

Knowledge, Attitude and Practice of Exclusive Breastfeeding among Women Attending Postnatal Care in Comprehensive Health Centre, Saminaka, Lere L.G.A, Kaduna State

Nuhu Bobby Ezekiel¹, Nura Yakubu²

^{1,2}MSc Public Health, Department of Paramedics, Mewar University Chittorgarh Rajasthan, India

ABSTRACT

This study was designed to examine the knowledge, attitude and practice of Exclusive Breast feeding among women attending postnatal care in Comprehensive Health Centre, Saminaka, Lere L.G.A, Kaduna State. It was a hospital-based descriptive study involving women of childbearing age. One hundred and ten respondents were selected by convenience and data concerning their knowledge, attitude and practice of Exclusive breastfeeding (EBF) was obtained using a set of thirty items structured, self-designed questionnaire. The data was analysed using simple frequency, percentages, mean and Chi-square. The result shows that most of the respondents(28.2%) were in the age category of 21-25 years, with the mean age of 28.5.Majority of the respondents(32.7%) and (39.1%) have attained the level ofprimary and secondary education respectively. The study revealed a high level of awareness (100%) of EBF, however, only few of the respondents (56.4%) practice complementary feeding, attributable to their culture. P-value = 0.05 significance. Although, breastfeeding is a common practice in this locality, adequate knowledge and practice of EBF is relatively low. Therefore, it is recommended thatrelevant stakeholders, such as the government, donor agencies, health care personnel, as well as Community leaders, should intensify efforts aimed at improving the knowledge and practice of EBF by nursing mothers, towards achieving the sustainable development goal number two and three respectively.

Method: Descriptive survey was adopted for this study; the questionnaire was administered to the respondents with the help of trained research assistants. An informed consent from both the authority of the health facility and the respondents were obtained prior to carrying out the process of data collection.

Key Words: knowledge, attitude, practice, Exclusive Breastfeeding (EBF), postnatal care.

INTRODUCTION

Throughout history, breastfeeding has been globally regarded as the ideal way of infant feeding. It is the act of feeding a child with breast milk directly from the breast to the mouth. In the Egyptian, Greek and Roman empires, women usually feed only their own children. However, breastfeeding began to be seen as something too common to be done by royalty and wet nurses were employed to breastfeed the children of the royal families. This was extended over the ages, particularly in Western Europe where noble women often made use of wet nurses (Stevens et al., 2009). The Moche artisans of Peru (1800, AD) represented women breastfeeding their children in ceramic vessels (Larco, 2001). Shared breastfeeding is still practiced in many developing countries when mothers need help to feed their children. Traditionally, Japanese women give birth at home and breastfeed with the help of breast massage. Weaning was often late with breastfeeding in rare cases continuing until early adolescence. After World war II, western medicine was taken to Japan and women began giving birth in hospitals, where the babies were usually taken to the nursery and fed infant formula (Stevens et al., 2009). Japan became the first developed country to have established a baby-friendly hospital and



as at 2006 has an additional 24 of such facilities (Payne, 2013). In the 18th century, the emerging natural science argued that women should stay at home to nurse and raise their children, like animals also do (Schiebinger, 1993). Government in Europe started to worry about the decline in workforce due to the high mortality rate among new born. Wet nursing was considered as one of the main problems. Campaigns were launched against the custom among the higher class to use a wet nurse. Schiebinger (1993) also stated that women were advised or even forced by law to nurse their children. The Biologist and Physician Linnaeus (1752) wrote a pamphlet against the use of a wet nurse and considered it against the law of nature. A baby not nursed by the mother was deprived of the laxative colostrums. Linnaeus thought that the lower class wet nurse ate too much fat, drank alcohol and had contagious diseases, therefore producing lethal milk and that mother's milk was considered a miracle fluid which could cure people and give wisdom. Dutch historian Van (1984) researched the small amount of available evidence of breastfeeding practices in the Netherlands. Women were obliged to nurse their babies: every mother ought to nurse her own child, if she is fit to do it. No woman is fit to have a child who is not fit to nurse it (Apple, 1987). Mother's milk was considered best for babies, but its quality was found to be varied. The quality of the breast milk was considered good only if the mother had a good diet, had physical exercise and was mentally stable. In Europe, especially in France and less in U.S.A, it was a practice among the higher and middle class to hire a wet nurse. If it was too difficult to find a wet nurse, people used infant formula to feed their babies, but this was considered very dangerous for the health and life of the baby. Canadian perinatal health report (2003) stated that a 1994 Government health survey speculated that the gap between breastfeeding generations in Canada contributes to the lack of success of those who do not attempt it. New young parents cannot look up to the older ones for help with breast feeding since they are also ignorant on the topic.

