



RESEARCH ARTICLE

EXCLUSIVE BREASTFEEDING PRACTICES AMONG NURSING MOTHERS ATTENDING ANTENATAL CARE IN ENUGU STATE, NIGERIA

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ARTICLE INFO

Article History:

Received 28th August, 2019

Received in revised form

04th September, 2019

Accepted 14th October, 2019

Published online 21st November, 2019

Keywords

Antenatal Care,
Exclusive Breastfeeding,
Nursing Mothers,
Practices.

ABSTRACT

Background: Exclusive breast-feeding (EBF) rates in Nigeria continue to fall below the WHO/UNICEF recommendation of 90% EBF in children less than 6 months in developing countries. Majority of the mothers are currently breastfeeding, but less than half of the mothers are exclusively breastfeeding. Despite the huge advantages of EBF and ill-effects of not exclusively breastfeeding, practice of EBF is not widespread in the developing countries like Nigeria. **Objective:** The aim of this study is to assess the exclusive breastfeeding practices among nursing mothers who attend antenatal care in Enugu State, Nigeria. **Methods:** Data collection was by using a validated 26-item structured questionnaire which was administered to four hundred and twelve (412) nursing mothers who attended antenatal care in the health centres in Enugu state. Data generated from the study were analysed using mean and standard deviation for the research questions while t-test statistics was used to test the null hypotheses 1 and 2, then ANOVA was used to test the hypothesis 3 at 0.05 level of significance. **Results:** The nursing mothers who had ante-natal visits for four times and above practise exclusive breast-feeding to a high level with a grand mean of 2.81 and a standard deviation of 0.55 for all the items. The nursing mothers in urban locations in Enugu State practice exclusive breastfeeding to a high level with a grand mean of 3.11 and a standard deviation of 0.36 for all the items. The unemployed nursing mothers generally have high level of practice of exclusive breastfeeding with a grand mean of 3.18 and a standard deviation of 0.29. This is followed by the self-employed nursing mothers who also practice exclusive breastfeeding to a high extent with a grand mean of 2.56 and a standard deviation of 0.15. **Conclusion:** Exclusive breastfeeding practice requires prompt attention in Nigeria as it has great benefits for child survival. Rural location, non-attendance/reduced number of ANC visits, and maternal employment negatively influence EBF practice among the nursing mothers in Enugu State, Nigeria. A prenatal EBF plan during antenatal care for every mother, distribution of leaflets on EBF practice with pictures to the mothers during ante-natal visit, deployment of more health workers to rural areas for effective EBF education, and extension of maternity leave up to the first six month of child's age to achieve the most favorable EBF practices are recommended.

INTRODUCTION

The importance of exclusive breastfeeding (EBF) increases the focus of many health agencies and public health programmers towards its promotion. Exclusive breastfeeding refers to the feeding of an infant with only breast milk and no other liquids or solids except for drops or syrups consisting of vitamins, minerals, or medicines (Centers for Disease Control and Prevention, CDC, 2007). The introduction of solid foods before six months of age is associated with increased rates of infection, reduced breast-milk production, disruption to the micro-biome and possibly obesity (Binns & Lee, 2014). Conversely, EBF offers protection against common infections during infancy, of which partial breastfeeding does not offer (Ladomenou, Moschandreas, Kafatos *et al.*, 2010).

Exclusive breastfeeding is the best for both the baby and the mother physically, socially and emotionally (Kramer & Kakuma, 2012; Duijts, Jaddoe, Hofman *et al.*, 2010). Supportably, health-policy strategies to encourage EBF for babies in all countries should be put in place (Duijts, Jaddoe, Hofman *et al.*, 2010). Similarly, Nigerian government established the baby-friendly-Hospital-initiative in many states of Nigeria in 1991 including Enugu State. This was to promote appropriate breast-feeding practice which is EBF as an international strategy for promoting national health care delivery systems (Salami, 2006). Moreover, the joint World Health Organization (WHO) and United National Children Fund (UNICEF) in 2003 held a meeting on the infant and young child feeding in Geneva with emphasis on EBF (WHO/UNICEF, 2003). The meeting produced the WHO international code of marketing of breast milk substitutes with the aim of safe guarding the adoption and practice of EBF. Precisely, on 21 May 1981 the WHO International Code of Marketing Breast Milk Substitutes was passed and the Code

