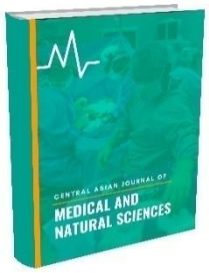
CENTRAL ASIAN JOURNAL OF MEDICAL AND NATURAL SCIENCES



Volume: 03 Issue: 02 | Mar-Apr 2022 ISSN: 2660-4159

http://cajmns.centralasianstudies.org

Birth Orderand Exclusive Breastfeeding Practices among Mothers with Two or More Children

1. **Ayinde, Abayomi O**
2. **Olugbenga Asaolu**
3. **Olubukola Alawale**

Received 24th Jan 2022,
Accepted 10th Feb 2022,
Online 8th Mar 2022

[1] University of Ibadan (Public Health Epidemiology)
yomi.ayinde@gmail.com

[2] Department of Public Health, Babcock University, Ilesan Remo, Ogun State.
gbengasaolu@gmail.com

[3] World Health Organization

Abstract: This study aimed to determine the association between birth order and exclusive breastfeeding practices in families with two or more children. Four null hypotheses were tested for the study. The research design used was a cross-sectional design. A sample size of 288 mothers with two or more children attending Adeoyo Maternity Hospital, Yemetu were selected using a systematic random sampling and a structured questionnaire was used to collect data on sociodemographic characteristics, birth history, knowledge and practice of breastfeeding. Chi-square test was used for bivariate analyses to test the significance of the association between categorical variables and the practice of exclusive breastfeeding. Logistic regression analysis was performed to identify independent predictors of exclusive breastfeeding. The level of of significance was at 5%. The mean age of mothers was 30.4 years (SD 4.4 years) while the mean age of the children was 56.0 months (SD 41.1 months). Exclusive breastfeeding was higher among the second and third children compared to the first, fourth and fifth children. However, on logistic regression, the differences were not significant. Mothers with three children were about three times more likely to have exclusively breastfed their children compared to mothers with four/five children (OR=2.168. 95%CI= 1.307-3.596). Mothers from other ethnic group different from Yoruba were significantly less likely to breastfeed exclusively than those who were Yoruba (OR=0.515, 95% CI=0.254-1.046).

Keywords: Exclusive breastfeeding, Practices, Birth order.

Based on the result of findings, the study recommended that Educational practices should be strengthened among mothers especially on the benefit of exclusive breastfeeding which makes it superior to artificial feeding.

Copyright (c) 2022 Author (s). This is an open-access article distributed under the terms of Creative Commons Attribution License (CC BY).To view a copy of this license, visit https://creativecommons.org/licenses/by/4.0/

Introduction

Breastfeeding is recommended by multiple health agencies as the preferred method of infant feeding for at least 1 year because of its numerous benefits, both immediate and long term, for both mothers and babies. In 2002, 71% of mothers in the United States initiated breastfeeding, close to the Healthy People 2010 goal of 75% (Ayinde, Ohue, Ayinde, Adeloye, Adeleke, Olatunde-Aiyedun & Ogunode, 2021).To maintain or even increase this proportion, it is necessary to determine the multiple factors that influence a woman's decision to breastfeed. Given that many women have more than one child, understanding the infant feeding experiences of individual mothers with multiple children provides an important public health perspective on infant nutrition (Idowu, Oluwasegun, Michael, Olatunde-Aiyedun & Jacob, 2021).

The promotion and support of breast-feeding is a global priority (Ekpo & Aiyedun, 2017). A vast scientific literature demonstrates substantial health, social and economic benefits associated with appropriate breast-feeding, including lower infant morbidity and mortality from diarrhea and other infectious diseases (Ojelade, Aiyedun & Aregebesola, 2019). In the longer term, insulin dependent diabetes mellitus, inflammatory bowel diseases and childhood lymphomas are less common in children who were breast-fed (Wilson et al., 1998). Breast-feeding promotes maternal-infant bonding and attachment and provides the child with a sense of security. Breast milk provides perfect nutrition because it optimizes growth, development and health in general. It provides all nutrients required for infants in the first six months of life.

