

KNOWLEDGE AND PRACTICE OF EXCLUSIVE BREAST FEEDING AMONG POSTNATAL MOTHERS IN ENUGU MUNICIPALITY OF ENUGU STATE

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Abstract

Exclusive breastfeeding was established by Nigerian government to reduce infant morbidity and mortality in Nigeria. This study determined the knowledge and practice of exclusive breastfeeding among postnatal mothers in Enugu municipality of Enugu State. Two research questions and two hypotheses were formulated to guide the study. Descriptive survey research design was employed. A sample of 200 postnatal mothers were randomly selected. Questionnaire was used to collect the data. Mean and Standard Deviation was used to answer research question 1, frequency and percentage was used to answer research question 2 while hypothesis 1 and 2 were tested using ANOVA and X^2 respectively at 0.05 level of significance. The findings of the study revealed that postnatal mothers have positive knowledge; and practiced exclusive breastfeeding; age of postnatal mothers does not affect their knowledge in Exclusive breastfeeding; and that age of the postnatal mothers does not affect the practice of exclusive breastfeeding. It was recommended among others that postnatal mothers who exclusively breastfeed their babies should be provided with free supplements to replenish the nutrient they lose during child breastfeeding as a means to achieve safe motherhood.

Keywords: Exclusive; Breastmilk; Exclusive Breastfeeding; Knowledge; Practice.

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remains static
leg (inward)
Co-Ordination
manipulation
muscular co-ordination
person is able to
of movement in
rhythmical pattern
Different activities
require different co-ordination
Muscular co-ordination
one is capable of

maximum exposure
shortest time - in the
It shows a person's
own body - some
through space -
like jumping through
related components
the need for
relationship
position
distance
time
the body
the state of

Handwritten notes and diagrams, including a diagram of a person's body with arrows indicating movement or force. The text is partially obscured by the diagram and is difficult to read.

Introduction

Breastfeeding is one of the oldest child-rearing practice known to mankind. Breastfeeding is known to be the best way to feed infants by providing the psychological and health benefit to both the mother and child. It is considered as an ideal method since it satisfies the physiological, biochemical, immunological and psychological need of an infant (Subbiah, 2003; Singh, 2010). Breastfeeding according to (Medterms Dictionary 2013) means feeding a child with human breast milk. Breast milk is the liquid secreted by the mammary glands of female mammals to nourish their young ones for a period beginning immediately after birth. It is a mixture of water, fat, sugar, inorganic salts, and is the mainstay of protein nutrition for the first six months of life and all that is needed during this period (Norton, 1994). According to (Singh 2010), exclusive breast feeding for 4 to 6 months is very important and it is sufficient for every child.

Exclusive breastfeeding is the infant feeding method employing breast milk as the infant's only food (Perez-Escamilla, 1993). It is an infant's consumption of human milk with no supplementation of any type (no water, juice, nonhuman milk and foods) except for vitamins, minerals, and medications (Institute of medicine, 1991). Poor breastfeeding practices are widespread. It is estimated that sub-optional breastfeeding especially non-exclusive breastfeeding in the

first six months (6) of life results in 1.4 million deaths and 10 percent of the disease burden in children younger than 5 years of age (WHO, 2009). Studies from developing countries show that infants who are not breastfeed are 6 to 10 times more likely to be hospitalized in the first year of life for serious illness or die in the first month of life than infants who are breastfeed (WHO, 2003). United Nation International Children Emergency Fund (UNICEF) (1992) observed that everyday, between 3000 and 4000 infants die from diarrhea and acute respiratory infection because of inadequate breastmilk given to them. The Nigerian government established the Baby-friendly Hospital Initiative (BFH) in Benin, Enugu, Maiduguri, Lagos, Jos, and Port Harcourt with the aim of providing mothers and their infants a supportive environment for breastfeeding and to promote appropriate breastfeeding practice, thus helping to reduce morbidity and mortality rates.

Scientific research such as the studies summarized for the U.S Agency for Health Care Research and Quality (HCRQ) and a 2007 review for the World Health Organization (WHO) has found many benefits to exclusive breastfeeding for the infants as well as mothers (Chung & Romon, 2007; Horta, Bahl, Martisn & Victoris, 2007). Breastmilk contains an abundance of maternal antibodies (Colostrum) to a range of infection, so the breastfed baby acquires a valuable

degree of passive immunity to cover the period before its own immunity system can take over, and the protection is greatest when the baby is fed on breastmilk alone (EBF) for about the first six months (Youngson 1995; Hawes & Scotchmer, 1993). Its greatest benefit comes from the right amount of fatty acid, lactose, water and amino acid for human digestion, brain development and growth. About 80 per cent of the cells in the breastmilk are macrophages - cells that kill bacteria, fungi and viruses (Singh, 2010). It contains several anti-infections factors like bile, salt, stimulate lipase (protecting against amoebic infections), lactoferrin (bind to iron and inhibits the growth of intestinal bacteria and immunoglobulin A protecting agent against micro-organisms (Glass, Svennerholm & Stoll 1993).