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arose out of concern that the dramatic increase in mortality, malnutrition and diarrhoea in very young infants in the developing world was associated with aggressive marketing of formula. The Code prohibited any advertising of baby formula, bottles or teats and gifts to mothers or 'bribery' of health workers (Brady, 2012). The code made it compulsory that manufacturers should add on their tins that "breast-milk is the best for babies". This campaign was promoted in Nigeria by the then Minister of Health Professor Olukoye Ramsome Kuti who set up a goal on "initiation education programme" which forced producers of infant formula to stop free distribution of baby milk. Despite the laudable benefits and objectives of EBF, FHI- 360 (2009) lamented that mothers in developing countries such as Nigeria, seem not to accept and practice EBF. To that effect, the infant mortality rate in Nigeria for the period of 1999-2003 was about 100 deaths per 1000 live births (Federal Office of Statistics Nigeria and IRD/Macro International Inc. 2004). Nigeria neonatal mortality rate stagnated at 41 per 1000 live births between 1990 and 2013 (Akinyemi, Bamgboye & Ayeni, 2015). Non-exclusive breastfeeding (non-EBF) is a risk factor for many of the 2300 under-five deaths occurring daily in Nigeria – a developing country with approximately 40 million children (Ogbo, Page, Idoko *et al.*, 2018).

Exclusive breast-feeding rates in Nigeria continue to fall below the WHO/UNICEF recommendation of 90% EBF in children less than 6 months in developing countries (WHO UNICEF, 2009). Evidence shows that majority of the mothers (97.3%) are currently breastfeeding, but less than half of the mothers (47.0%) are exclusively breastfeeding (Egwuda & Bako, 2018). A study documents that only a small proportion (19%) of the Nigerian nursing mothers practice EBF with their major constraints to EBF to be: the perception that babies continued to be hungry after breastfeeding; maternal health problems; fear of babies becoming addicted to breast milk; pressure from mother-in-law; and pains in the breast (Agunbiade & Ogunleye, 2012). Indeed, the EBF rate in Nigeria is low and EBF practice is essential for Nigeria to achieve the child survival target (Agho, Dibley, Odiase *et al.*, 2011). Similarly, a study in Ghana reveals that 22 percent of neonatal deaths (death within the first month of life) are linked to not exclusively breast-feeding the newly born for at least six months of life (Edmond, Zandalic & Quigley, 2006). Despite the huge advantages of EBF and ill-effects of not exclusively breastfeeding, practice of EBF is not widespread in the developing countries like Nigeria (Cai, Wardlaw & Brown, 2012). This calls for action. The aim of this study is to assess the exclusive breastfeeding practices among nursing mothers who attend antenatal care in Enugu State, Nigeria.

Research Questions

- What are the exclusive breastfeeding practices of nursing mothers who attended antenatal care in Enugu State based on their number of antenatal visit?
- What are the exclusive breastfeeding practices of nursing mothers who attended antenatal care in Enugu State based on their residential location?
- What are the exclusive breastfeeding practices of nursing mothers who attended antenatal care in Enugu State based on their occupation?

Hypotheses

- Number of antenatal visit will not have significant difference in the exclusive breastfeeding practices of

nursing mothers who attended antenatal care in Enugu State.

- Residential location will not have significant difference in the exclusive breastfeeding practices of nursing mothers who attended antenatal care in Enugu State.
- Occupation will not have significant difference in the exclusive breastfeeding practices of nursing mothers who attended antenatal care in Enugu State.

