
Factors influencing the practice of exclusive breastfeeding among mothers in tertiary health facility in Calabar, Cross River State, Nigeria

Ojong Idang Neji^{1,*}, Chiotu Catherine Nkemdilim², Nlumanze Faith Ferdinand³

¹Department of Nursing Science, University of Calabar, Cross River State, Nigeria

²Nursing Services Department, University of Abuja Teaching Hospital, Abuja, Nigeria

³School of Nursing, University of Calabar Teaching Hospital, Calabar, Nigeria

Email address:

Idangojong@yahoo.com (Ojong I. N.), Chiotu@yahoo.com (Chiotu C. N.), nfaithferdinand@yahoo.com (Nlumanze F. F.)

To cite this article:

Ojong Idang Neji, Chiotu Catherine Nkemdilim, Nlumanze Faith Ferdinand. Factors Influencing the Practice of Exclusive Breastfeeding among Mothers in Tertiary Health Facility in Calabar, Cross River State, Nigeria. *American Journal of Nursing Science*.

Vol. 4, No. 1, 2015, pp. 16-21. doi: 10.11648/j.ajns.20150401.13

Abstract: The study was conducted to investigate the factors influencing the practice of exclusive breastfeeding among nursing mothers in University of Calabar Teaching Hospital, Calabar, Cross River State, Nigeria. A non-experimental descriptive survey research design was used with a purposive sampling technique. The sample size was 300 nursing mothers. The instrument for data collection was a self developed questionnaire, and chi-square test analysis was used to test the relationship between variables. Majority of the respondents were aged 25 – 34. 138 (46%), attended secondary school 91(30.3%), married 192(64%). Result of the hypothesis testing on influence of educational level on practice of exclusive breast feeding, showed a non significant relationship with $\chi^2 = 6.61$, crit $\chi^2 = 7.815$, df 3, $P < 0.05$. Further results showed a statistical significant relationship between occupation and practice of exclusive breast feeding with $\chi^2 = 9.52$, crit $\chi^2 = 5.991$, df 2, $P < 0.05$ marital status and practice of exclusive breastfeeding with $\chi^2 = 23.9$, crit $\chi^2 = 9.815$, df 3, $P < 0.05$. The study suggests the need for clinical nurses to create awareness on the need for exclusive breastfeeding and the need for provision of crèches in ministries and parastatals for nursing mothers.

Keywords: Factors, Exclusive Breastfeeding, Mothers

1. Introduction

Human milk is species specific, having evolved over time to optimize the growth and development of the baby and young child. Breastfeeding is an integral part of the reproductive process with important implications for the health of the mother and baby⁽¹⁾. The 54th World Health Assembly in Geneva in May 2001, affirmed the importance of exclusive breastfeeding for 6 months and urged member states to support exclusive breastfeeding for six months as a global public health recommendation taking into account the findings of the WHO Expert Technical consultation on optimal duration of exclusive breastfeeding and to promote safe and appropriate complementary feeds with continued breastfeeding for up to two years or beyond⁽²⁾.

A high level of child survival in the society is necessary because the presence of children ensures the continuity of the

society⁽³⁾. In an attempt to increase EBF some studies have revealed factors positively associated with exclusive breastfeeding such as higher maternal educational level, gestational age greater than 37 weeks and mothers with previous experience of breastfeeding⁽⁴⁾. However, despite the benefits of exclusive breastfeeding, certain factors also identified in the literature include psychosocial factors such as beliefs and misconceptions⁽⁵⁾, socio-demographic factors such as age, educational level of mother and occupation of mother⁽⁶⁾.

Nevertheless, it is prudent to consider that as an eating habit, breastfeeding is intrinsically related to social, psychological, cultural and traditional patterns of a given population⁽⁵⁾. In Nigeria, feeding practices of the children are not uniform within the state, local government area district

and town. There are variations due to ethnicity, religious difference and various socio-economic strata. But despite these variations, the negative effects of poor nutrition cut across the various groups⁽⁷⁾. This fact justifies need for regional studies that allows more efficient action in regard to measures for intervention, based on knowledge of local reality. This study is aimed at investigating the factors influencing the practice of exclusive breastfeeding among mothers in Tertiary Health Facility in Calabar, Cross River State, Nigeria.