Several studies have considered the impact of maternal demographics, employment, the health care system, maternal-child health medical issues, and cultural beliefs on breastfeeding initiation (Olatunde-Aiyedun & Ogunode, 2021). However, very few articles have focused on the relationship between birth order and breastfeeding. Two older studies, one small and the other limited to a single region of the United States, have shown that women tend to repeat the feeding decision they made with their first child with subsequent children. However, a more recent analysis of birth certificates in New Jersey found considerable fluctuations in breastfeeding status at hospital discharge for births to the same mother. Kruse et al. (2005) stated that mothers who breastfed their first child exclusively had higher rates of subsequent breastfeeding than those who supplemented breastfeeding with formula. In addition, it has also been suggested that the duration a woman breastfeeds her first born is an important predictor of whether or not she will breastfeed a later-born child. It is interesting to consider yet difficult to clearly delineate the association between birth order and duration of breastfeeding. In addition, often women stop breastfeeding when they have another pregnancy. However, very few articles have focused on the relationship between birth order and breastfeeding.

This study promote the understandings of infant feeding experiences which will provide an important public health prospective on infant nutrition. Several studies have considered impact of maternal demographics, employment, the health care system, maternal-child health medical issues, and cultural beliefs on breastfeeding initiation. (Scott et al .,1999 and Fein et al ., 1998) However, very few articles have focused on the relationship between birth order and breastfeeding initiation and duration. Thus this study sought to determine the association between birth order and breastfeeding practices in families with two or more children.

Purpose of the Study

To determine the association between the educational practices of mothers with two or more children as regards birth order and exclusive breastfeeding. The specific objectives of this study are to:

1. To determine the prevalence of knowledge, practice and attitude towards exclusive breastfeeding.
2. To describe the socio demographic characteristics associated with exclusive breastfeeding.

Copyright (c) 2022 Author (s). This is an open-access article distributed under the terms of Creative Commons Attribution License (CC BY).To view a copy of this license, visit https://creativecommons.org/licenses/by/4.0/

3. To determine relationship between knowledge and practice of exclusive breastfeeding.
4. To determine the association between birth order and exclusive breastfeeding

Research Hypotheses

Ho1: There is no prevalence, level of knowledge, practice and attitude of multiparous mothers towards exclusive breastfeeding.

Ho2: There is no relationship between the socio demographic characteristics and exclusive breastfeeding

Ho3: There is no relationship between knowledge and practice of exclusive breastfeeding.

Ho4: There is no relationship between birth order and exclusive breastfeeding.

Methodology

The study was carried out in adeoyo maternity hospital, yemetu located at Ibadan, Oyo State. Oyo State is one of the 36 states of Nigeria and is located in the South Western region of the country. The State was created in 1976 out of the old Western region. The study population consist of mothers aged 15 to 44 with two or more children that are attending both antenatal and post natal activities at adeoyo maternity hospital, yemetu located at Ibadan, Oyo State. Systematic random sampling technique was used to recruit subject for the study. Participants were interviewed as they came into the hospital. The process continued until the required number of sample size (288) was obtained. Data was entered, edited, and analyze with SPSS statistical software (version 15). This included the analysis of mother's socio-demographics data of age, marital status, occupation, educational level, ethnicity and mother's parities. Frequency table diagrams and graph for these data shall be computed. The main variable of interest was birth order; the main outcome measure were exclusive breastfeeding practices for each mother-child pair. Univariate analysis was employed to calculate frequencies and distributions of each variable. Chi-square test was used for bivariate analyses to test the significance of the association between categorical variables and the practice of exclusive breastfeeding. Logistic regression analysis was performed to identify the factors associated with the outcome variable.

Ethical Consideration

Ethical clearance was obtained from the ministry of health research and ethical committee. The research was at no cost to the participants as the researcher shall bear the cost.Informed written consent was obtained from the mothers and permission was taken from the hospital.

RESULTS

Section A: Socio demographic characteristics.