MATERIALS AND METHODS

Research Design: The research design adopted was a descriptive survey design.

Area of the Study: The area of the study is Enugu State. It is one of the states in the South East geopolitical Zone of Nigeria. It is bounded in the east by Ebonyi State, in the West by Anambra State, in the North by Kogi and Benue States and in the South by Abia State. The state has 17 Local Government Areas (LGAs). Enugu State has a population figure of 3,267,837 persons (National Population Commission, 2006). Enugu is noted as a civil service state with those at the rural areas practising peasant farming while there are equally many traders and artisans.

Population of the Study: The population for the study involves nursing mothers who attended antenatal care in the available Health centres in the 17 local government areas of Enugu State.

Sample and Sampling Technique: Multi-stage sampling technique was used to select 412 nursing mothers who attended antenatal care in the health centres in Enugu state.

Instrument for Data Collection: The instrument for data collection was a 26-item structured questionnaire known as Exclusive Breastfeeding Practising Questionnaire (EBFPQ) developed by the researchers. The questionnaire was made up of Sections A and B. Section A contains 3 items designed to elicit responses on the number of antenatal visit, occupation and residential location of nursing mothers who attended antenatal care in Enugu State. Section B contains 23 items to elicit responses on the indices of exclusive breastfeeding practice. The response columns of EBFPQ were allocated scores as follows: very often (4), often (3), sometimes (2), and never (1).

Validation and Reliability of the Instrument: The instrument was subjected to face and content validity, and its internal consistency was obtained using Cronbach Alpha reliability coefficient.

Method of Data Collection: Copies of the questionnaire were administered by the researchers and four trained research assistants to the respondents.

Method of Data Analysis: Data generated from the study were analysed using mean and standard deviation for the research questions. A decision rule based on mean rating of 2.5 was set. The items with mean rating below 2.5 were considered as low practice while items with mean at 2.5 and above were regarded as high practice.

The t-test statistics was used to test the null hypotheses 1 and 2 while ANOVA was used to analyse hypothesis 3 at 0.05 level of significance.

RESULTS

Research Question one: What are the exclusive breastfeeding practices of nursing mothers who attended antenatal care in Enugu State based on their number of antenatal visit?. Table 1 shows that nursing mothers, who had ante-natal visits four times and above, had high mean ratings (2.50 and above) for items 5, 10, 11, 13, 14, 15, 16, 17, 18, 19, 20, 22, 23, 24, 25 and 26 while low mean ratings (below 2.50) were recorded for them for items 4, 6, 7, 8, 9, and 21. A grand mean of 2.81, with standard deviation of 0.55, was obtained for all the 23 items, indicating that the nursing mothers who had ante-natal visits for four times and above practise exclusive breast-feeding to a high level. For the nursing mothers who had antenatal visits below four times, high mean ratings are recorded for only items 15 and 20, with low mean ratings being recorded for the remaining items (4, 5, 6, 7, 8, 9, 10, 11, 13, 14, 16, 17, 18, 19, 21, 22, 23, 24, 25 and 26). A grand mean of 1.59, with standard deviation of 0.25, was obtained for all the items, thereby indicating that generally, nursing mothers, with less than 4 ante-natal visits, have low level of practice of exclusive breastfeeding.

Research Question Two: What are the exclusive breastfeeding practices of nursing mothers who attended antenatal care in Enugu State based on their residential location?. Table 2 shows that high mean ratings (2.50 and above) were obtained by the urban nursing mothers on all the items, except items 4, 7, 9 and 21. A grand mean of 3.11, with standard deviation of 0.36, was obtained for all the 23 items, thereby indicating that the nursing mothers in urban locations in Enugu State practice exclusive breastfeeding to a high level. On the contrary, the nursing mothers in rural locations had high mean ratings (2.50 and above) for items 5, 10, 13, 15, 16, 17, 18, 19, 20, 22, 25, and 26), which is indicative of high level of practice of exclusive breastfeeding. Low mean ratings (below 2.50) were, however, obtained by the rural nursing mothers for items 4, 6, 7, 8, 9, 11, 14, 21, 23 and 24, thereby showing low level of practice of exclusive breastfeeding. A grand mean of 2.24, with standard deviation of 0.41, was obtained for all 23 items (4-26), thereby showing that the rural nursing mothers in Enugu State generally practice exclusive breastfeeding to a low level.