1.1. Purpose of the Study

The study was designed to investigate the factors influencing the practice of exclusive breastfeeding among nursing mothers in UCTH, Calabar. Specific objectives were:

- To ascertain the relationship between level of education and the practice of exclusive breastfeeding.
- To ascertain the relationship between mother's occupation and the practice of exclusive breastfeeding.
- To determine the influence of marital status on the practice of exclusive breastfeeding.

1.2. Significance of the Study

1. Recommendations from this study if implemented will improve the level of practice and compliance to EBF thus reduce infant mortality and morbidity.
2. Educationally, findings from this study will aid the nurse/midwife during counselling on antenatal visit thus increase the practice of EBF.
3. The study will also provide a baseline information for future researchers in relevant topic.

1.3. Research Hypothesis

- There is no significant relationship between level of education and the practice of exclusive breastfeeding.
- There is no significant influence between mother's occupation and the practice of exclusive breastfeeding.
- There is no significant relationship between marital status and practice of exclusive breastfeeding.

2. Literature Review

2.1. Socio-Demographic Factors Influencing Exclusive Breastfeeding

Certain socio-demographic factors identified in the literature review tend to influence the practice of EBF were age, educational level, marital status and occupation of mothers (7, 8). Age as identified in a study by (9) as a contributory variable to the determination of breastfeeding pattern among women in Kogi the result showed that mothers between age 25 years – 35 years practiced EBF more than women 15 – 24 years.

Educational level of the mother has been identified as a factor which significantly influences the acceptance and practice of EBF among major ethnic group in Kogi State,

Nigeria⁽⁸⁾. According to the authors most of the women who had formal education reside and work in the urban centres that have baby friendly hospitals. Secondly they were exposed to the mass media and hand bills on EBF. All these factors create awareness on the benefit of breastfeeding resulting in acceptance and practice of EBF. Educational level has been affirmed by HBM⁽¹⁰⁾ and HPM⁽¹¹⁾ as a factor that can influence the practice of health promoting behaviour like EBF for the infants.

Marital status is one of the socio-demographic variables that can influence the practice of EBF. A study conducted by⁽¹²⁾ revealed that 64% of women studied in Ikot Omin, Cross River State practiced EBF, while 8.3% not married did not practiced EBF. Also a significant relationship exist between marital status and practice of EBF when the calculated X_2 of 27.8 was greater than critical X_2 of 9.48 with 4 degrees of freedom. Fathers have an important influence on maternal decision in relation to EBF and intended duration strongly predicted actual duration^(8, 11).

It was also found out that low commitment level, lack of social support and lack of prior exposure to breastfeeding were risk factors for abandoning EBF⁽¹³⁾.

2.2. Socio-Economic Factors Influencing Exclusive Breastfeeding

In the developing countries, urbanization, increasing levels of education, standard of living occupation and income affect the practice of EBF negatively. By contrast, in developed countries (e.g. USA, Sweden and Australia), EBF is more prevalent among educated women in urban areas, although the length of EBF remains short⁽¹³⁾, of the factors studied to date, urban – rural dichotomy seems to have the most consistent affection on EBF practice. In a study by⁽¹⁴⁾ on socio-economic factors and EBF among mothers in Yoruba, study showed that breastfeeding was held in high esteem and 51% respondents practiced EBF with ease. He went further to state that problem arise when Yoruba mothers have to work outside the home, formula feeding is usually given during these period, while breastfeeding is done before leaving the house in the morning and in evening when they returned. It was also found out by⁽¹⁵⁾ that a high maternal education level, small family size and good income promote EBF, while a large family size, low income and family opposition especially from grand parents restrained EBF practice. A study by^(14, 16) on socio-economic factors influencing EBF found that among the 312 women studied, 53% were unable to exclusively breastfed their babies due to large family sizes, 72.6% due to poor income and occupation. In contrast, 70.2% were able to practice EBF although not up to 6 months due to high maternal educational level, 68.3% due to small family size and mothers occupation⁽¹⁷⁾.

In another study by⁽¹⁸⁾ on socio-economic factors and exclusive breastfeeding, the result revealed that among the 215 women studied, 78.2% were low income earners, practiced EBF longer as compared with 49.4% of the high income earners that had difficulties. Also their occupation did not affect EBF as babies were fed on demand⁽¹⁹⁾.