LITERATURE REVIEW

EXCLUSIVE BREASTFEEDING:

Gartner (2005) defined EBF as "an infant's consumption of human milk with no supplementation of any type (no water, juice, non-human milk and other foods) except vitamins, minerals and medications. WHO (1998) also defines EBF as excluding solids, or any other fluids (including infant formula) except medicines, vitamins and minerals. It is important to recognize the baby's hunger signs. It is assumed that the baby knows how much milk it needs and it is therefore, advised that the baby should dictate the number, frequency and length of each feed. The birth weight of the baby may affects its feeding habits and mothers may be influenced by what they perceived its requirement to be. For example, a baby born small for gestational age may lead another to believe that her child needs to feed more than if it is larger; they should, however, go by the demands of the baby rather than what they feel is necessary.Iwinski (2006) says that while it can be hard to measure how much food a breast fed baby consumes, babies usually feed to meet their own requirement. Babies that fail to eat enough may exhibit the manifestation of failure to thrive.

WHO(2002, 2011),Gartner(2005),Coutsoudis(2005),Kramer(2009) and other relevant authorities stressed the importance of breastfeeding as follows: impact on neonatal and infant survival and good health, provision of total food security to infants, meets all water requirement and optimizes child physical and mental growth and development. Breast feeding also reduces the mother's risk of fatal post-partum hemorrhage and premenopausal breast and ovarian cancers; enhances maternal and child bonding and saves money. In developed countries, many working mothers do not breastfeed their children due to work pressures and very short periods of maternity leave. For example, a mother may need to schedule for frequent pumping breaks and find a clean, private and quiet place at work for pumping. These inconveniences may cause mothers to give up on breastfeeding and use infant formula. However, Newman (2001) stated that many breastfeeding difficulties can be resolved with proper hospital procedures, properly trained midwives, physicians and lactation consultants. Benjamin (2011) also advocated that health practitioners are to be educated about breastfeeding and its related issues. Galson (2008). reported that returning to work is the most common cited reason for discontinuing breastfeeding. Breastfeeding practices were significantly associated with the mother's marital status, education and family income (Williams, 1996). In many developing countries, particularly those with a generally poor level of health, malnutrition is the major cause of death in children less than five years, with 50% of those cases being within the first year of life (Shrimpton, 2003). Traditional beliefs in many developing countries give different advice to women raising their new born children. In Ghana, babies are still frequently fed with tea alongside breastfeeding, reducing the benefits of breastfeeding and inhibiting the absorption of iron, important in prevention of anemia (Elliot, 2003). Picciano (2001) has reaffirmed that human breast milk is the healthiest form of milk for babies. However, there are few exceptions, such as when the mother is infected with human T-lymphotropic virus, active untreated tuberculosis and varicella (American Academy of Pediatrics, 2013) and active Herpes Simplex virus with the lesions on the breast (Academy of Breastfeeding medicine, 2012). Other contraindications to breastfeeding are cancer of the breast, injury caused by scalding, burns and breast surgery; including maternal use of certain drugs such Estrogens, Bromocriptine, Cabergoline, large doses of thiazide diuretics and Ergotamine. Experts agree that breastfeeding is beneficial and



expressed concern about artificial infant formula, but there are conflicting views about how long EBF remains beneficial (Kramer &Kakuma, 2002). The World Health Organization and American Academy of Pediatrics emphasize the value of breastfeeding for mothers as well as children. Both recommend EBF for the first six months of life. American Academy of Pediatrics recommends that EBF be followed by supplemental breast feeding for at least one year, while WHO recommends that supplemental breastfeeding continue up to two years, or more(WHO,2003). Baker(2003) while recognizing the superiority of breastfeeding, regulating authorities also should work to minimize the risks of artificial feeding. Read more on exclusive breastfeeding on (https://www.paho.org/en/topics/breastfeeding and https://www.globalbreastfeedingcollective.org)