Research Questions Three: What are the exclusive breastfeeding practices of nursing mothers who attended antenatal care in Enugu State based on their occupation?. Table 3 shows that the unemployed nursing mothers had high mean ratings (2.50 and above) for items 5, 6, 8, 10, 11, 13, 14, 15, 16, 17, 18, 19, 20, 22, 23, 24, 25 and 26. A grand mean of 3.18, with standard deviation of 0.29 was obtained for the unemployed nursing mothers, thereby showing that they generally have high level of practice of exclusive breastfeeding. The self-employed nursing mothers had high mean ratings (2.50 and above) for items 5, 6, 10, 11, 13, 14, 15, 16, 17, 18, 19, 20, 22, 23, 25 and 26. A grand mean of 2.56, with standard deviation of 0.15 was, however, obtained by the self-employed nursing mothers, which is indicative of the fact that they practice exclusive breastfeeding to a high extent. For the nursing mothers who are public servants, high mean ratings (2.50 and above) were recorded for items 5, 10, 15, 16, 18, 20, 22, and 26 only. More so, publicly employed nursing mothers (public servants) had low mean ratings (below 2.50) for the remaining 14 items (4, 6, 7, 8, 9, 11, 13, 14, 17, 19, 21, 23, 24 and 25).

A grand mean of 2.00 with standard deviation of 0.37, was obtained for the items, thereby showing that the publicly employed nursing mothers (public servants) generally have low level of practice of exclusive breastfeeding.

Ho₁: Number of antenatal visits will not have significant influence on the exclusive breastfeeding practices of nursing mothers who attended antenatal care in Enugu State. Table 4 shows that the calculated t-value, at 0.05 level of significance and 403 degree of freedom, is 9.78 while the critical t-value is 1.96. Since the calculated t-value is greater than the critical value, the null hypothesis is then rejected. This invariably means that number of antenatal visits has significant influence on the exclusive breastfeeding practices of nursing mothers who attended antenatal care in Enugu State.

Ho₂: Residential location will not have significant difference in the exclusive breastfeeding practices of nursing mothers who attended antenatal care in Enugu State. Table 5 shows that the calculated value of t, at 0.05 level of significance and 403 degree of freedom, is 19.30, as against the critical t-value of 1.96, under the same conditions. Since the t-calculated is greater than the critical t-value, the null hypothesis is then rejected. This invariably means that location produces significant difference in the exclusive breastfeeding practices of nursing mothers who attended antenatal care in Enugu State.

Ho₃: Occupation will not have significant difference in its influence on the exclusive breastfeeding practices of nursing mothers who attended antenatal care in Enugu State. Table 6 shows that the calculated f-value, at 0.05 level of significance, is 7.06 while table or critical f-value under the same conditions, is 3.18. Since the calculated f-value is greater than the critical f-value, the null hypothesis is, therefore, rejected. This means that occupation has significant influence on the exclusive breastfeeding practices of nursing mothers who attended antenatal care in Enugu State.

DISCUSSION

Regarding the number of antenatal visit on the exclusive breastfeeding practices among nursing mothers who attended antenatal care, result of this study reveals a grand mean of 2.81 with standard deviation of 0.55 for nursing mothers that had antenatal visit for four times and above and grand a mean of 1.59, with standard deviation of 0.25 for nursing mothers with less than four ante-natal visits. Also the summary of t-test analysis reveals significant difference of number of ante-natal visit on the exclusive breastfeeding practices among nursing mothers who attended antenatal care in Enugu State.