Breastfeeding a baby at least once every 2 – 3 hours encouraged the constant supply of milk and breastfeeding about 8 times a day tend to sustained copious milk supply. This result in many working mothers finding it difficult in meeting this requirement if their job does not allow opportunity to breastfeed.

3. Materials and Methods

3.1. Research Design

The study adopted a descriptive survey which was institution based.

3.2. Research Settings

The setting of the study, was Cross River State which is one of the thirty six (36) states of the Federal Republic of Nigeria and it has eighteen (18) Local Government Areas (LGAs). The study site is University of Calabar Teaching Hospital which is the only tertiary institution in the state with adequate equipments and facilities for training nurses and accept referrals of cases from primary and secondary health facilities in the state.

3.3. Population

The target population consisted of all nursing mothers in the maternity annex of UCTH from January – June, 2014, totally 1182 from hospital records. The accessible population was 300 mothers visiting family medicine unit and postnatal ward of the maternity annex. 100% of the accessible population of mothers were used. Exclusion criteria include mothers not booked in the hospital and not attending their ANC clinics.

3.4. Research Instrument

A self developed structured questionnaire was used. Positive comments by psychometric experts were suggestive for the face validity of the instrument. A measure of its stability over time was assessed using a test-retest procedure which yielded a reliability coefficient of 0.72% after an interval of two weeks.

3.5. Data Analysis

Data generated were analyzed using descriptive and inferential statistics.

3.6. Administrative Design

An official permission was obtained from the institution then informed consent was obtained from the subjects who participated in the study.

3.7. Human Rights and Ethical Consideration

The subjects were chosen according to criteria and questionnaires were administered by the researchers to

respondents after their informed consent was obtained to participate in the study. Thereafter, the purpose of the study was explained to all participants and their consents obtained. Anonymity was maintained and it was strictly confidential.

4. Results and Discussion

4.1. Socio-Demographic Data n = 300

Table 1. Showing frequent distribution and percentages of socio-demographic data of nursing mother in UCTH

S/No	Variables	Frequency	Percentage
	Age in years		
	15 – 24	29	9.7
1.	25 – 34	138	46.0
	35 – 44	97	32.3
	45 years and above	36	12.0
	Total	300	100
	Marital Status		
	Single	25	8.3
2.	Married	192	64.0
	Divorce/Separated	59	19.7
	Widow	24	8.0
	Total	300	100
	Educational level		
	Non-formal education	60	20.0
3.	Primary	62	20.7
	Secondary	91	30.3
	Tertiary	87	29.0
	Total	300	100
	Occupation		
	Self-employed	93	31.0
4.	House wife	133	44.3
	Civil servant	74	24.6
	Total	300	100

The result shown on Table 1 on respondents socio-demographic data revealed that most respondents were in the age 24 – 34 years, majority 91(30.3%) attained secondary education one hundred and ninety two (64%) were married and 24(8%) were widow. On occupation, 133(44.3%) were housewives, 93(31%) were self-employed, while 74(24.6%) were civil servants.

4.2. Results for Hypotheses

4.2.1. Research Hypothesis 1

There is no significant relationship between level of education and practice of exclusive breastfeeding among nursing mothers in UCTH

To test this hypothesis, chi-square statistics was used.

Table 2. Contingency chi-square analysis to determine the relationship between level of education and practice of EBF among nursing mothers in UCTH (n = 300).

S/No	Level of Education	Practice of EBF		Total	Calx ₂	Critx ₂	Df
		Complete practice EBF	Incomplete practice EBF				
1.	Non-formal education	40(31.4)	20(28.6)	60	6.61	7.815	3
2.	Primary	32(32.4)	30(29.6)	62			
3.	Secondary	45(47.6)	46(43.4)	91			
4.	Tertiary	40(45.5)	47(41.5)	87			
	Total	157	143	300			

Not significant at 0.05; df = 3, X₂ calculated 6.61, X₂ critical = 7.815

The result on Table 2 showed a non significant relationship between level of education and practice of exclusive breastfeeding. Using chi-square test analysis, revealed a X₂ calculated of 6.61 lesser than a X₂ tabulated of 7.815 at 0.05 level of significance with 3 degrees of freedom. Hence no significant relationship between level of education and

practices of EBF.

4.2.2. Hypothesis 2

There is no significant relationships between occupation and practice of EBF among nursing mothers in UCTH.

