

Socio-Demographical Factors On Exclusive Breastfeeding Cessation Among Postpartum Mothers In Ibadan South-East Local Government Ibadan, Ibadan Oyo-State

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ABSTRACT

This study was designed to examine the socio-demographic factors associated with exclusive breastfeeding cessation among post-partum mothers in Ibadan South-East Local Government Area, Ibadan, Oyo State. The study was a facility-based descriptive cross-sectional research design that assessed 386 postpartum mothers that are fourteen consenting community women of advanced maternal age in Ibadan South East Local Government Area. A multi-stage sampling procedure was used to select 386 post-partum mothers from the study. The estimated population of Ibadan South-East LGA is 201,441 inhabitants with the most populated ethnic group in the area being the Yoruba. A semi-structured interviewer-administered questionnaire was used to collect information from the respondents. Descriptive statistics and Chi-square tests were used to analyze data and the level of statistical significance was set at $\alpha \leq 0.05$. The study find out that parity, education, husband's education, number of ANC attendance are associated with EBF cessation period among others. It was recommended that there is an urgent need of policies that will aim at providing acceptable food supplements that could aid the supply of breast milk among postpartum mothers, especially those with low socio-economic status. Similarly, these policies should also incorporate significant others (grandmothers, mothers-in-laws, and husbands) in the process of encouraging breastfeeding mothers. There is an indication that significant others play active roles in encouraging or discouraging exclusive breastfeeding practices among the study population.

KEYWORDS: *Exclusive Breastfeeding, EBF cessation, Socio-demographical*

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I. INTRODUCTION

Exclusive breastfeeding (EBF) refers to mothers providing only breast milk for their infants without any other liquids or solids. Exclusive breastfeeding until 6 months postpartum is a World Health Organization objective and benefits have been demonstrated for both mother and infant. The WHO has reported well-established short-term infant benefits of breastfeeding especially the reduction of mortality and morbidity from infectious disease. (World Health Organization 2014).

Worldwide, human breast milk is recognized as the optimal source for infant nutrition due to its unique composition of microorganisms, metabolites, multipotent stem cells, growth factors, and other components. Thus, it has clear short-term effects during childhood and adolescent.

Furthermore, the WHO conducted a systematic review and meta-analysis on the consequences of breastfeeding and found that there are long-term benefits to breastfeeding too; for example, there is strong evidence of an effect of breastfeeding on IQ (Horta and Victora, 2013)

Despite all the advantages of exclusive breastfeeding mothers still refused the children for the 6months may be due to socio-demographical factors which the study wants to find out. The social and cultural environments in which women reside may impact their ability to practice EBF. Friends and families have an influential role in infant feeding practices, either providing advice on early introduction of foods or actively feeding the infant during the first 6 months, with or without maternal consent. In Nepal, having friends who exclusively breastfed had a positive impact on the EBF of Nepalese women (Chandrashekar, 2007). Reasons for not practicing or discontinuing EBF included: it not being culturally acceptable, husband refusing to allow EBF, or receipt of advice from elders to discontinue. Social support was identified to aid in continuing EBF in Ghana (Ugboaja et al., 2013).

Earlier studies have documented cessation of breastfeeding but reasons vary by infant age, parity and geographical distribution (Lamberti, Walker, Noiman, Victora and Black 2011). Breastfeeding promotion is considered one of the essential elements of post-partum care. Given that breastfeeding has been observed to benefit both the mother's and infant's health, the World Health Organization (WHO) recommends that

breastfeeding is initiated within an hour of birth, exclusive breastfeeding (EBF) is performed for the first six months, and breastfeeding is continued for at least two years (WHO., 2019).

While, some studies sees a correlation between early cessation of EBF and socio demographic variables of the mothers such as education, occupation, age and birth order. These characteristics influenced the prevalence of cessation (Ratnayake and Rowel, 2018). In a study conducted on prevalence of EBF among Chinese breastfeeding mothers documented the prevalence of EBF as 55.1% of infants were exclusively breastfed for the first week of their life, 40.6% were mix-fed, and 4.3% were formula fed. Among the mothers, 53.8% declared having breastfeeding problems. The top 3 reasons why mothers added formula were inadequate breast milk supply (65.9%), worry that breast milk alone was not sufficient (12.3%), and pressure from family members (7.7%) Chekol, Biks, Gelaw, & Melsew, (2017)