DATA PRESENTATION AND ANALYSIS

The data collected was presented, analyzed and interpreted using descriptive and inferential statistics, which include: simple frequency tables, percentages, mean and Chi-square, after which inferences and recommendations were drawn.

SOCIO-DEMOGRAPHIC DATA

Age	Frequency (f)	Percentage (%)	Mean(fx)
16-20	23	20.9	28.5
21 – 25	31	28.2	
26 - 30	20	18.2	
31 – 35	12	10.9	
36 - 40	18	16.4	
41, above	06	05.15	
Marital status			
Married	94	85.5	
Divorcee/Separated	10	9.1	
Widow	06	5.5	
Educational Qualification			
Non- formal education	14	12.7	
Elementary/Primary	36	32.7	
Secondry	43	39.1	
Tertiary	17	15.5	
Ethnicity			
Hausa / Fulani	36	32,7	
Yoruba	14	12.7	
Igbo	10	09.1	
Others	50	45.5	
Occupational			
Civil servants	20	18.2	
Artisan	09	8.2	
Farming	25	22.7	
Business/Training	22	20	
Housewife/unemployed	30	27.3	
Students	04	3.6	

Table 1: age, marital status, educational qualification, ethnicity and occupation of the respondents.

Table 1 shows that majority of the respondents are between the ages of 21 - 25 years, constitute 28.9% of the respondents while 05.5% falls within 41 years and above with mean age of 28.5. 85.5% of the respondents are married women. Differentethnic groups comprises Kurama, Gure, Jere, Kahugu and Amo, formed majority (45.5%) of the respondents. 32.7% and 39.1% attained primary and secondary education respectively and majority of the respondents are Housewives.

Table 2: Respondents' Knowledge of EBF

Knowledge of EBF	Awareness (f) / (%)	Unawareness (f) (%)	
Provide total food security to infant	99 (90)	11 (10)	
Provide water requirements to infant	44 (40)	66 (60)	



Optimizes a child physical& mental growth	82 (74.5)	28 (25.)	
Protection against developmental allergies	37 (33.6)	73 (66.4)	
Saves infant's life	74 (67.3)	32 (32.7)	
Protection against wide range of illness	80 (72.7)	30 (27.3)	
Promote recovery of sick child	73 (66.4)	37 (33.6)	
Help in stopping bleeding after birth	30 (27.3)	80 (72.7)	
Facilitates emotional bond b/w mother & child	82 (74.5)	28 (25.5)	l
Protection against another pregnancy	33 (30)	77 (70)	
It is better than any other type of feeding	65 (59.1)	45 (40.9)	
It saves money	90 (81.8)	20 (18.2)	
It is cheap and readily available	96 (87.3)	14 (12.7)	

The results shows that majority of the respondents(90%, 81.8% and 87.3%) are knowledgeable that EBF provide total food security, saves money and it is cheap and readily available, while majority(66%) are unaware that it provide water requirement for infant's life.

Table 3: Attitude (respondents opinion) about EBF as whether good/beneficial to the infant or not, and practice of EBF.

Attitude	frequency (f)	percentage (%)	
Positive	61	55.5	
Negative	49	44.5	
Practice			
EBF	48	43.6	
Complementary feeding	62	56.4	

The result shows that majority of the respondents (55.5%) has positive attitude toward EBF, however, most respondents (56.4%) practiced complementary feeding.