To test this hypothesis, chi-square statistics was used.

Table 3. The contingency chi-square (X²) analysis of the influence of occupation on practice of EBF among nursing mothers in UCTH (n = 300).

S/No	Occupation	Practice of EBF		Total	Calx ₂	Critx ₂	Df
		Complete practice EBF	Incomplete practice EBF				
1.	Self-employed	50(44.6)	43(48.4)	93	9.52	5.99	5
2.	House wife	70(63.8)	63(69.2)	133			
3.	Civil Servant	24(35.5)	50(38.5)	74			
	Total	144	156	300			

Significant at 0.05; df = 2, X₂ calculated 9.52, X₂ critical = 5.991

The result on table 3 showed that the X₂ calculated of 9.52 was greater than the X₂ tabulated of 5.991 at 0.05 level of significance with 2 degrees of freedom. Hence there was significant relationship between nursing mothers occupation and practice EBF.

4.2.3. Hypothesis 3

There is no significant relationship between marital status and practice of EBF among nursing mothers in UCTH.

To test this hypothesis, chi-square statistics was used.

Table 4. The contingency chi-square (X₂) analysis of the influence of marital status on practice of EBF among nursing mothers in UCTH n = 300

S/No	Marital status	Practice of EBF		Total	Calx ₂	Critx ₂	Df
		Complete practice EBF	Incomplete practice EBF				
1.	Single	9(11.4)	16(13.6)	25	23.9	7.815	3
2.	Married	77(87.7)	115(104.3)	192			
3.	Divorce/separated	29(26.9)	30(32.1)	59			
4.	Widow	22(11)	2(13)	24			
	Total	137	163	300			

Significant at 0.05; df = 3, X₂ Calculated 23.9, X₂ tabulated 7.815

Using X₂ statistical test analysis, the result in table 4 above, showed a statistical relationship between marital status and practice of EBF, when the X₂ calculated of 23.9 was greater than X₂ tabulated of 7.815 at 0.05 level of significance with 3 degrees of freedom. Hence the null hypothesis was rejected meaning, no significant influence between nursing mother marital status and practice of EBF.

4.3. Discussion

4.3.1. Level of Education and Practice of Exclusive Breastfeeding

The result showed that there was no significant relationship between level of education and practice of exclusive breastfeeding.

The result is surprising because the study took place in a tertiary institution and majority of the respondents had

secondary and tertiary education. Breastfeeding is a traditional way of feeding the child therefore no formal education is needed to breastfeed the baby, although educational level of the mother has been identified as a factor which significantly influences the acceptance and practice of breastfeeding among major ethnic groups in Kogi State Nigeria⁽⁸⁾

4.3.2. Occupation and the Practice of Exclusive Breastfeeding

A significant relationship existed between occupation and the practice of education. The result of this study may be related to the area of the study. In this study, majority of the respondents were housewives and self employed who carried their new born babies wherever they went so as to feed them on demand. The action of feeding on demand is inconsonance with WHO and American Academy of

Paediatric that support the promotion of exclusive breastfeeding as the best method of feeding the baby⁽²⁰⁾. The study findings is in line with (7, 8) who identified occupation of mothers as a contributory variable to the determination of breastfeeding pattern among women in Kogi State.

4.3.3. Marital Status and Practice of Exclusive Breastfeeding

The result showed a significant relationship between marital status and practice of exclusive breastfeeding. Majority of the respondents were married women. The husband and other relatives can encourage exclusive breastfeeding as a social support system. Therefore the wives may have no option than to breastfeed. Also in support of the above, (4) in a study conducted by (12) among women in Ikot Omin on factors influencing exclusive breastfeeding, the result showed a statistical significant relationship between marital status and practice of exclusive breastfeeding. This result is also supported by (7, 8) who identified marital status as one of the contributory variable to the determination of breastfeeding.

4.4. Conclusion

From the findings of the study, it can be concluded that mothers occupation and marital status were major determinants of the duration and practice of exclusive breastfeeding.

