Teaching Hospital, Abakaliki by parity.

Table 1: Mean and standard deviation of exclusive breastfeeding practices among women attending child care immunization services at Alex Ekwueme Federal University Teaching Hospital Abakaliki (n=210).

S. no.	Exclusive breastfeeding practices	\bar{x}	SD	Dec
1.	I give only breast milk for six months.	3.73	0.73	High
2.	I give infants human milk without supplements of any type.	3.60	0.90	High
3.	I initiated EBF practices within 30 minutes after delivery.	3.83	0.61	High
4.	I don't use feeding bottles, teats or pacifiers in feeding an infant, only breast milk for six months.	3.50	0.90	High
5.	I give my baby other fluids e.g. water plus glucose.	2.71	1.40	High
6.	I give only breast milk, no other food for six months.	3.60	0.92	High
7.	Once born, the first thing that enters my baby's mouth is breast milk.	3.90	0.51	High
8.	I give my baby no other thing else other than breast milk from the time of birth.	3.70	0.74	High
9.	I breast feed my new born only on the first breast milk (colostrum).	3.52	1.04	High
10.	Nipple sore affects me breastfeeding my baby.	2.00	1.20	Low
11.	The breast pains that accompany each of my births put obstacles to my baby's breastfeeding.	2.43	1.30	Low
12.	I feed child breast milk whenever the child wants it.	3.73	0.80	High
13.	I give child breast milk only in the night.	1.80	1.22	Low
14.	I clean my breast before breastfeeding my baby.	3.81	0.60	High
15.	I do not allow my baby to drink breast milk from another woman's breast.	3.60	1.00	High
16.	I give child breast milk until he or she is satisfied.	3.90	0.42	High
17.	I give child vitamin supplements alongside breastfeeding	3.40	1.10	High
	Grand mean	3.33	0.39	High

Table 2: Mean and standard deviation of exclusive breastfeeding practices among women attending child care immunization services at Alex Ekwueme Federal University Teaching Hospital Abakaliki by age (n=210).

S. no.	Exclusive breastfeeding practices	Age (15-35 years)		35 years and above	
		\bar{x}	SD	\bar{x}	SD
1.	I give only breast milk for six months.	3.81	0.60	3.46	1.01
2.	I give infants human milk without supplement of any type.	3.70	0.80	3.36	1.10
3.	I initiated EBF practices within 30 minutes after delivery.	3.81	0.61	3.88	0.60
4.	I don't use feeding bottles, teats, or pacifiers in feeding an infant, only breast milk for six months.	3.60	0.90	3.20	1.10
5.	I give my baby other fluids e.g., water plus glucose.	2.74	1.40	2.64	1.30
6.	I give only breast milk, no other food for six months.	3.73	0.80	3.04	1.20
7.	Once born, the first thing that enters my baby's mouth is breast milk.	3.90	0.50	3.86	0.60
8.	I give my baby no other thing else other than breast milk from the time of birth.	3.80	0.70	3.42	0.88
9.	I breastfeed my new born baby only on the first breast milk (colostrum).	3.50	1.10	3.58	0.97
10.	Nipple sore affects me breastfeeding my baby.	2.04	1.20	1.82	1.06
11.	The breast pains that accompany each of my births put obstacles to my baby's breastfeeding.	2.43	1.30	2.44	1.30
12.	I feed child breast milk whenever the child wants.	3.80	0.70	3.60	0.90
13.	I give child breast milk only in the night.	1.80	1.30	1.64	1.10
14.	I clean my breast before breastfeeding my baby.	3.83	0.60	3.76	0.08
15.	I do not allow my baby to drink breast milk from another woman's breast.	3.58	0.99	3.68	0.86
16.	I give child breast milk until he or she is satisfied.	3.90	0.40	3.84	0.50
17.	I give child vitamin supplements alongside breastfeeding.	3.41	1.08	3.18	1.08
	Grand mean	3.37	0.39	3.19	0.32

Table 3: Mean and standard deviation of exclusive breastfeeding practices among women attending child care immunization services at Alex Ekwueme Federal University Teaching Hospital Abakaliki by parity (N=210).