Table 1: Maternal Demographic Characteristics

MATERNAL DEMOGRAPHIC FACTOR	FREQUENCY (%)
MEAN AGE (SD) MOTHERS	30.4 (4.4)
AGE GROUPS	
20-24	15 (6.3)
25-29	85 (29.8)
30-34	110 (38.6)
35 AND Above	72 (25.3)
TOTAL	285 (100)

Copyright (c) 2022 Author (s). This is an open-access article distributed under the terms of Creative Commons Attribution License (CC BY).To view a copy of this license, visit https://creativecommons.org/licenses/by/4.0/

MOTHERS OCCUPATION	80 (28.1)
Skilled	205 (71.9)
Others	285 (100)
TOTAL	
FATHERS OCCUPATION	124 (43.5)
Skilled	161 (56.5)
Semi skilled	
TOTAL	
EDUCATIONAL LEVEL	43 (15.1)
Primary	159 (55.8)
Secondary	83 (29.1)
Tertiary/ post tertiary	285 (100)
TOTAL	
MARITAL STATUS	277 (96.9)
Married	9 (3.1)
Others	286 (100)
TOTAL	
ETHNICITY	268 (93.7)
Yoruba	18 (6.3)
Others	286 (100)
TOTAL	
RELIGION	123 (43.0)
Christianity	163 (56.9)
Islam	286 (100)
TOTAL	
NUMBER OF CHILDREN	161 (55.9)
Two children	95 (33.0)
Three children	32 (11.1)
Four/five children	288 (100)
TOTAL	

Table 1 shows the demographic characteristics of the mothers. The mean age of mothers was 30.4 years (SD 4.4 years). Majority of the mothers were aged between 30-34 years (38.6%) followed by those aged 25-29 years (29.8%), 35 years and above (25.3%) and 20-24 years (6.3%). There were more mothers in others occupations (71.9%) compared to those with skilled occupations (28.1%). Majority of the fathers had semi skilled occupations (56.55). Majority of the mothers were married (96.9%) and had secondary level of education highest (55.8%). A little above half of the mothers were Muslims (57.0%) while majority were Yoruba's (93.7%). Mothers with two children were more (55.9%) than those with three children (33.0%). Those with four children and above were only about 11.1%.

Section B: Childs vital information

Table 2: Demographic Characteristics of Children

DEMOGRAP HIC CHARACTERISTICS OF CHILDREN	FREQUENCY (%)
MEAN AGE	56.0 (41.4)
AGE OF CHILDREN(MONTHS)	
1-60	
61-144	486 (66.1)

Copyright (c) 2022 Author (s). This is an open-access article distributed under the terms of Creative Commons Attribution License (CC BY).To view a copy of this license, visit https://creativecommons.org/licenses/by/4.0/

145 and above	228 (31.0)
Total	21 (2.9)
	735 (100)
SEX	
Male	445 (60.5)
Female	290 (39.5)
Total	753 (100)

Table 2 shows the demographic characteristics of the children. The mean age of the children was 56.0 months (SD 41.1 months). Majority of the children were aged between 1-60 months (66.1%) and were males (60.5%).

Research Question 1: What is the prevalence, level of knowledge, practice and attitude of multiparous mothers towards exclusive breastfeeding?

Section C: Mothers knowledge of breastfeeding.

Table 3: Breastfeeding Practices Received by Mothers

BREASTFEEDING PRACTICES RECEIVED BY CHILDREN	FREQUENCY BY BIRTH ORDER (PERCENTAGE)				
	TOTAL	FIRST CHILD	SECOND CHILD	THIRD CHILD	FOURTH/FIFTH CHILD
EXCLUSIVE BREASTFEEDING					
Yes	462 (62.9)	163 (57.0)	191 (66.8)	91 (70.0)	16 (48.5)
No	273 (37.1)	123 (43.0)	95 (33.2)	38 (29.5)	17 (51.5)
Total	735 (100)	286 (100)	286 (100)	129 (100)	33 (100)
TIME OF INITIATION OF BREAST FEEDING					
Immediately	421 (57.8)	166 (58.5)	167 (59.0)	75 (58.6)	13 (39.4)
Hours	307 (42.2)	118 (41.5)	116 (41.0)	53 (41.4)	20 (60.6)
Days	728 (100)	284 (100)	283 (100)	128 (100)	33 (100)
Total	1456(54.3)	618(12.2)	566(14.0)	256(13.8)	66(14.3)
SUPPLEMENTARY FOODS GIVEN					
Multi mix	9 (30.0)	4 (36.4)	4 (33.3)	1 (14.3)	
Pap	5 (16.7)	1 (9.1)	2 (16.7)	2 (28.6)	
Pap and milk	2 (6.7)	1 (9.1)	1 (8.3)	0 (0.0)	
Baby formular	14 (46.7)	5 (45.5)	5 (41.7)	4 (57.1)	
Total	30 (100)	11 (100)	12 (100)	6 (100)	

Table 3 shows mother's breastfeeding practices for all children. Majority of the children were exclusively breastfed (62.9%) and were immediately put to the breast after delivery (57.8%). Children who were given baby formular had the highest percentage (46.7%) followed by those who were given multi mix (30.0%), pap (16.7%) and pap and milk (6.7%).