Several factors have been documented by studies in Nigeria, that investigated factors influencing exclusive breastfeeding practices, and these studies showed fear of loss of weight, nature of the job, abstinence from certain foods and drugs, feeding problems of the baby, perception of breastfeeding as for rural and uneducated women, the health of the nursing mother, the drooping of breasts, Other studies show that mother's age, socioeconomic status, parity, psychosocial factors, and maternity-leave duration are the predictors of breastfeeding duration. Exclusive breastfeeding is also independently associated with perceived inadequate breast milk, cesarean section delivery, and feeding counseling during postnatal care (Vieira, Vieira, de Oliveira, Mendes, Giugliani and Silva 2014; Kasahun Wako, Gebere and Neima,2016). However, there is a dearth of studies that evaluate the factors for withdrawing the process of breastfeeding during the first six months of a child's life the lower abdominal pain. This study observed the association between the number of antenatal care attendance and the cessation period of exclusive breastfeeding is in line with the findings from studies by Chekol et al. (2017) among Ethiopia mothers.

Biks, Gelaw and Melsew, 2017 on exclusive breastfeeding and mothers' employment status in Gondar town, Northwest Ethiopia revealed that the overall breastfeeding practice was 34.8% as others stopped EBF before the end of the first 6 months. According to McCann (2007), less than 50% of women enrolled in a Women, Infants, and Children (WIC) program-initiated breastfeeding, and less than 25% of those women were breastfeeding their infants at 6 months postpartum.

Also, the Lande et al. (2003) study noted similar data for exclusive breastfeeding at 6 months of age. For example, compared to an odds ratio of 1.00 for with 10 years or less of education, an adjusted odds ratio of 1.46 was recorded for women with 11-12 years of education. A woman possessing 13 or more years of education was calculated as having an adjusted odds ratio of 2.43. These findings support the previously noted research indicating that maternal education greatly correlates with initiation and length of breastfeeding. Taveras (2005) conducted a study to evaluate the association between breastfeeding discontinuation at 2 and 12 weeks postpartum and factors they considered to be "amenable to intervention".

There is a correlation between early cessation of EBF and socio-demographic variables of the mothers such as education, occupation, age, and birth order. These characteristics influenced the prevalence of cessation (Ratnayake and Rowel, 2018). A study conducted on the prevalence of EBF among Chinese breastfeeding mothers documented the prevalence of EBF as 55.1% of infants were exclusively breastfed for the first week of their life, 40.6% were mix-fed, and 4.3% were formula fed. Among the mothers, 53.8% declared having breastfeeding problems. The top 3 reasons why mothers added formula were inadequate breast milk supply (65.9%) worry that breast milk alone was not sufficient (12.3%), pressure from family members (7.7%) (Chekol, Biks, Gelaw and Melsew, 2017) exclusive breastfeeding and mothers' employment status in Gondar town, Northwest Ethiopia revealed that the overall breastfeeding practice was 34.8% as others stopped.

According to a study carried out on Barriers to postnatal care and exclusive breastfeeding among urban women in southeastern Nigeria, results revealed that about 13% of respondents were not practicing EBF due to time constraints as well as their husband's refusal (Adeyinka, Falaye, and Aremu, 2008). A study revealed that more than 15% of total participants had mentioned family members' influence; especially mother-in-law insisted persistently to provide additional food before the child reached six months. Some mothers indicated that though they knew the baby should be given exclusive breast milk for six months, they gave their children cow milk after about four months as their mother-in-law, and sister-in-law wanted the baby to get used to family foods.

Again, according to Fabian (2020), employed women who return to work after giving birth must cope with the "ecosystem" of the work environment, which includes attitudes of coworkers, length of maternity leave, length of working shifts, and hourly wages or salary. In their study, the researchers found that women who were employed had a 9% lower rate of breastfeeding at 6 months postpartum than women who were unemployed. Before returning to work, the employed women in their study felt it was necessary to meet with their managers to discuss breastfeeding. Women who were offered longer maternity leave were more likely to maintain breastfeeding upon their return to work and reported having an easier transition that combined both their breastfeeding needs and work obligations. According to Thomas (2016) only a few women in the study mentioned that return to work and return to school were barriers that prevented exclusive breastfeeding;

however, there was not a significant relationship between return to work or school and duration of exclusive breastfeeding. These findings were in contrast with the findings of a research study conducted by Ryan, Zhou. And Arenaberg (2006) that indicated mothers who returned to work fulltime were less likely to continue breastfeeding than those who worked part-time or not at all. Research indicates that working fulltime had a negative effect on duration of EBF (Ogunlesi, 2010). Mothers who had been civil servants (employed) by occupation were 4.73 times more likely to cessation EBF compared to those housewife mothers, this could be because civil servant mothers may return to the workplace before 6 months of infant age and perceive their infant starved. Then, they will have a high likelihood of start other fluids or diets. (Bayemi et al.2020)