Exclusive breastfeeding reduces the risk of respiratory illness in infants both in terms of duration and severity (Cushing & Samet, 1998). Not only does it reduce respiratory track infection but mothers produce antibodies to whatever disease is present in their environment, making their milk custom - designed to fight the disease their bodies are exposed to the community level (Singh 2010), reduces the risk of urinary track infection up to seven months of age (Marild, Hanson, Jodal, Oden & Svedbera 2004), reduces likelihood of contacting cold and flu bugs, a tiny disease in the risk of childhood leukemia, lowers risk of childhood onset of diabetes, decreased risk of asthma and

eczema and decreased risk of developing psychological disorder (Wikipedia 2011).

Breast milk meets all water requirements. Breast milk is 88 per cent water. Studies show that exclusive breast fed infant under 6 months old do not need additional fluid, even in countries with extremely high temperature and low humidity. Offering water before 6 months of age reduces breast milk intake, interferes with full absorption of breast milk nutrients and increase the risk of illness (Richard 2009). There is also evidence of health benefits for exclusive breastfeeding mothers. Short term benefits to mothers include, a more rapid weight loss after delivery and a delay resumption of ovulation resulting in increase child spacing (Kennedy, & Visness, 1992). In addition breastfeeding appears to be protective against ovarian cancer and pre-menopausal breast cancer period (Forste, 1994). It has also been associated with reduction in hip fracture in the post-menopausal period (Hirose 1994).

Regrettably, upon all the numerous benefits of exclusive breastfeeding, Lopez and Perez (1993) pointed out that prevalence of Practice and duration appears to be decreasing in developing countries such as Nigeria. O'Quinn, McIntyre and Meade (1991) reported that very few women practice exclusive breastfeeding very well especially in urban areas in their study on Montserratian women. In Kuala Lumpur of India, it has been observed that mothers who

practiced exclusive breastfeeding were those who had an antenatal plan to breastfeed, not in paid employment postnatally and also of older age group more than 27 years of age (Singh 2010). Enugu state as one of the States in Nigeria has productive mothers of varying profiles. Most of them are either working class or business women. Their age ranges vary widely and their experiences as nursing mothers are equally wide. In Enugu Municipality majority of the women in the area were engaged in one form of work or the other. Some of them are workers working in the Banks, government offices, and in some private establishments. The demands of these offices make them to be away from home for a greater part of the day and this could affect their breastfeeding practice.

Based on speculations and allegations that exclusive breastfeeding is declining in developing countries particularly in urban centres, there is need to ascertain the knowledge and practice of exclusive breastfeeding by postnatal mothers in Enugu Municipality.

Purpose of the Study

The purpose of this study is to determine the knowledge and find out the practices of postnatal mothers regarding EBF in Enugu municipality of Enugu State. Specifically, this study will attempt to answer the following research questions.

1. What is the knowledge of postnatal mothers in Enugu Municipality regarding Exclusive breast feeding?
2. Do postnatal mothers in Enugu Municipality practice Exclusive breastfeeding?

Hypotheses

Hypotheses was postulated as thus to be tested at 0.05 level of significance.

1. There is no significant difference in Age among postnatal mothers knowledge on Exclusive breastfeeding.
2. There is no significant difference in Age among postnatal mothers in practicing EBF.

Methodology

The study was carried out on postnatal mothers of three hospitals /health centres in Enugu Municipality of Enugu State. The research design utilized in the study was a survey research design. The population for the study comprised all postnatal mothers who attended clinic at the period of study. A sample of 200 postnatal mothers of infants 0-2 years was randomly selected from the hospitals/ health care centre. The researchers' structured questionnaire was the instrument for data collection. A total of 200 copies of the questionnaire were collected back and 198 questionnaires was properly filled and used in the data analysis. Mean and Standard

Deviation was used to answer research question 1, while frequency and percentage was used to answer research question 2. Analysis of variance (ANOVA) and chi-square was used in testing hypothesis 1 and 2 respectively at 0.05 level of significance.

Results

The results of the study are presented as follows:

Research question 1.