The result of the study agreed with the findings of Amadhila (2005) and Limo (2018) which reveal that antenatal visit associates with EBF practice. Supportably, a study reveals that three and above ANC visit is associated with EBF practice (Woldie, Kassa & Edris, 2014), and antenatal care (four or more visits) is a significant predictor associated with higher chance for exclusive breastfeeding (Ghwass & Ahmed, 2011; Agho, Dibley, Odiase *et al.*, 2011). Antenatal breast-feeding education and postnatal lactation support improve rates of EBF up to six months after delivery (Su, Chong, Chan *et al.*, 2007).

Table 1: Mean ratings of nursing mothers in Enugu State regarding their exclusive breast-feeding practices based on their number of ante-natal visits

S/N	Items	ANC 4 times & above = 384			Below 4 times = 21		
		Mean	SD	Decision	Mean	SD	Decision
4	Initiation of breast-feeding within a half hour of birth	1.60	0.83	LL	1.00	0.00	LL
5	Making sure the baby gets the first yellow milk which is the first immunization to the baby.	3.68	0.47	HL	2.33	0.58	LL
6	Feeding the baby on demand	2.97	0.73	HL	1.57	0.61	LL
7	Expression of breast milk when away from home	1.13	0.49	LL	1.00	0.00	LL
8	Breast feed in the public without shame	2.39	0.78	LL	1.00	0.00	LL
9	Continuing breastfeeding for six months even when pregnant	1.04	0.19	LL	1.00	0.00	LL
10	Breastfeed up to 8-10 times in 24 hours	3.54	0.53	HL	1.90	0.30	LL
11	After introduction of complimentary feeds at six months continued breastfeeding up to one year.	3.25	0.92	HL	1.00	0.00	LL
12	After introduction of complimentary feeds at six months continued breastfeeding up to two years	.	.	.	.	.	.
13	Breastfeed until the baby is satisfied	3.01	0.56	HL	1.86	0.36	LL
14	No giving of artificial teat or pacifiers to breastfeeding infants	3.24	0.69	HL	1.24	0.44	LL
15	Feeding the baby without food other than breast milk for the first six months	3.79	0.41	HL	2.86	0.36	HL
16	Breastfeeding the baby without giving water for the first six months	3.54	0.50	HL	2.43	0.51	LL
17	Ensures that baby's mouth is well attached to the areola for the baby to get enough milk	3.33	0.61	HL	1.67	0.48	LL
18	Making sure that baby is not sucking the nipple of the breast to avoid sore nipple	3.95	0.21	HL	1.48	0.87	LL
19	Proper massaging of baby's back to ensure adequate belching	3.33	0.60	HL	2.00	0.00	LL
20	Ensure good personal hygiene to protect the baby from having diarrhea	3.72	0.45	HL	2.86	0.36	HL
21	Continuing breast milk as it does not sour if a mother does not breastfeed her baby for some days	1.05	0.22	LL	1.00	0.00	LL
22	Breastfeeding the baby adequately at night	3.56	0.50	HL	2.33	0.97	LL
23	Practising rooming in which allow mother and infant to remain together 24 hours for the first day of life	3.02	0.84	HL	1.00	0.00	LL
24	Having sex during breastfeeding as it does no harm to the baby	2.58	0.89	HL	1.00	0.00	LL
25	Increase fluid to promote adequate breast flow	3.32	0.71	HL	2.00	0.00	LL
26	Sleeping on the same bed with your baby	3.53	0.55	HL	2.00	0.00	LL
	CLUSTER TOTAL	64.57			36.53		
	GRAND MEAN	2.81	0.55	HL	1.59	0.25	LL

Table 2. Mean ratings of urban and rural nursing mothers in Enugu State who attended antenatal care regarding their level of practice of exclusive breastfeeding