Table 4:	Sources of	information,	duration and	the number o	f exclusively	breastfed infants
		,				

Sources of information	Frequency (f)	percentage (%)
Hospital	90	81.8
Media	5	4.5
Church/Mosque	6	5.5
Relatives	4	3.6
Friends	5	4.5
How long have you been practicing EBF		
Less than 1 year	6	5.5
1 - 2 years	14	12.7
3-4 years	11	10
5 and above	17	15.5
None	62	56.4
Number of exclusively breastfed infants		
None	62	65.4
1 - only	16	14.5
2-3	15	13.6
4 and above	17	15.5

Table 4 shows that majority of the respondents (81.8%) got information from Hospital; most of the respondents (56.4%) have not been practicing EBF.

Table 4: Reason for not practicing EBF by mothers

Reason	frequency (f)	percentage (%)
Ignorance	3	4.8
Against personal belief	10	16.1
Against culture	21	33.9



Against Religion	3	4.8	
Because of illness	2	3.2	
Aesthetic purpose	3	4.8	
Other persona reason	20	32.3	
Total	110	100	

The result shows that most of the respondents (33.9%) who do not practice EBF said are due to their culture.

Table 5: As	ssessment of	EBF method
-------------	--------------	------------

Grade	Frequency (f)	Percentage (%)	
Very Good	24	21.8	
Good	34	30.9	
Fair	27	24.5	
Poor	20	18.2	
Very Poor	5	4.5	

Table 5 shows that most of the respondents (30.9%) reaffirmed that EBF method is good while 4.5% of the respondents contradict as been very poor.

Age Categories	Aware	Unaware	Total	
16 – 20 years	12	11	23	
21 – 25 years	18	13	31	
26 – 30 years	13	7	20	
31 – 35 years	6	6	12	
36 – 40 years	10	8	18	
41 years and above	4	2	06	
TOTAL	63	47	110	
V ² 170 7 007 1 1				

 $X^2 = 17.8 = 5$, at 0.05 significance level, critical value = 11.1

Null hypothesis (H01) is rejected, there is statistically significant difference in knowledge of EBF among women attending postnatal care across age categories and it can be deduced that those who have adequate knowledge are more likely to develop positive attitude toward EFB, therefore practicing the method than those who do not have.

Table 7: Cross tabulation of attitude of mothers toward EBF across age categor
--

Age Categories	Positive	Negative	Total		
16 – 20 years	5	19	24		
21 - 25 years	19	11	30		
26-30 years	10	10	20		
31 – 35 years	8	4	12		
36-40 years	15	3	18		
41 years and above	4	2	6		
Total 61	49	110			
$\boldsymbol{x}^2 = 19.2$, df = 5, at 0.05 significance level, critical value = 11.1					

The calculated chi-square of 19.2 is greater than the critical value of 11.1 at significance level 0.05 and df of 5. Therefore, null hypothesis (H02) is rejected. It means that the women attending postnatal care show significant difference in attitude towards EBF method across age categories. It can be inferred that women with positive attitude are more likely to practice EBF than those with negative attitude.



Level of education	Practiced EBF	Practiced complementary feeding	Total
Non formal education	2	11	13
Primary education	10	27	37
Secondary education	23	20	43
Tertiary education	13	4	17
Total	48	62	110

 $x^2 = 17.2$, df = 3, at 0.05 significance level, critical value = 7.8.

Therefore, the null hypothesis (H03) is rejected, which means there is significant difference in the practice of EBF among women attending postnatal care in Comprehensive health Centre, Saminaka, across levels of education. This shows that the children of mothers who practiced EBF are more likely to derive the benefits associated with EBF than those who practiced complementary feeding.