Copyright (c) 2022 Author (s). This is an open-access article distributed under the terms of Creative Commons Attribution License (CC BY).To view a copy of this license, visit https://creativecommons.org/licenses/by/4.0/

Research Question 2: Is there any relationship between the socio demographic characteristics and exclusive breastfeeding?

Section D: Pregnancy and delivery history.

Table 4: Bivariate analysis of exclusive breastfeeding with socio demographic characteristics of the mothers

SOCIO DEMOGRAPHIC CHARACTERISTICS	EXCLUSIVE BREASTFEEDING		Total	Chi square	P-value
	Yes (%)	No (%)			
AGE GROUPS					
20-24	13 (72.2)	5 (27.8)	18 (100)		
25-29	47 (55.3)	38(44.7)	85 (100)		
30-34	59 (53.6)	51 (46.4)	110 (100)	2.523	0.471
35 AND Above	43 (59.7)	29 (40.3)	72 (100)		
MOTHERS OCCUPATION					
Skilled	47 (58.8)	33 (41.3)	80 (100)		
Others	115 (56.1)	90 (43.9)	205 (100)	0.165	0.685
HUSBAND OCCUPATION					
Skilled	74 (59.7)	50(40.3)	124 (100)	0.719	0.396
Semi skilled	88 (54.7)	73 (45.3)	161 (100)		
EDUCATIONAL LEVEL					
Primary or non	25 (58.1)	18 (41.9)	43 (100)		
Secondary	86 (54.1)	73 (45.9)	159(100)		
Tertiary/ post tertiary	51 (61.4)	32 (38.6)	83 (100)	1.238	0.538
MARITAL STATUS					
Married	156 (56.3)	121 (43.7)	277 (100)		
Others	7 (77.8)	2 (22.2)	9 (100)	1.638	0.201
ETHNICITY					
Yoruba	149 (55.6)	59 (53.6)	268 (100)		
Others	14 (77.8)	4 (22.2)	18 (100)	3.386	0.066
RELIGION					
Christianity	78 (63.4)	45 (36.6)	123 (100)		
Islam	85 (52.1)	78 (47.9)	163 (100)	3.631	0.005
PARITY					
Two children	193 (61.1)	123 (38.9)	316 (100)		
Three children	202 (69.7)	88 (30.3)	290 (100)		
Four/five children	67 (51.9)	62 (48.1)	129 (100)	12.757	0.002

Table 4 shows the association between exclusive breastfeeding and demographic characteristics of the mothers. Majority of the mothers were aged between 20-24 years (72.2%) exclusively breastfed their children followed by those 35 years and above (59.7%), those aged 25-29 years (55.3%), and 30-34

Copyright (c) 2022 Author (s). This is an open-access article distributed under the terms of Creative Commons Attribution License (CC BY).To view a copy of this license, visit https://creativecommons.org/licenses/by/4.0/

years (53.6%). This was not significant at p= 0.47. The mothers who were skilled (58.8%) exclusively breastfed their children compared to those in others occupations (56.1%). This was not significant at p= 0.68. Majority of the husband (59.7%) that their wives exclusively breastfed had skilled occupations compared to those that were semi skilled (5.7%). This was not significant at p= 0.39. Mothers who had tertiary level of education (61.4%) who exclusively breastfed were the highest when compared to those who had secondary level of education (54.1%). This was not significant at p= 0.53. Majority (77.8%) of the mothers who exclusively breastfed were others (divorce, widows and single) compared to those that were married (56.3%) and had secondary level of education highest (55.8%). This was significant at p= 0.20. The mothers who were Christians (63.4%) exclusively breastfed compared to those were Islam (52.1%). This was significant at p= 0.005. Mothers who exclusively breastfed (77.8%) were other (hausa, igbo and others) compared to those who were Yoruba (55.6%). This was not significant at p= 0.06. A slightly greater proportion of mothers with three children reported exclusive breastfeeding (69.7%) compared to those with two (61.1%) and four/five children (51.9%). This was significant at p= 0.002.