Statement of the Problem

Exclusive breastfeeding has great advantages to both child and mother according to WHO. However, in 2013 globally only 32, 07% infants were exclusively breastfeed until 6 months Heymann, Raub & Earle (2013). Although, the recent reports and investigations we have slight difference. Accordingly some researchers on exclusive breastfeeding basically based on employments and time factors on their work (Bai, & Wunderlich 2013,. Chekol, Biks, Gelaw and Melsew, 2017) This study was aimed at investigating socio demographical factors associated with exclusive breastfeeding cessation among post-partum mothers. Information derived from the identified factors will assist programme managers and health workers in developing feasible interventions and strengthening the existing factors on exclusive breast feeding. Moreover, it will create opportunity for policy debate and modification by a combination of the Ministry of Health, other Stakeholders and Policy makers, and all others affect that related to exclusive breast feeding by supporting exclusive breast feeding and reducing the morbidity and mortality rate to children.

Research Question

What is the level of Socio-demographical variables on exclusive breastfeeding among post-partum mothers in Ibadan South East Local Government Area, Ibadan, Oyo state.

Hypothesis

One Hypothesis was tested in this study:

H01: There is no significant association between socio-demographic characteristics of respondents and cessation period of exclusive breastfeeding among post-partum mothers in Ibadan South East Local Government Area, Ibadan, Oyo state.

II. Methodology

This study was a facility based descriptive cross-sectional that was designed to determine the socio-demographical factors s associated with exclusive breastfeeding cessation among post-partum mothers in Ibadan South-East Local Government Area, Ibadan, Oyo State. A multi-stage sampling procedure was used to select 386 post-partum mothers from the study. The estimated population of Ibadan South-East LGA is 201,441 inhabitants with the most populated ethnic group in the area being the Yoruba. The Yoruba and English languages are commonly spoken in this Local Government Area while the religions of Christianity and Islam are widely practiced in this area. Ibadan South-East Local Government

Area has 12 wards, with 29 health facility. The LGA is located in one of inner core region of Ibadan, where most residents are majorly traders and artisans, the houses are unstructured and has more than 70% government clinics with baby friendly initiatives and less than 30% private clinics and insufficient amount of creches and daycare for the residents due to poor hygiene and housing structure that are not suitable for schools that run crèches and daycare.

Data was collected with the use of a semi-structured interviewer-administered questionnaire that was developed for the study. The researcher conducted an extensive review to ensure appropriate content and face validity. To ensure that the instrument measures what is intended to measure, the researcher conducted a pre-test. a reliability coefficient of 0.7 was obtained which was considered to be reliable. Both descriptive and inferential statistical analysis methods were used to analyze the quantitative data. The result was presented using descriptive statistics such as frequencies, percentages and means with standard deviation, while chi square was used to test for significant association between the categorical variables.

Table 1a socio- demographics of respondents (N= 386)

Characteristics	Frequency (N)	Percentage (%)
Age group (years)		
20-29	81	21.0
30-39	198	51.3
40-49	96	24.9
50-59	11	2.8

Mean Age= 34. 58 (SD= 6.22) years		
Age of Index child (Months)		
2-3	98	25.4
4-5	244	63.2
6 and above	44	11.4
Mean age=5.25 (SD=6.07) months		
Sex of child		
Female	229	59.3
Male	157	40.7
Marital status		
Single	13	3.4
Married	324	83.9
Widowed	11	2.8
Separated	38	9.8
Religion		
Islam	175	45.3
Christianity	211	54.7
Number of children		
1-3	254	65.8
4 and above	132	34.2
Highest level of education		
No formal education	38	9.8
Primary	20	5.2
Secondary	129	33.4
Vocational	49	12.7
Tertiary	150	38.9
Partners' highest level of education		
No formal education	51	13.2
Primary	7	1.8
Secondary	194	50.3
Vocational	37	9.6
Tertiary	97	25.1

Table: 1b socio- demographics of respondents (N= 386)