S. no.	Exclusive breastfeeding practices	Parity 1-4 children		5 and above children	
		\bar{x}	SD	\bar{x}	SD
1.	I give only breast milk for six months.	3.80	0.64	3.41	0.01
2.	I give infants human milk without supplement of any type.	3.70	0.80	3.29	1.11
3.	I initiated EBF practices within 30 minutes after delivery.	3.83	0.60	3.82	0.71
4.	I don't use feeding bottles, teats, or pacifiers in feeding an infant, only breast milk for six months.	3.53	0.90	3.20	1.12
5.	I give my baby other fluids e.g., water, plus glucose.	2.70	1.38	2.76	1.30
6.	I give only breast milk, no other food for six months.	3.63	0.86	3.20	1.14
7.	Once born, the first thing that enters my baby's mouth is breast milk.	3.90	0.50	3.85	0.60
8.	I give my baby no other thing else other than breast milk from the time of birth.	3.72	0.70	3.41	0.90
9.	I breastfeed my new born only on the first breast milk (colostrum).	3.50	1.06	3.61	0.90
10.	Nipple sore affects me breastfeeding my baby.	1.96	1.13	2.11	1.32
11.	The breast pains that accompany each of my birth put obstacles to my baby's breastfeeding.	2.40	1.27	2.80	0.21
12.	I feed child breast milk whenever the child wants it.	3.80	0.71	3.52	0.96
13.	I give child breast milk only at night.	1.80	1.24	1.70	1.12
14.	I clean my breast before breastfeeding my baby.	3.84	0.54	3.64	0.64
15.	I do not allow my baby to drink breast milk from another woman's breast.	3.60	1.00	3.73	0.75
16.	I give child breast milk until he or she is satisfied.	3.90	0.44	3.91	0.30
17.	I give child vitamin supplements alongside breastfeeding.	3.32	1.12	3.52	0.90
	Grand mean	3.34	0.39	3.26	0.32

Table 4: Summary of t test analysis of exclusive breastfeeding practices among women attending child care immunization services at Alex Ekwueme Federal University Teaching Hospital, Abakaliki by age.

Age (years)	N	\bar{x}	SD	t value	P value	Dec
15-34 years	160	3.37	0.40	2.801	0.006	S
35 years and above	50	3.20	0.32			

Note: S- p value<0.05.

Table 5: Summary of t test analysis of exclusive breastfeeding practices among women attending child care immunization services at Alex Ekwueme Federal University Teaching Hospital, Abakaliki by parity.

Parity	N	\bar{x}	SD	t value	P value	Dec
1-4 children	176	3.34	0.40	1.041	0.229	NS
5 children and above	34	3.26	0.32			

Note: S- p value<0.05.

DISCUSSION

The study revealed in Table 1 that women attending child care immunization services at Alex Ekwueme Federal University Teaching Hospital Abakaliki indicated high exclusive breastfeeding practices. This finding was expected because emphasis has been given to exclusive breastfeeding practices among the women during their immunization days. The result of this finding is in line with the study of Ukaegbu and Onyeonoko, whose result reported that women in Anambra State had high extent of exclusive breastfeeding practices.³⁰ The result of this finding disagreed with the study who indicated low extent

of exclusive breastfeeding practices among the women in rural residents of Nsukka, Nigeria.³¹

The results in Table 2 showed that women attending child care immunization services at AE-FUTHA had high extent of exclusive breastfeeding practices by age. Although, younger women with age bracket 15-34 years had higher practices compared to older women with 35 years and above as revealed in the present study.

This finding is surprised based on the fact that most of the young mothers are usually shy in the breastfeeding of their babies. This result is in line with the study of Abdumaleck, who revealed that younger mothers are more likely than

older mothers to practice exclusive breastfeeding.³² The finding in this study however disagreed with the study of Omololu, who found that older mothers are more likely to experience success with exclusive breastfeeding practices than younger mothers due to shyness young mothers feel in breastfeeding their children.³³

Results of the finding in Table 3, showed that women attending child care immunization services at AE-FUTHA had high exclusive breastfeeding practices by parity. Thus, Women with 1-4 children had higher exclusive breastfeeding practices than women with 5 children and above.

The results of this finding was expected based on the fact that women with fewer children have more time to care for their children than those with 5 children and above. This result supported the study by Tembo et al who found that the women with fewer children are more likely to practice exclusive breastfeeding than women with many children.³⁴ The present finding however disagreed with the study of Frazer that revealed that a woman who has had a successful exclusive breastfeeding practices for the previous babies will realize the benefits and continue to practice exclusive breastfeeding.²³

Results in Table 4 indicated that there was significant difference in the exclusive breastfeeding practices among women attending child care immunization services at Federal Teaching Hospital Abakaliki based on age. The result agreed with Jamil, whose finding indicated significant difference in the exclusive breastfeeding practices by maternal age.³⁵ The result of this finding is also in agreement with the study on factors influencing the practice of exclusive breastfeeding among mothers whose findings revealed a significant difference in the exclusive breastfeeding practices by age.³⁶

Results in Table 5 showed that there was no significant difference in the extent of exclusive breastfeeding practices among women attending child care immunization services at Federal Teaching Hospital Abakaliki based on parity. The result of this finding is in line with Ali, who conducted a study on exclusive breastfeeding: mothers' awareness and health care providers practice during antenatal visits at Abia State and found no significant difference in between exclusive breastfeeding practice by parity.³⁷ The present result however disagreed with the study of Frazer and Cooper whose findings indicated a significant difference in the exclusive breastfeeding practice by parity.²³

Limitations

The present study is not without some limitations. Thus, the method of data collection was quantitative cross-sectional survey using closed ended questionnaire which may not have captured all the predictors of exclusive

breastfeeding practices among mothers attending child care immunization services in the area.