Research Question 3: What is the relationship between knowledge and practice of exclusive breastfeeding?

Section E: Information on Breastfeeding practices of mothers.

Table 5: Bivariate analysis of exclusive breastfeeding with socio demographic characteristics of the children

DEMOGRAPHIC CHARACTERISTICS OF CHILDREN	EXCLUSIVE BREASTFEEDING		Total	Chi square	P-value
	Yes (%)	No (%)			
AGE OF CHILDREN(MONTHS)					
1-60	319 (65.6)	167 (34.4)	486 (100)	6.67	0.03
61-144	128 (56.1)	100 (43.9)	228 (100)		
145 and above	15 (71.4)	6 (28.6)	21 (100)		

Table 4.5 shows the association between exclusive breastfeeding and the demographic characteristics of the children. The children that were 145 months and above (71.4%) were exclusively breastfed were the highest compared to those who are between 1-60 months (65.6%) and those between 61-144 months (56.1%). This was however significant at p= 0.03. The children who were males (63.8%) were exclusively breastfed than those who were females (61.4%). This was not significant at p= 0.50

Table 6: Bivariate analysis of exclusive breastfeeding with birth order

BIRTH ORDER	EXCLUSIVE BREASTFEEDING		Total	Chi square	P-value
	Yes (%)	No (%)			
First child	163 (57.0)	123 (43.0)	286 (100)	12.276	0.006
Second child	191 (66.8)	95 (33.2)	286 (100)		
Third child	91 (70.5)	38 (29.5)	129 (100)		
Fourth/fifth child	16 (48.5)	17 (51.5)	33 (100)		
TIMEOF INITIATION OF BREASTFEEDING					
Immediately	270 (64.1)	187 (60.7)	421 (100)	0.889	0.346
Hours	151 (35.9)	121 (39.3)	308 (100)		

Copyright (c) 2022 Author (s). This is an open-access article distributed under the terms of Creative Commons Attribution License (CC BY).To view a copy of this license, visit https://creativecommons.org/licenses/by/4.0/

Table 4.6 shows the association between exclusive breastfeeding and birth order. A slightly higher proportion of third children had been exclusively breastfed (70.5%) followed by second children (66.8%), first children (57.0%) and fourth and fifth children (48.5%). This was significant at p= 0.006

Research Question 4: What is the relationship between birth order and exclusive breastfeeding?

Section F: Information on Mothers attitude to breastfeeding

Table 7: Logistic regresion of exclusive breastfeeding on variables

Variable	Odds ratio	95% CI or	P-value
ETHNICITY			
Yoruba	0.515	0.254-1.046	0.066
Others			
RELIGION			
Christianity	1.347	0.984-1.843	0.063
Islam			
CHILD AGE (yrs)			
0-5	0.517	0.177-1.508	0.227
5-10	0.418	0.149-1.169	0.096
10 and above			
BIRTH ORDER			
First child	0.919	0.373-2.268	0.855
Second child	1.355	0.577-3.182	0.486
Third child	1.540	0.652-3.638	0.325
Fourth/fifth child			
PARITY			
Two children	1.609	0.920-2.813	0.095
Three children	2.168	1.307-3.596	0.003
Four/five children	2.941		
TIME OF INITIATION OF BREASTFEEDING			
Immediately	0.864	0.638-1.170	0.346
Hours	2.069		

Table 4.7 shows the logistic regression output for exclusive breastfeeding. After adjusting for other variables, mothers who are Yoruba are two times less likely to have exclusively breastfed their children compared to mothers from other ethnic group. (OR=0.494, 95%CI= 0.247-0.986). Mothers who are Christians are more likely to have exclusively breastfed their children compared to mothers who are Muslims. (OR= 1.347, 95%CI= 0.984-1.843). The children who are between 1-60 months are six times less likely to be exclusively breastfed compared the children that were 145 months and above (OR= 0.517, 95%CI= 0.177-1.508) children who are between 1-60 months are two times less likely to be exclusively breastfed compared the children that were 145 months and above. (OR= 0.418, 95%CI= 0.149-1.169). The first child are less likely to be breastfed than the fourth child, second child is more likely to be breastfed than the fourth and fifth child while the third child are two times more likely to be exclusively breastfed than the fourth and fifth child (OR= 1.540, 95%CI= 0.652-3.638).