S/N	Items	Urban = 236			Rural = 169		
		Mean	SD	Decision	Mean	SD	Decision
4	Initiation of breast-feeding within a half hour of birth	1.98	0.86	LL	1.00	0.00	LL
5	Making sure the baby gets the first yellow milk which is the first immunization to the baby.	4.00	0.00	HL	3.07	0.49	HL
6	Feeding the baby on demand	3.41	0.49	HL	2.18	0.51	LL
7	Expression of breast milk when away from home	1.22	0.61	LL	1.00	0.00	LL
8	Breast feed in the public without shame	2.80	0.67	HL	1.64	0.48	LL
9	Continuing breastfeeding for six months even when pregnant	1.06	0.24	LL	1.00	0.00	LL
10	Breastfeed up to 8-10 times in 24 hours	3.90	0.30	HL	2.83	0.40	HL
11	After introduction of complimentary feeds at six months continued breastfeeding up to one year.	3.84	0.36	HL	2.15	0.80	LL
12	After introduction of complimentary feeds at six months continued breastfeeding up to two years	.	.	.	.	.	.
13	Breastfeed until the baby is satisfied	3.26	0.44	HL	2.51	0.54	HL
14	No giving of artificial teat or pacifiers to breastfeeding infants	3.64	0.48	HL	2.44	0.66	LL
15	Feeding the baby without food other than breast milk for the first six months	4.00	0.00	HL	3.38	0.52	HL
16	Breastfeeding the baby without giving water for the first six months	3.89	0.32	HL	2.93	0.26	HL
17	Ensures that baby's mouth is well attached to the areola for the baby to get enough milk	3.66	0.47	HL	2.67	0.55	HL
18	Making sure that baby is not sucking the nipple of the breast to avoid sore nipple	4.00	0.00	HL	3.58	0.90	HL
19	Proper massaging of baby's back to ensure adequate belching	3.66	0.48	HL	2.72	0.45	HL
20	Ensure good personal hygiene to protect the baby from having diarrhea	4.00	0.00	HL	3.21	0.45	HL
21	Continuing breast milk as it does not sour if a mother does not breastfeed her baby for some days	1.08	0.27	LL	1.00	0.00	LL
22	Breastfeeding the baby adequately at night	3.91	0.29	HL	2.92	0.40	HL
23	Practising rooming in which allow mother and infant to remain together 24 hours for the first day of life	3.48	0.50	HL	2.12	0.80	LL
24	Having sex during breastfeeding as it does no harm to the baby	3.01	0.87	HL	1.78	0.42	LL
25	Increase fluid to promote adequate breast flow	3.75	0.43	HL	2.55	0.50	HL
26	Sleeping on the same bed with your baby	3.91	0.29	HL	2.82	0.38	HL
	CLUSTER TOTAL	71.46			51.5		
	GRAND MEAN	3.11	0.36	HL	2.24	0.41	LL

Table 3. Mean ratings of unemployed, self-employed and publicly employed nursing mothers regarding their exclusive breast-feeding practices