DISCUSSION OF FINDINGS

This study was conducted to investigate the knowledge, attitude and practice of EBF among women attending postnatal care in comprehensive Health center Saminaka, Lere LGA, Kaduna State, Nigeria. The study revealed a high level of awareness of EBF, however only few of the respondents have adequate knowledge and this correlated with the findings of Olatona et al (2011) who found a high level of awareness of EBF with a relatively poor knowledge in Ikosi LGA in Lagos state. The findings also shows that majority of the respondents have positive attitude toward EBF method, this is similar with the findings of Di Napoli et al. (2006) who reported that Jordanian women have a positive attitude toward EBF method which is reflected in their thinking that breast feeding was easier and less expensive than feeding infant formula. This contradicts the study conducted in Zambia by field et al. (2008), found that complementary feeding particularly with water, other fluids and light mealie- mealportridge, was perceived as the best way to feed an infant mainly because of misconception that breast milk contains insufficient water. However, majority of the respondents have reaffirmed that EBF method is good and this is in consonance with the recommendation of WHO (2003) and AAP (2005), of six months of EBF to all infants under the age of six months, after which the complementary feeding is to be introduced.

Hypothesis one is rejected because there is statistical significant difference in knowledge of EBF among women attending postnatal care in comprehensive Health Centre Saminaka across age categories. This may be due to the age difference, which support the findings of Ogbonna et al. (2007) in a study conducted in Plateau state, Nigeria, reported that knowledge and practice of EBF was found to increase with age and higher educational status of women. Hypothesis two and three were also rejected due to statistical differences in attitude and practice of EBF method among the respondents, the elderly women are more likely to develop positive attitude than the younger once, likewise the women with lower educational status were less likely to practice EBF, this study concur with the study findings conducted in Mozambique and Malawi by Rita (2012), which highlighted the lack of autonomy and decision making power among young mothers, as decision on infant feeding significantly involves the extended family.

CONCLUSION

The researchershave found a relatively low rate of EBF practice in Saminaka, Lere LGA, Kaduna state, Nigeria, which is in conformity with the report of World Bank (2008), found a very low rate of EBF practice in Nigeria. A substantial improvement in EBF in Saminaka community can be achieved by avoiding the practice of complementary feeding within the first six months of life. EBFpromotion programmes should target all mothers, but with special focus on non-literate families in rural and semi-urban communities such as Saminaka. This will go a long way in achieving the child survival sustainable development goal of reducing infant mortality from about 100 deaths per 1000 live births to a target of 35 deaths per 1000 live birth by the year 2030.

RECOMMENDATION

Based on the research findings, the researchers came up with the following recommendations:

1. Relevant stakeholders such as federal ministry of women affairs, Local government health department, through thestate ministry of health, National orientation agency, should put more emphasis on socio-cultural re-



orientation programs through effective community mobilization and sensitization with special attention to adequate infant nutrition/feeding practices.

- 2. Government in collaboration with media should increase community awareness and enlightenment campaign on the benefits of EBF method and address harmful feeding practices through the establishment of a Baby-friendly Hospital initiative.
- 3. Government in collaboration with donor agencies such as UNICEF, WHO etc. should intensify effort in organizing seminar/workshop programs for the Health care workers to be acquainted with the current trends in health care delivery.
- 4. Government should promote socio-economic empowerment of women by ensuring girl-child education up to the tertiary levels.
- 5. Government should review periodically and strengthens policy and programs implementation to support EBF initiative with special focus on ruralcommunities.
- 6. Government should allocate more funds to the health sector and ensure its judicious use for effective health care management.