Mothers with three children were about two times more likely to have exclusively breastfed their children compared to mothers with four/five children. (OR= 2.168, 95%CI= 1.307-3.596). Mothers

Copyright (c) 2022 Author (s). This is an open-access article distributed under the terms of Creative Commons Attribution License (CC BY).To view a copy of this license, visit https://creativecommons.org/licenses/by/4.0/

who initiated breastfeeding immediately are less likely to be exclusively breastfed compared to those who breastfed hours after delivery.

DISCUSSION

This study provides insight the relationship between birth order and exclusive breastfeeding practices and their socio demographic factors among multiparous mothers.

SOCIO DEMOGRAPHIC CHARACTERISTICS

The mean age of the mothers was 30.9 ± 4.4 years and the age range was 20-45. The highest proportion (38.6%) of mothers was in the age group 30 - 34 when compared with the others and those (6.3%) in the age group 20 – 24 having the least. Majority of the participants were married when compared to others who were single, divorced or widowed. Among all the respondents more than half had a secondary educational level while the least were those who had a primary or none.

Mothers occupation was such that majority were either unskilled or semi skilled when compared to those that were skilled. Also the occupation of the husband was the same. The predominant ethnic group was Yoruba compared to Islam.

DEMOGRAPHIC CHARACTERISTICS OF THE CHILDREN

The mean age of the children was 56.0 ± 41.4 months and the age range was 1- 145 months. The highest proportion of the children was in the age group 1 – 60 months when compared with the others while those aged 145 months and above were the least. Majority of the children were males when compared to the females

BREASTFEEDING PRACTICES RECEIVED BY MOTHERS

The prevalence of exclusive breastfeeding was 62.9%. This figure although above average can still be considered low considering the increasing awareness on the importance of exclusive breastfeeding gives to mothers during ante natal care. This is however not consistent with the findings conducted in Enugu, Nigeria by (Uchendu et al., 2009) which reported that one third of the mothers exclusively breastfed their children.

Majority of the mothers breastfed their first and third child exclusively, this however decreased with the second child and then the fourth/ fifth child. Those shows an increase rate of breastfeeding with smaller family size < 4 children.

A little above half of the mothers initiated breast feeding in all their children immediately after birth. This was however not the case with mothers with four/five children who initiated breastfeeding hours after birth. This is likely due to the fact that mothers with more children are more experienced than those with fewer children and are less anxious on to initiate breastfeeding. This findings was similar was to the study conducted by Bhavana Singh, 2010 in Ghana in a university teaching hospital who reported that 62.0% of mothers responded to breast feeding within minutes and hours of delivery. Majority of the mothers gave their children irrespective of the birth order baby formular at the onset of weaning compared to other types of food used when weaning a baby. This could be due to the availability of a wide range of baby formular and the ability to prepare it easily at anytime compared o the other options which needs the mother to be at home before they are prepared. (Bhavana Singh, 2010)

ASSOCIATION BETWEEN EXCLUSIVE BREASTFEEDING AND SOCIO DEMOGRAPHIC CHARACTERISTICS OF THE MOTHERS

There was no association between selected socio demographic variables and exclusive breastfeeding except for the religion. The study showed that younger mothers between the ages of 20-24 years were

Copyright (c) 2022 Author (s). This is an open-access article distributed under the terms of Creative Commons Attribution License (CC BY).To view a copy of this license, visit https://creativecommons.org/licenses/by/4.0/

more likely to exclusively breastfeed their children compared to older mothers. Mothers within this age range are more likely to be unemployed and stay at home with their babies making exclusive breastfeeding possible. This is not in line with findings by Uchendu at al, 2010) which showed women who were relatively young (≤25 years) or old (≥36 years) had a lower EBFR compared with those aged between 26 and 35 years. Also, mothers with a higher level of education were more likely to exclusively breastfeed their children compare to mothers with less education. This is because mothers with a higher level of education are more likely to know and appreciate the importance and benefits of exclusive breastfeeding. The results were however not significant. This was consistent with previous studies which reported an association between education of mothers and exclusive breastfeeding (Ogbonna et al,2000, Mahgoub et al, 2002, Lliyasu Z. et al, 2005). The study also found that about two thirds of mothers who were Christians exclusively breastfed compared to those who were Muslims.. This findings are in line with studies by Bhavana Singh 2010 which reported that religion had a significant relationship with duration of breast feeding (18 months) with greater percentage of Christian mothers breastfeeding than Muslim mothers.