1. What is knowledge of postnatal mothers in Enugu municipality regarding exclusive breastfeeding? Data answering this research question are contained in Table 1

Table 1

Mean Scores of Knowledge of Exclusive Breastfeeding (n-198)

S/N Items on Knowledge of EB	Mean	Standard Deviation	Decision
1. Knowledge of definition /concept.	88.38	32.123	Positive
2. Knowledge of purpose.	89.90	30.211	Positive
3. Knowledge of time.	2.53	15.729	Positive
4. Knowledge of nutritional contents.	83.84	36.903	Positive
5. Knowledge of importance.	61.11	48.873	Positive

Data in Table 1 shows the mean scores of knowledge of postnatal mothers on exclusive breastfeeding items: knowledge of definition (88.38); Knowledge of purpose (89.90); Knowledge of time (2.53); Knowledge of nutritional contents (83.84) and Knowledge of importance (61.11) which are higher than 2.50. This implies that postnatal mothers in Enugu Municipality have positive and high knowledge of exclusive breastfeeding. The standard deviation of 48.873 to 15.729 shows that the responses are close to one another.

Research question 2.

Do postnatal mothers in Enugu Municipality practice exclusive breastfeeding? Data answering this research question are contained in Table 2

Table 2

Exclusive Breastfeeding Practice of Postnatal Mothers (n-198)

S/N	Exclusive breastfeeding practices	Yes		No	
		F	%	F	%
6.	I practice exclusive breastfeeding.	150	75.8	48	24.2
7.	Family members prevent me from exclusive breastfeeding.	63	31.8	135	68.2
8.	Office/home work load are too demanding and stressful to practice exclusive breastfeeding.	86	43.4	112	56.6
9.	Infant formular is better, easier richer and satisfies the child more than exclusive breastfeeding.	80	40.4	118	59.6
10.	Exclusive breastfeeding is money/time consuming to practice.	55	27.8	143	72.2

Data in table 2 above show that majority of the women 150 (75.8%) practice exclusive breastfeeding; 143 (72.2%) postnatal mothers indicated that exclusive breastfeeding is not money/time consuming to practice; 135 (68.2%) of them indicated that family members do not hinder them from practicing exclusive breastfeeding; 118(59.6%) mothers disagreed infant formular to be better or richer than exclusive breastfeeding and 112 (56.6) indicated that office/home work load does not prevent them from exclusive breastfeeding practice. This implies that postnatal mothers practiced exclusive breastfeeding.

Hypothesis 1

1. There is no significant difference in Age among postnatal mothers knowledge on Exclusive breastfeeding. Data testing this null hypothesis are contained in Table 3.

Table 3

One-Way ANOVA Testing the Hypothesis of No Significant Difference in Age of Postnatal Mothers Regarding their Knowledge of Exclusive Breastfeeding

S/n			Sum of squares	df	Mean square	F	P-value
1	Knowledge of definition.	Between Groups	4537.705	2	2268.853	2.226	.111
		Within Groups	198745.123	195	1019.206		
		Total	203282.828	197			
2	Knowledge of purpose.	Between Groups	1225.051	2	612.525	.669	.513
		Within Groups	178572.929	195	915.759		
		Total	179797.980	197			
3	Knowledge of time.	Between Groups	517.086	2	258.543	1.046	.353
		Within Groups	48220.288	195	247.284		
		Total	48737.374	197			
4	Knowledge of nutritional contents.	Between Groups	1049.935	2	524.968	.383	.682
		Within Groups	267232.893	195	1370.425		
		Total	268282.828	197			
5	Knowledge of importance	Between Groups	2044.526	2	1022.263	.425	.654
		Within Groups	468511.029	195	2402.621		
		Total	470555.556	197			

Table 3 shows the f-value and their corresponding p-value at 2 and 195 degrees of freedom for the following items: Knowledge of nutritional content (F=.383, P=.682); knowledge of importance (F=.425, P=.654); knowledge of purpose. (F=.669, P=.513); knowledge of time (F=1.046, P=.353); knowledge of definition (F=2.226, P=.111) which were greater than 0.05 level of significant. The null hypothesis of no significant difference in Age among the postnatal mothers on knowledge of exclusive breastfeeding was therefore accepted. This implies therefore that the age of postnatal mothers does not affect their knowledge of Exclusive breastfeeding.

Hypothesis 2

2. There is no significant difference in Age among postnatal mothers in practicing EBF. Data testing this null hypothesis are contained in Table 4.