REFERENCES

- [1]. Agostoni, C., Decsi, T., Fewtrell, M., Goulet, O.,Kolacek, S., Koletzko, B., & ESPGHAN Committee on Nutrition. (2008). Complementary feeding: a commentary by the ESPGHAN Committee on Nutrition. *Journal of pediatric gastroenterology and nutrition*, 46(1), 99-110
- [2]. Bezner-Kerr, R.M. (2007). We grandmothers know plenty: Breastfeeding, complementary feeding and the multifaceted role of grandmothers in Malawi. *Social science and medicine, issue*: 66, Pp: 1095 1105.
- [3]. Black, R.and Rivera, J. (2008). Maternal and child under Nutrition study group: Global and regional exposure and Health consequences; *Lancet*. Vol. 7, No. 3 Pp; 243 260
- [4]. Butte, N. F; Lopex-Alarcon, M.G. and Garza, C. (2002). Nutrition adequacy of exclusive breastfeeding for the term infant during the first six months of life. *World organization's publication*.
- [5]. Chantry, C.J. Howard, C.R. ;Auigner, p. (2007). Full breastfeeding duration and risk for ion deficiency in US infants. *Breast feed med*, Vol. 5, No. 2, Pp: 63 73.
- [6]. Davies Adetugbo, A. A. (1997). Sociocultural factors and the promotion of exclusive breastfeeding in rural Yoruba communities of Osun State. *Soc. Sci. Med Pub.* Abstract, Vol. 4, No. 5, Pp: 113 125.
- [7]. Di Napoli, A. and Porta, D. (2006). Effects of parental smoking and level of education on initiation and duration of breastfeeding:*Actapediatr*. Vol. 8, No. 3 Pp: 678 685.
- [8]. Du Toit, G and Fisher, H. R. (2008). Early consumption of peanut in infancy is associated with a low prevalence of peanut allergy: *immonol*. Issue: 122, 984 91.
- [9]. Field, E. (2008). No sister, the breast alone is not enough for my baby: A quantitative assessment of exclusive breastfeeding in southern Zambia; *International breastfeeding journal*, Vol. 3, No. 1, Pp: 26 28.
- [10]. Gartner, L.M. (2005). Breastfeeding and the use of human milk policy statement:http://aapolicy.aapublication.org/cgi/content/full/pediatrics.
- [11]. Halterman, J.S. and Szilagyi, P. G. (2001). Iron deficiency and cognitive achievement among school aged children and adolescents in the United states: *Pediatric*, Issue: 107: 1381-6.
- [12]. Krammer, M.S. and Fombonne, E. (2009). Health and development outcomes in six and half year old children breastfed exclusively for three or six months..*Nutr.*, Issue: 90: 1070-4.
- [13]. Lanigan, J.A., Bishop, J; Kimber, A.C., Morgan, J. (2001). Systematic review concerning the age of introduction of complentary foods to the healthy full term infant. *For J. Clin. Nutr. Issue*: 55:309-20.
- [14]. Lozoff, B. and Wolf, W. (20000. Poorer behavior. Rural and developmental outcome more than ten years after treatment for iron deficiency in infancy. *Pediatrics*, Vol. 5, No. 1, Pp: 105.
- [15]. Norris, J.M., and Erlich, H.A. (2003). Timing of initial cereal exposure in infancy and risk of islet autoimmunity. *JAMA*, Vol. 69, No. 8, Pp: 13 20.
- [16]. Parcio, J.M., and Sanchez-palomares, m. (2006). Full breastfeeding and hospitalization as a result of infections in the first year of life. *Pediatrics*, Vol. 88, No. 3, Pp: 224 228.
- [17]. Quigley, M.A. Kelts, Y. J., Sacker, A. (2007). Breast feeding and hospitalization for diarrheal and respiratory infections in the United Kingdom Millennium Cohort study. *Pediatrcs aapublication.org*.
- [18]. Rebhan, B. and Koletzko, B.V. (2009). Breastfeeding duration and exclusivity with infants' health and growth: Data from a prospective cohort studty in Bavaria. Germany: *Actapediatr*, Vol. 98, No. 9, Pp: 74 80.
- [19]. Reilly, J.J., and Wells, J.C. (2005). Introduction of complementary feeding may be necessary before six months of age. *Br J. Nutr.*, Vol. 94, No. 8. Pp: 69-72.



- [20]. Salami, L. (2006). Factors influencing breastfeeding practices in Edo state, Nigeria: African journal of food Agriculture, Nutrition and development. Vol. 6, No. 2, Pp: 1-12.
- [21]. WHO (2002). 55TH World Health Assembly. Infant and young child nutrition:*thhp://apps.who.int/gb/archieve/pdffiles/WHASS/ewha5525,pdf. Publication*. Retrieved 22/03/2013.
- [22]. WHO, and UNICEF. (2009). Global action plan for prevention and control of pneumonia: *http://www.unicef.org Publication. Retrieved*, 22/03/2013.