This study shows that mothers with three children were more likely to have exclusively breastfed their children compared to those with two and four/five children. This shows that exclusive breastfeeding is mainly the decision of the mother irrespective of the number of children she has. Uchendu et al., 2010 reported similar findings which said that smaller family size had a positive effect on EBF among women with ≤4 children per family, who achieved higher EBFRs than those with ≥5 children. Also studies by Ogunlesi T., 2010 in Sagamu Nigeria showed no association between parity and the practice of exclusive breastfeeding. However, it is self-evident that mothers can cope better with the demands of EBF when they have fewer babies who are well spaced out; this reduces the likelihood of 'burnout' and maternal exhaustion.

A slightly higher proportion of the third children were exclusively breastfed followed by second children and first children while the fourth and fifth children were the least. This result suggests that having more than three children presents the greatest challenge for breastfeeding every child. It also shows that increases in family size can cause a decrease exclusive breastfeeding practice.

ASSOCIATION BETWEEN EXCLUSIVE BREASTFEEDING AND CHARACTERISTICS OF THE CHILDREN

A greater proportion of the older children above the age of ten had been exclusively breastfed compared to the younger children. This could be as a result of mothers back then been more of house wives and having more time for their children. However, children under the age of five had a higher proportion that had been exclusively breastfed compared to those above the age of five. This is likely due to the increased awareness in recent times among mothers on the importance of exclusive breastfeeding.

Male children had a slightly higher proportion that were exclusively breastfed compared to females, this was however not significant. This could be as a result of males having a tendency to feed more been more active. Also in the African tradition males take precedence over females in many aspects of their live, feeding inclusive. This is in line with studies by Aye Kyi Kyi, 2000 reported that sex had no significant relationship with duration of breastfeeding (18 months).

A greater proportion of third children were exclusively breastfed compared to first and second children. This is likely due to mothers seeing the benefits of exclusive breastfeeding on their first and second child and wanting the same for their present child. However the proportion is lowest in the fourth/fifth child, this may be because mothers with more children may not be eager to keep you with the practice of exclusive breastfeeding with increase.

Copyright (c) 2022 Author (s). This is an open-access article distributed under the terms of Creative Commons Attribution License (CC BY).To view a copy of this license, visit https://creativecommons.org/licenses/by/4.0/

FACTORS AFFECTNG EXCLUSIVE BREASTFEEDING

After adjusting for other variables, the study showed that Christians were twice likely to have practiced exclusive breasting when compared to Muslims. This is because Christians are generally believed to be more educated and patronize health facilities where they are taught the benefits of exclusive breastfeeding compared to Muslims whose religion has a great role to play in their daily activities especially among women. This findings are in line with studies by Bhavana Singh 2010 which reported that religion had a significant relationship with duration of breast feeding (18 months) with greater percentage of Christian mothers breastfeeding than Muslim mothers.

Younger children aged 0-5years were twice less likely to have been exclusively breastfed compared to children above ten years of age. Those between 5-10 years of age were three times less likely to have been exclusively breastfeed compared to those above ten years of age.

The mothers that initiated breastfeeding immediately after the birth of their children were two times less likely to have practiced exclusive breastfeeding compared to those that initiated breastfeeding some hours after the birth of their children. This may be because they may be working class mothers and initiated breastfeeding immediately considering the fact that they may soon resume work and may not be able to continue breastfeeding the children.

First children were two times less likely to have been breastfed compared to fourth/fifth children. Second and third children were two times more likely to have been exclusively breastfed compared to fourth/fifth children.