Characteristics	Frequency (N)	Percentage (%)
Occupation		
Civil Servant	30	7.8
Housewife	12	3.1
Artisan	137	35.5
Labourer /Cleaner	7	1.8
Student	14	3.6
Unemployment	17	4.4
Trading	169	43.8
Husband's occupation		
Civil Servant	122	31.6
Artisan	23	6.0
Labourer/ cleaner	139	36.0
Others	102	26.4
Facility of ANC		
Home	69	17.9
Government hospital	168	43.5
Mission hospital	25	6.5
Private hospital	124	32.1
Initiation of ANC timing		
1 st trimester	322	15.3
2 nd trimester	62	16.1
3 rd trimester	2	0.5
Initiation of ANC		
10-15 times	59	15.3
16-20 times	43	11.1
21-25 times	96	24.9
25-30 times	188	48.7
Types of Marriage		
Monogamy	63	16.3
Polygamy	323	83.7
Monthly income (Naira)		
Less than 40,000	242	62.7
40,000	144	37.3

A total of 386 respondents were enrolled (with a response rate of 100%). The respondents' age ranged from 20 years to 51 years with a mean age of 34.58±6.22 years. About half of the respondents (51.3%) fell within age group of 30-39, closely followed by respondents within the age group 40-49 years (24.9%) while few respondents (2.8%) fell within the age group 50-59 years (Table 4.1a). Majority of the respondents (63.2%) had their index child age fell within age group 4-5 years, 25.4% of the respondents had index child fell within age group 2-3 years while

11.4% had index child aged 6 years and above (Table 4.1a). There were more respondents (59.3%) whose index child were female compared to 40.7% of respondents whose index child were male (Table 4.1a). Majority of the respondents (83.9%) were married, 9.8% were separated while few of the respondents (2.8%) were widowed (Table 4.1a). The prominent religion practiced was Christianity (54.7%) while others (45.3%) practiced Islam. There were more respondents (65.8%) with 3 children or less while 34.2% of the respondent had more than 3 children (Table 4.1a). About forty percent (38.9%) of the respondent had tertiary education, 33.4%, had secondary education and 12.7% had vocational education. Respondents whose partners had secondary education were the most common (50.3%), 25.1% of the respondents' partner highest level of education was tertiary, while few of the respondents (1.8%) had partners' highest level of education to be primary (Table 4.1a).

Less than half of the respondents (43.8%) were traders, 35.5% were artisans and 7.8% were civil servants (Table 4.1b). The respondents' spouse occupation were majorly labourers/cleaner (36%) and civil servant (31.6%). Majority of the respondents (43.5%) made use of government hospital for antenatal and 32.1% made use of private hospital (Table 4.1b). More than three quarter of the respondents (83.4%) were in their first trimester while 16.1% and 0.5% were in their second and third trimester respectively (See Table 4.1b). Almost half of the respondents (48.7%) had attended antenatal clinics between 25-30 times, while 24.9% and 15.3% had attended antenatal clinic 21-25times and 10-15times respectively (Table 4.1b). Almost all the respondent (83.7%) are from polygamy family. Respondents mean and median income were 38253.89 naira (± 30183.99) and 25000.00 naira respectively (Table 4.1b).

Hypothesis testing

H₀₁: There is no significant association between socio-demographic characteristics of respondents and cessation period of exclusive breast-feeding among post-partum mothers in Ibadan South East Local Government Area, Ibadan, Oyo State.

Table 3: Association between socio-demographics of respondents and cessation period of EBF.

Characteristics	EBF cessation period			X ²	P-value
	2 weeks N (%)	3 weeks N (%)	More than 3 weeks N (%)		
Age group					
Less than 35 years	43 (50.6)	62 (55.4)	15 (55.6)		
35 years and above	42 (49.4)	50 (44.6)	12 (44.4)	0.490	0.783
Religion Islam					
Christianity	43 (50.6)	61 (54.5)	14 (51.9)	0.300	0.861
Parity 1-3					
4 and above	42 (49.4)	93 (83.0)	12 (44.4)	30.324	*0.000
Education Primary or less					
Secondary	10 (11.8)	38 (33.9)	2 (7.4)	32.668	*0.000
Tertiary	33 (38.8)	16 (14.3)	15 (55.6)		
Husband's education Primary or less					
Secondary	42 (49.4)	58 (51.8)	10 (37.0)	9.507	0.050
Tertiary	16 (18.8)	31 (27.7)	3 (11.1)		
Occupation Unemployed					
Employed	7 (8.2)	10 (8.9)	2 (7.4)	0.076	0.963
Number of ANC attendance					
Less than 25 times	78 (91.8)	102 (91.2)	25 (92.6)	41.905	*0.000
25 times and above	65 (76.5)	34 (30.4)	16 (59.3)		
	20 (23.5)	78 (69.6)	11 (40.7)		