The study suggested the use of qualitative data collection like focus group discussion and/or in-depth interview. Hence, FGDs have the potential to facilitate group interaction which would help to understand other predictors of exclusive breastfeeding practices among mothers. Also, the current study did not capture pregnant mothers in rural communities in the state to strengthen the generalizability of the findings.

CONCLUSION

Exclusive Breastfeeding has been accepted globally as most vital intervention for reducing infant mortality and ensuring optimal growth and development of children. The present study has revealed amongst others that women attending child care immunization services at AE-FUTHA had high exclusive breastfeeding practices. The study however, concluded that for the high exclusive breastfeeding practices to be sustained, health educators, government, and health workers should embark on seminars, workshop, and house to house campaign especially in rural areas where the present study do not cover to educate the women of child bearing age on the benefits of exclusive breastfeeding practices. This will help to sustain the high practices of exclusive breastfeeding among the women in Ebonyi state.

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REFERENCES

1. Kayode OO, Oyedeji AS, Alabi QK. Factors affecting exclusive breastfeeding practices among working-class women in Osun State, Nigeria. *J Public Health Afr*. 2023;14(6):2191.
2. Okoroiwu G, Ubosi N, Aliyu SM, Eya CP. Knowledge, Attitude and Practice of Exclusive Breastfeeding amongst Mothers of Infants in Gwagwalada Area Council, FCT, Abuja, Nigeria. *J Appl Sci Environ Manag*. 2021;25(1):127-32.
3. WHO. Indicators for assessing infant and young child feeding practices: conclusions of a consensus meeting held 6-8 Nov, 2007. Washington: WHO; 2017.
4. Horta BL, Bahl R, Martines JC, Victora CG. Evidence on the long-term effects of breastfeeding: systematic reviews and meta-analyses. Geneva, Switzerland: WHO; 2017.