These were however not significant except for mothers who had three children who were two times more likely to have been exclusively breastfed compared to fourth/fifth children. This shows that exclusive breastfeeding is mainly the decision of the mother irrespective of the number of children she has. Previous studies show that it is most likely that women with higher parity are usually older, less educated and less likely to involve in formal employment sector. Also, women with many children are more likely to be from rural areas and follow the traditional lifestyles (Aye, 2000)

Conclusion

The educational practices of the breastfeeding worldwide is increasing on the average based on the findings of this study. This result suggests that having more than four children presents the greatest challenge for breastfeeding every child. It also shows that increases in family size can cause a decrease exclusive breastfeeding practice. Despite the fact that previous studies found significant association between exclusively breastfeeding and some socio demographic factors, this study however only found ethnicity to be significant with exclusive breastfeeding.

Recommendations

In view of the above findings, the following recommendations are being put up to help achieve a desirable attitude and to adopt better practices of breast feeding in our community:

1. Health education should be strengthened among mothers and should cut across all social strata irrespective of level of education and class and should include information especially like properties and component of breast milk which makes it superior to artificial feeding.
2. Mothers should also be educated about the importance and duration of exclusively breast feeding for first six months of lives of their babies.
3. Mothers should also be taught about when to add supplementary food to breastfeeding and also how to prepare these feeds. They should also be taught the types of food which have the most nutritious value.

Copyright (c) 2022 Author (s). This is an open-access article distributed under the terms of Creative Commons Attribution License (CC BY).To view a copy of this license, visit https://creativecommons.org/licenses/by/4.0/

References

1. Ayinde Abayomi Oluwaseun, Ohue Michael Utomiabhi, Ayinde Taiwo Oluwaseun, Adeloye Adewale Idowu, Adeleke A. J., Olatunde-Aiyedun, T. G, & Ogunode Niyi Jacob. (2021). Determinants contributing to adherence with antiretroviral regimen of people living with HIV/AIDS in Babcock University Teaching Hospital. *Central Asian Journal of Medical and Natural Sciences*, 2(3), 253-270. https://doi.org/10.47494/cajmns.v2i3.210
2. Ekpo C.G. & Aiyedun T.G. (2017). Environmental Education: Essential tool for the attainment of Sustainable Development Goals in the 21st Century Nigeria. *The Researcher: A Journal of Contemporary Educational Research, 1(1), 124- 142.* http://www.researchersjournal.org/j2/papers/v1n1g.pdf
3. Fein SB, Roe B (1998). The effect of work status on initiation and duration of breastfeeding. *Am J Public Health*, 88, 1042–1046.
4. Idowu, A. A., Oluwasegun, A. A., Michael, O., Olatunde-Aiyedun, T. G., & Jacob, O. N. (2021). Prevalence and the risk factors associated with HIV-TB co-infection among clinic attendees in dots and art centres in Ibadan, Nigeria. *Central Asian Journal of Medical and Natural Sciences*, 2(3), 73-87. http://cajmns.centralasianstudies.org/index.php/CAJMNS/article/view/177
5. Kruse L, Denk CE, Feldman-Winter L. (2005). Longitudinal patterns of breastfeeding initiation. Matern Child Health J 2005;10:13–18.
6. Ojelade, I.A., Aiyedun, T.G. & Aregebesola, B.G. (2019). Environmental Education as an Instrument for awareness creation on the health effects of water contamination in Saburi Community of Federal Capital Territory (FCT), Abuja, Nigeria. *The Researcher: A Journal of Contemporary Educational Research,* 2 (1), 1- 16. http://www.researchersjournal.org/j2/papers/v2n1a.pdf
7. Olatunde-Aiyedun, T.G., & Ogunode, N.J. (2021). Shortage of professional science and environmental education teachers in Nigeria. *Asian Journal of Science Education*, 3 (1), 1-11. https://www.researchgate.net/publication/350819014_Shortage_of_Professional_Science_and_Environmental_Education_Teachers_in_Nigeria
8. Scott JA, Binns CW. Factors associated with the initiation and duration of breastfeeding: A review of the literature. Breastfeed Rev 1999;7(1):5–16.
9. Wilson AC, Forsyth JS, Greene SA, Irvine L, Hau C, Howie PW. Relation of infant diet to childhood health: Seven years follow up of cohort of children in Dundee infant feeding study. BMJ 1998; 316:21-25.

Copyright (c) 2022 Author (s). This is an open-access article distributed under the terms of Creative Commons Attribution License (CC BY).To view a copy of this license, visit https://creativecommons.org/licenses/by/4.0/