S/N	Items	Unemployed = 202			Self-employed = 111			Public servant = 92		
		M	SD	Decision	M	SD	Decision	M	SD	Decision
4	Initiation of breast-feeding within a half hour of birth	2.14	0.83	LL	1.00	0.00	LL	1.00	0.00	LL
5	Making sure the baby gets the first yellow milk which is the first immunization to the baby.	4.00	0.00	HL	3.53	0.50	HL	2.85	0.39	HL
6	Feeding the baby on demand	3.48	0.50	HL	2.67	0.47	HL	1.90	0.30	LL
7	Expression of breast milk when away from home	1.25	0.66	LL	1.00	0.00	LL	1.00	0.00	LL
8	Breast feed in the public without shame	2.93	0.63	HL	2.00	0.00	LL	1.35	0.48	LL
9	Continuing breastfeeding for six months even when pregnant	1.07	0.26	LL	1.00	0.00	LL	1.00	0.00	LL
10	Breastfeed up to 8-10 times in 24 hours	4.00	0.00	HL	3.09	0.29	HL	2.70	0.51	HL
11	After introduction of complimentary feeds at six months continued breastfeeding up to one year.	3.99	0.12	HL	2.92	0.27	HL	1.53	0.50	LL
12	After introduction of complimentary feeds at six months continued breastfeeding up to two years									
13	Breastfeed until the baby is satisfied	3.30	0.46	HL	3.00	0.00	HL	2.10	0.39	LL
14	No giving of artificial teat or pacifiers to breastfeeding infants	3.74	0.44	HL	3.00	0.00	HL	1.98	0.57	LL
15	Feeding the baby without food other than breast milk for the first six months	4.00	0.00	HL	3.91	0.29	HL	2.97	0.18	HL
16	Breastfeeding the baby without giving water for the first six months	4.00	0.00	HL	3.06	0.24	HL	2.87	0.34	HL
17	Ensures that baby's mouth is well attached to the areola for the baby to get enough milk	3.77	0.42	HL	3.00	0.00	HL	2.39	0.63	LL
18	Making sure that baby is not sucking the nipple of the breast to avoid sore nipple	4.00	0.00	HL	4.00	0.00	HL	2.23	1.11	HL
19	Proper massaging of baby's back to ensure adequate belching	3.77	0.42	HL	3.00	0.00	HL	2.48	0.50	LL
20	Ensure good personal hygiene to protect the baby from having diarrhea	4.00	0.00	HL	3.66	0.48	HL	2.97	0.18	HL
21	Continuing breast milk as it does not sour if a mother does not breastfeed her baby for some days	1.09	0.29	LL	1.00	0.00	LL	1.00	0.00	LL
22	Breastfeeding the baby adequately at night	4.00	0.00	HL	3.12	0.32	HL	2.85	0.53	HL
23	Practising rooming in which allow mother and infant to remain together 24 hours for the first day of life	3.56	0.50	HL	2.90	0.30	HL	1.51	0.50	LL
24	Having sex during breastfeeding as it does no harm to the baby	3.18	0.82	HL	2.00	0.00	LL	1.59	0.50	LL
25	Increase fluid to promote adequate breast flow	3.88	0.33	HL	3.00	0.00	HL	2.17	0.38	LL
26	Sleeping on the same bed with your baby	4.00	0.00	HL	3.11	0.31	HL	2.67	0.47	HL
	CLUSTER TOTAL	73.15			58.97			45.11		
	GRAND MEAN	3.18	0.29	HL	2.56	0.15	HL	2.00	0.37	LL

Table 4. T-test analysis of the mean ratings regarding the influence of the number of antenatal visits on exclusive breastfeeding practices among nursing mothers who attended antenatal care in Enugu State

No. of antenatal visits	N	x	SD	Df	t-cal	t-crit	Decision
4 times and above	384	2.81	0.55	403	9.78	1.96	Reject Ho
Below 4 times	21	1.59	0.25				

Table 5. T-test of difference in the means rating regarding exclusive breastfeeding practices among urban and rural nursing mothers who attended antenatal care in Enugu State

Location	N	x	SD	Df	t-cal	t-crit	Decision
Urban	236	3.11	0.36				
Rural	169	2.24	0.41	403	19.30	1.96	Reject Ho

Table 6. ANOVA table regarding the influence of occupation on the exclusive breastfeeding practices among nursing mothers who attended antenatal care in Enugu State

Source of Variation	Sum of squares	Df	Means square	f-cal	f-crit	Decision
Between Groups	121.58	2	60.79	7.06	3.18	Reject Ho
Within groups	57.13	402	0.14			
Total	178.71	404				