Table 4

Chi-Square Analysis Testing the Hypothesis of No Significant Difference in the Age among Postnatal Mothers Practicing Exclusive Breastfeeding

			16-26yrs	27-37yrs	38-48yrs	Cal X ² Value	df	P-value	
6	I practice EBF	No	count	16	20	12	3.866	2	.145
			Expected count	16.5	2.8	7.8			
	Yes	count	52	78	20				
		Expected count	51.5	74.2	24.2				
7	Family members prevent me from EBF practice.	No	count	45	70	20	1.078	2	.583
			Expected count	46.4	66.8	21.8			
	Yes	count	23	28	12				
		Expected count	21.6	31.2	10.2				
8	Office/home work load are too demanding and stressful to practice exclusive breastfeeding.	No	count	41	51	20	1.660	2	.436
			Expected count	38.5	55.4	18.1			
	Yes	count	27	47	12				
		Expected count	29.5	42.6	13.9				
9	Infant formular is better, easier richer and satisfies the child more than exclusive	No	count	34	67	17	6.288	2	.043
			Expected count	40.5	58.4	19.1			
	Yes	count	34	31	15				
		Expected count	27.5	39.6	12.9				
10	Exclusive breastfeeding is money/time consuming to practice breastfeeding.	No	count	44	78	21	5.262	2	.072
			Expected count	49.1	70.8	23.1			
	Yes	count	24	20	11				
		Expected count	18.9	27.2	8.9				

Table 4 shows the calculated X² value and their corresponding P-values at 2 degree of freedom for the following items: family members prevent me from exclusive breastfeeding practices. (Cal X² = 1.078, P = .583); Office/home work load are too demanding and stressful to practice exclusive breastfeeding (Cal X² = 1.660, P = .436); I practice exclusive breastfeeding (Cal X² = 3.866, P = .145); exclusive breastfeeding is money/time consuming to practice (Cal X² = 5.262, P = .072) which were greater than .05 level of significance except for Infant formular is better, easier richer and satisfies the child than exclusive breastfeeding (Cal X² =

6.288, $P = .043$) which is less than .05 level of significance. The table shows no significant difference in the practice of exclusive breast feeding in age among postnatal mother. The null hypothesis of no significant difference in Age among postnatal mothers in practicing EBF is therefore accepted. This implies that of EBF did not differ by age of postnatal mothers.

Discussion

The finding in Table 1 revealed that postnatal mothers have positive and high knowledge of exclusive breastfeeding. This finding is expected and not surprising because Enugu State is one of the areas Baby-Friendly Initiative was established by the Nigerian government. This finding is in agreement with the finding of Singh (2010) who observed high knowledge of exclusive breastfeeding among mothers in India.

The finding in table 2 revealed that postnatal mothers in Enugu municipality practiced exclusive breastfeeding. This is expected and not surprising and can be attributed to campaigns and teachings by healthcare workers in Enugu State during antenatal clinic. This is in contrast with the finding of Ekanem, et al (2012) who recorded 24 per cent (low) of working mothers who practiced exclusive breastfeeding in Calabar municipality.

The finding in Table 3 revealed no significant difference in age among postnatal

mothers knowledge on exclusive breastfeeding. This is not surprising because irrespective of age, Baby-Friendly Initiative is for all postnatal mothers. Also anti-natal clinic teachings by healthcare workers embrace every age bracket of mothers who attended anti-natal clinic.

The finding in Table 4 revealed no significant difference in age among postnatal mothers practice of exclusive breastfeeding. This is expected because of the laudable sensitization in hospitals, clinics, radio and TV programmes on exclusive breast feeding. This is in contrast with Singh (2010) finding in India who observed that working class postnatal mothers and older age group more than 27 years old do not practice exclusive breastfeeding.

Conclusions

Based on the findings and discussion, it was concluded that:

1. There is a high knowledge of exclusive breastfeeding among postnatal mothers.
2. Postnatal mothers in Enugu municipality practice exclusive breastfeeding.
3. There is no significant difference in age among postnatal mothers knowledge on exclusive breastfeeding.
4. There is no significant difference in age among postnatal mothers' practice of exclusive breastfeeding.

Recommendations

Based on the findings, discussions and conclusions, the following recommendations were made:

1. That postnatal mothers who exclusively breastfeed their babies should be provided with free supplements to replenish the nutrient they lose during child breastfeeding as a means to achieve safe motherhood.
2. Trained health workers in primary care setting on EBF should be sponsored and sent to reach out to hinterland of the state to sensitize rural women on the need for exclusive breastfeeding as a means of safe motherhood.
3. Strengthening of health education especially to young mothers and primary/secondary school girls is crucial as a strategy for safe motherhood.
4. Maternity leave should be elongated up to 4 months for postnatal mother who are working as a means of improving safe motherhood.

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