Recommendations

In order to encourage the practice of exclusive breastfeeding in Cross River State, Nigeria, the following recommendations were made:

- Maternity leave for working mothers should be extended to at least 6 months or in the alternative employers should make provision for crèches or day care centres in ministries, parastatals and other working places where mothers can breast feed their babies.
- Clinical Nurses/Midwives should intensify their effort in the education of mothers on the benefits of exclusive breastfeeding at least for the first 6 months of baby's life.
- Lastly all the above mentioned variables that can influence the practice of exclusive breastfeeding should be considered in all interventions designed to improve the practice of exclusive breastfeeding.

References

- [1] Fraser, D. M., Cooper, M. A. & Nolte, A. G. (1st ed.). Myles textbook for midwives, African edition London, United Kingdom Churchill Livingstone, 2009.
- [2] WHO/UNICEF, The Innocent declaration on the protection, promotion and support of exclusive breastfeeding WHO/UNICEF: Geneva 2002.
- [3] Baby Milk action, update No 29 June 2001, Available at www.ibfan.org.
- [4] Lands, B., Kenneth, I. A. & Paterson, P. Infant feeding practices and associated factors in the first 6 months of life. Norwegian infant nutrition survey. *Journal of Paediatric* 2004 92(1), 152 – 161.
- [5] Grant, P. J. Counselling and assessing knowledge and skills of breastfeeding. Geneva; WHO Bulletin 2004 8(3), 17 – 21.
- [6] Kloeblen-Tarver, A. S., Thompson, N. J. & Miner, K. R. Intent to breast feed, the impact of attitude, norms, parity and experience. *American Journal of Health Behaviour* 26(3), 182 – 187.
- [7] Essien, N. C., Samson-Akpan, P. E., Ndebbio, T. J. & John, M. E.; Mothers knowledge, attitude, beliefs and practices concerning exclusive breastfeeding in Calabar. *West African Journal of Nursing* 2009, 11(1), 65 – 75.
- [8] Gastner, L. M., Morton, J., Lawrence, R. A., Naylor, A. J.: Breastfeeding and the use of human milk paediatrics 2006, 115(2), 496 – 502.
- [9] Ajayi, A. D., Hellandensis, J. & Odekunle, F. Socio-demographic correlates of breastfeeding practices among mothers in Kogi State, Nigeria, *West African Journal of Nursing* 2011, 22(1), 28 – 35.
- [10] Pender, N. J., Murdaugh, C. L. Parson, M. A.: Health promotion model revised 4th ed. Prentice Hall: New Jersey 2004.
- [11] Rosenstock, I. M. Historical origin of the Health belief model in Becker H. M. ed. *The Health belief model and personal health behaviour* Charles B. Slack Thorfare. New Jersey 2000.
- [12] Kronborg, H. & Vaeth, M. The influence of psychological factors on the duration of breastfeeding. *Journal of Public Health* 2004, 32(3), 210 – 216.
- [13] Essien, N. C. & Samson-Akpan, P. E. Factors influencing the practice of exclusive breastfeeding among women in Ikot Omin, Calabar, Nigeria, *Mary Slessor Journal of Medicine*, 2013, 12(1), 51 – 63.
- [14] Davis-Adetugbo, A. A. Socio-economic factors and the promotion of exclusive breastfeeding in rural Yoruba communities of Osun State, Nigeria, *Journal of Public Health* 2005 45(7), 155 – 160.
- [15] Aghaji, M. N.: Exclusive breastfeeding practice and associated factors in Enugu, Nigeria *West African Journal of Medicine* 2007, 31(1), 66 – 69.
- [16] Nwachukwu, A. E. & Nwachukwu, A. U.: Common factors responsible for less than six months period of exclusive breastfeeding among women in Nigeria. *Journal of International council for health physical education, Recreation sport and dance (ICHPER-SD)* 2007, 43(2), 30 – 35.
- [17] Sabifu, K., Evaluation of community level nutrition information of system *Annals of African medicine* 2006; 10, 120 – 126.
- [18] Scott, J. A. & Binns, C. W.: Factors associated with the initiation and the duration of breastfeeding. *Breastfeeding Review* 2004, 7(1), 5 – 15.
- [19] Uchendu, U. O., Ikefuna, A. N. & Emodi, I. J.: Factors associated with exclusive breastfeeding among mothers seen at the University of Nigeria Teaching Hospital. *South African Journal of Child Health* 2009, 3(1), 14 – 19.

- [20] World Health Organization. Exclusive breastfeeding child and adolescent health and development. World Health Organization Geneva: 2003.