Regarding the influence of residential location on the EBF practices among nursing mothers who attended antenatal care in Enugu State, result of the study reveals a grand mean of 3.11 with, standard deviation of 0.36 for nursing mothers of urban residence while a grand mean of 2.24, with a standard deviation of 0.41 was recorded for nursing mothers of rural residence. The result of summary of t-test analysis also shows significant difference between location of residence and the exclusive breastfeeding practices among nursing mothers who attended antenatal care in Enugu State. Result of study is in agreement with that of Nwagu (2006) which indicates that nursing mothers in the urban areas may be disposed to follow

any current trend in health promotion while their rural counterpart may be ignorant of the benefits and existence. Evidence indicates that mothers differ in their practice of EBF based on their home locations (Magaji & Ezenkiri, 2015), and the prevalence of exclusive breastfeeding in urban area is higher than in rural area for infants aged 6-11 months (Yohmi, Marzuki, Nainggolan *et al.*, 2015). Moreover, the problems of rural nursing mother could be associated with the mother in-law, father in-law or any of the extended family members' influence in the rural setting (Agunbiade & Ogunleye, 2012). On the contrast, a study reveals that EBF was positively associated with rural residence (Tan, 2011).

Probably it may be because the study was done in peninsular Malaysia. Regarding the different occupations and the exclusive breastfeeding practices among nursing mothers who attended antenatal care in Enugu State, result on table 3 reveals a grand mean of 3.18, with standard deviation of 0.29 for unemployed nursing mothers, a grand mean 2.56, with standard deviation of 0.15 for self employed nursing mothers and a grand mean of 2.00 with standard deviation of 0.37 for publicly employed nursing mothers (public servants). Also the result of summary of ANOVA shows significant difference of occupation in the exclusive breastfeeding practices among nursing mothers who attended antenatal care in Enugu State. The result of the study agrees with the results of Sika-Bright (2010); Matias, Nommsen-Rivers and Dewey (2012); and Ananta, Gandaputra, Waiman *et al.* (2016) which show high EBF practice among unemployed mothers.

Those mothers who were unemployed are more likely to practice EBF than their counterparts (Mekuria & Edris, 2015; Yohmi, Marzuki, Nainggolan *et al.*, 2015). Practice of EBF is high among non-working mothers (Tan, 2011). Evidence records that the practice of exclusive breastfeeding in Siaya County is found at 29.9%; with unemployed mothers presenting at 36.1%, while working class mothers performed poorly at 21.4% (Odindo, Loum, Alwar *et al.*, 2014). Contrarily, mothers who work away from home practice EBF less (Mascarenhas, Albernaz, Silva *et al.*, 2006; Setegn, Belachew, Gerbaba *et al.*, 2012). Indeed, maternal employment/occupation has a direct influence on EBF (Neifert & Bunik, 2013; Radhakrishnan & Balamuruga, 2012) and mothers resuming work affects EBF practice (Perera, Ranathunga, Fernando *et al.*, 2012; Qureshi, Oche, Sadiq *et al.*, 2011). Arguably, a study documents that maternal occupation does not prevent mothers from breastfeeding rather affects the duration and frequency of breast-feeding per day and the health status of babies (Al-Ruzaihan, Al-Ghanim, Bu-Haimed *et al.*, 2017).

Summary and Conclusion

Exclusive breastfeeding practice requires prompt attention in Nigeria as it has great benefits for child survival. Rural location, non-attendance/reduced number of ANC visits, and maternal employment negatively influence EBF practice among the nursing mothers in Enugu State, Nigeria. This calls for a quick action.

Recommendation

- Offering every mother a prenatal EBF plan during antenatal care.
- Programme planners and government should develop a leaflet on EBF practice with pictures to be distributed to the mothers during ante-natal visit and after delivery for easy EBF practice decision.
- More health workers should be posted to rural areas for effective EBF education and other new health trends communicated to the grass-root.
- Promotion of workplace breastfeeding practices, creating an enabling environment for EBF, and extension of maternity leave up to the first six month of child's age to achieve the most favorable EBF practices.

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