5. Martin CR, Ling PR, Blackburn GL. Review of Infant Feeding: Key Features of Breast Milk and Infant Formula. *Nutrients*. 2016;8(5):279.
6. UNICEF, WHO. Baby Friendly Hospital Initiatives, Revised, Updated and Preliminary Version; 2003. Available at: <https://www.unicef.org/media/95191/file/Babyfriendlyhospitalinitiativeimplementationguide2018.pdf>. Accessed on 01 November 2024.
7. Jolly N. Community based peer counselors for support of exclusive breastfeeding. *Int Breastfeed J*. 2008;25:101-6.
8. Dodeson CL. Breast feeding initiation and duration: a 1990 – 2000 literature review. *J Obstetr Gynecol*. 2010;31(1):12-32.
9. Section on Breastfeeding. Breastfeeding and the use of human milk. *Pediatrics*. 2012;129(3):e827-41.
10. Essien N, Sampson U. Factors influencing the practice of exclusive breastfeeding among mothers in Ikot Omin, Calabar Nigeria. *American J Nursing Sci*. 2015;4(1):16-21.
11. Centers for Disease Control and Prevention. Breastfeeding report card, 2014. Available at: <http://www.cdc.gov/breastfeedingpdf/2014breastfeedingreportcard>. Accessed on 01 November 2024.
12. Alemayehu T, Haidar J, and Habte D. Determinants of Exclusive Breastfeeding practices in Ethiopia. *Ethiop.J.Health Dev*. 2009;23(1):12-8.
13. Jama A, Gebreyesus H, Wubayehu T, Gebregyorgis T, Teweldemedhin M, et al. Exclusive breastfeeding for the first six months of life and its associated factors among children age 6-24 months in Burao district, Somaliland. *Int Breastfeed J*. 2020;15(1):5.
14. Agampodi SB, Agampodi TC, Silva A. Exclusive breastfeeding in Sri Lanka: problems of interpretation of reported rates. *Int Breastfeed J*. 2009;4:14.
15. WHO. Federal Ministry of Health National Policy on Infant and Young Child Feeding in Nigeria, 2010. Available at: <https://extranet.who.int/default/filesstore>. Accessed on 11 September 2023.
16. UNICEF. National, Regional and Local Strategies for Breastfeeding: UK Baby Friendly Initiative. Progress for children. A Report Card on Nutrition. State of the World's Children, 2017. Available at: <https://www.unicef.org/morocco/media/1551/file/State%20of%20the%20World's%20Children%20Report>. Accessed on 11 September 2023.
17. Campos AM, Chaoul Cde O, Carmona EV, Higa R, do Vale IN. Exclusive breastfeeding practices reported by mothers and the introduction of additional liquids. *Rev Lat Am Enfermagem*. 2015;23(2):283-90.
18. Oddy WH, Sly PD, Klerk NH, Landau LI, Kendall GE, Holt PG, et al. Breast feeding and respiratory morbidity in infancy: a birth cohort study. *Arch Dis Child*. 2003;88(3):224-8.
19. Ajayi PN. The theory of planned behavior. *Organiz Behav Human Dec Process*. 2011;50(2):179-211.
20. Shirima R, Gebre-Medhin M, Greiner T. Information and socioeconomic factors associated with early breastfeeding practices in rural and urban Morogoro, Tanzania. *Acta Paediatr*. 2001;90(8):936-42.
21. Elyas L, Mekasha A, Admasie A, Assefa E. Exclusive Breastfeeding Practice and Associated Factors among Mothers Attending Private Pediatric and Child Clinics, Addis Ababa, Ethiopia: A Cross-Sectional Study. *Int J Pediatr*. 2017;2017:8546192.
22. Underwood S, Pridham K, Brown L, Clark T, Frazier W, Limbo R, et al. Infant feeding practices of low-income African American women in a central city community. *J Community Health Nurs*. 1997;14(3):189-205.
23. Frazer DM, Cooper MA. Myles text book for midwives. 14th ed. London: Churchill Living stone; 2009.
24. Rosenstock IM. The Health Belief Model and Preventive Health Behavior. *Health Education Monographs*. 1974;2(4):354-86.
25. Rosenstock IM. The Health Belief Model and Preventive Health Behavior. *Health Edu Monog*. 1974;2(4):354-6.
26. Ojong IN, Chiotu C, Nlumanze N, Ferdinand F. Factors Influencing the Practice of Exclusive Breastfeeding among Mothers in Tertiary Health Facility in Calabar, Cross River State, Nigeria. *American J Nurs Sci*. 2015;4(1):16-21.
27. Ebonyi State Ministry of Information. History of Ebonyi State, 2022. Available at: <https://www.ebonyistate.gov.ng/Ministry/Information>. Accessed on 11 June 2023.
28. Ebonyi State Ministry of Health. Ebonyi State Strategic Health Development Plan, 2022. Available at: <https://www.ebonyistate.gov.ng/Ministry/Health>. Accessed on 11 June 2023.
29. Ogbazi, N, Okpala O. Educational Research: Basic Issues and Methodology. Ibadan: Wisdom Publishers Ltd; 1994.
30. Ukegbu AU, Ebenebe EU, Ukegbu PO, Onyeonoro UU. Determinants of breastfeeding pattern among nursing mothers in Anambra State, Nigeria. *East Afr J Public Health*. 2011;8(3):226-31.
31. Christopher, A. Awareness and Involvement of exclusive breastfeeding practice among rural residents of Nsukka, Nigeria. *Res Gate*. 2015.
32. Adulmaleck KN. Knowledge, Attitude and Practices of Exclusive antenatal clinic in Aminu Kano Teaching hospital. *Int Breastfeed J*. 2016;7:1-2.
33. Hedberg IC. Barriers to breastfeeding in the WIC population. *MCN Am J Matern Child Nurs*. 2013;38(4):244-9.
34. Tembo C, Ngoma MC, Maimbolwa M, Akakandelwa, A. Exclusive breastfeeding practice in Zambia. *Med J Zambia*. 2015;42(3):124-9.
35. Jamil AS. Factors affecting breastfeeding practices in working women of Pakistan, 2015. Available at: InternationalBreastfeedingJournal.com/content. Accessed on 10 September 2023.
36. Sokan-Adeaga MA, Sokan-Adeaga AA, Sokan-Adeaga ED, Osibogun A, Edris H. Predictors of exclusive breastfeeding practice among nursing

mothers attending a health care facility in a peri-urban setting in Lagos State, Nigeria. *Afr Health Sci.* 2022;22(2):545-59.

37. Ali HM. Exclusive breastfeeding: mothers' awareness and health care providers practice during antenatal visits in Mvomero, Tanzania. *Int J Breastfeed.* 2012;7:1-2.

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