Income (naira) Less than 40,000	49 (57.6)	66 (58.9)	15 (55.6)		
40, 000 and above	36 (42.4)	46 (41.1)	12 (44.4)	0.110	0.946
Total	85 (100.0)	112 (100.0)	27 (100.0)		

*Significant p-value

The association between ages of respondents and cessation period of exclusive breastfeeding was not statistically significant. The data showed that age does not influence period of exclusive breastfeeding cessation. Researcher failed to reject null hypothesis as p-value equals 0.783. There is no significant association between respondents' religion and exclusive breastfeeding cessation period. Exclusive breastfeeding cessation period was not influenced by religion as pvalue equals 0.861. Therefore, the researcher failed to reject the null hypothesis. Parity was found to be statistically significant with cessation period of exclusive breastfeeding. Therefore researcher rejected the null hypothesis as p-value equals 0.000. Similarly, the association between respondents' education and exclusive breastfeeding cessation period was statistically significant as p-value equals 0.000. Therefore, the researcher rejected the null hypothesis. There was a significant association between respondents' husband level of education and cessation period of exclusive breastfeeding as p-value equals 0.050. Therefore, the researcher rejected the null hypothesis. The data showed that occupation of respondents' does not influence cessation period of exclusive breastfeeding. Researcher failed to reject the null hypothesis as p-value equals 0.963. There is no significant association between respondents' number of ANC attendance and cessation period of exclusive breastfeeding as p-value equals 0.000. Therefore, the researcher rejected the null hypothesis. The association between respondents' income and exclusive breastfeeding cessation period was not statistically significant as p-value equals 0.946. Therefore, the researcher failed to reject the null hypothesis

III. Discussion

In the present study, socio-demographics such as education, partner's education, parity and number of antenatal care attendance were associated with cessation period of exclusive breastfeeding. There were no significant association between socio-demographics including age of mothers, religion, occupation, income and cessation period of exclusive breastfeeding.

The association between parity and cessation period of exclusive breastfeeding is consistent with the findings of Chang et al. (2019). Their study showed that primiparity was both a risk factor and predictor of exclusive breastfeeding cessation at 1 and 2 months. Similarly, Ogunlesi (2010) in their study among nursing mothers in United Kingdom found that mothers with higher order birth were less likely to discontinue exclusive breast feeding compared to those with lower birth order babies. The implication of this finding is that mothers with more previous births are less likely to discontinue exclusive breastfeeding compared to those with few previous birth births. That is breastfeeding duration tends to increase with increasing parity (Bolling, Grant, Hamlyn and Thornton 2007; Lande et al., 2003). The reason for these findings has been linked to previous breastfeeding experiences of the mothers (Bolling et al., 2007).

The association between education and cessation period of exclusive breastfeeding in this study was similar to the findings of Chang et al. (2019) in their study to determine the factors associated with exclusive breastfeeding cessation at 1 and 2 months postpartum in Taiwan. They observed that lack of tertiary education was a risk factor and predictor of cessation of exclusive breastfeeding. The likely explanation is that mothers with higher level of education tend to initiate breastfeeding early as well as practice exclusive breastfeeding for long duration (Lande et al., 2003).

This study observed association between number of antenatal care attendance and cessation period of exclusive breastfeeding is in line with the findings from studies by Chekol et al. (2017) among Ethiopia mothers. Mothers who attend antenatal classes are well informed about issue such as lactation and inadequate milk production which might increase their intention to breastfeed for longer duration and therefore lower the possibility of discontinuing exclusive breastfeeding (Lewallen, 2006).

IV. Conclusion

In spite of the recent effort of the Nigeria Federal Ministry of Health towards ensuring improved exclusive breastfeeding practices, exclusive breastfeeding cessation is still prevalent among mothers in Ibadan East Local Government Area. The socio-cultural factors of these mothers could be contributing immensely to their behaviour towards breastfeeding practice. The study also concluded that the following factors parity, education, husband's education, numbers of ANC attendance is associated with EBF cessation period.

V. Recommendations

1. There is an urgent need of policies that will aim at providing acceptable food supplements that could aid the supply of breast milk among postpartum mothers, especially those with low socio-economic status.
2. Similarly, these policies should also incorporate significant others (grandmothers, mothers-in-laws, and husbands) in the process of encouraging breastfeeding mothers. There is an indication that significant others play active roles in encouraging or discouraging exclusive breastfeeding practices among the study population.
3. Promotion of women's education, husbands' engagement, encouraging antenatal care and exclusive breastfeeding counseling during antenatal care were recommended to improve exclusive breastfeeding practice.

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