

Issues and Challenges of Exclusive Breastfeeding in Rural Nigeria: Survey of Ibarapa East Local Government Area of Oyo State, Nigeria

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Abstract

Exclusive breastfeeding is a vital practice to promote the health, nutrition and cognition of infants and nursing mothers. The significance of exclusive breastfeeding extends beyond the infant and mother to the society as a whole for its stability and economic growth. This study aimed to evaluate the practice of exclusive breastfeeding among rural women. Questionnaire was used to collect data and were described using percentages and the mean scores. Inferential statistics adopted was the t-test to determine the differences in opinion among respondents. Results showed that initiation of breastfeeding within first one hour (t-stat 61.847); duration of breastfeeding (t-stat 31.67); and, exclusiveness (t-stat 32.726) all significant ($p < 0.05$ sig. level). Factors examined: awareness of the benefit of exclusive breastfeeding (t-stat 24.819); education levels of nursing mothers (t-test value 8.732); effect of seminars attended by nursing mothers on the practice of exclusive breastfeeding (t-stat 13.441); occupation of nursing mothers (t-stat 18.439); effect of privacy of nursing mothers (t-stat of 14.151) all significant ($p < 0.05$ sig. level). Five barriers: cultural inhibitions (t-stat 18.894); religious prohibitions (t-stat 14.572); inadequacy of maternity leave (t-stat 14.818); convenience of breastfeeding in public (t-stat 15.589); notion of insufficiency of breast milk (t-stat 12.819) all significant ($p < 0.05$ sig. level). It was concluded that exclusive breastfeeding was not adequately practiced; duration of breastfeeding is generally shorter than recommended; the occupation of nursing mothers and absence of privacy were overriding factors. The barriers to exclusive breastfeeding were identified as cultural and religious inhibitions, inadequacy of maternity leave, and inconvenience of breastfeeding in public as well as the notion of inadequacy of breast milk.

Keywords: exclusive breastfeeding; infant nutrition; nursing mothers; rural Nigeria.

Introduction

Adequate nutrition is fundamental for cognitive and economic development. It is a key indicator of progress in human development. Therefore, reducing malnutrition is an important goal of development. Nutrition at early life is a significant milestone towards achieving meaningful national development. Breastfeeding is the nursing of young ones with the mother's breast milk as soon as they are born, starting from the very first hour of a baby's birth. The first hour of birth is crucial to the baby because the colostrum in breast milk produced in the first days after child-birth is more concentrated than the matured milk; it is easy to digest and has laxative effect that helps infants pass early stools. It also helps the excretion of excess Bilirubin (that substance needed to prevent jaundice occurrence), seals gastrointestinal tract against foreign substances; and, aids secretion of immunoglobulin A (IgA), which attack germs in the mucous membranes of the throat, lungs and intestines (HNN, 2013). WHO (2019) declared breastfeeding as "an unequalled way of providing ideal food for the healthy growth and development of the infant".

Exclusive breastfeeding is recommended for the first 6 months of life after which weaning diets is introduced. In the first 6 months of life, babies are fed with breast milk only, no addition of fluid or any food except for Vitamin D or medication recommended to achieve optimal growth, development and health (WHO, 2016). Breastfeeding continues after 6 months with adequate and safe complementary foods for up to 2 years and beyond so that infant nutritional requirements are met. Breastfeeding make available calories, (carbohydrates, protein and fat) and micronutrients (vitamins and mineral). Breast feeding babies from first hour of life has a lot of benefits: the breast milk has long-chain polyunsaturated fatty acids which help with normal retina and neural development. It prevents respiratory tract infections, diarrhoea, risk of asthma,

food allergies, type1 diabetes, risk of obesity later in adulthood and improves cognitive development of the child.

Lactating mothers also benefit from breastfeeding through reduction in blood loss after delivery, better uterus shrinkage and decrease in postpartum depression. Lactation delays return of menstruation and fertility (i.e., lactational amenorrhea), also decreases risk of breast cancer, cardiovascular disease and rheumatoid arthritis. Above all, breastfeeding assists in the mother and child bonding as a result of infant-mother interaction: immediate skin to skin contact warms the baby and reduces crying; and, heals any feeling of disappointment or bitterness, if delivery is not as planned. According to UNICEF (2018), “infants and young children need the right foods at the right time to grow and develop to their full potential.” It was further stated that improving breastfeeding practices worldwide could save the lives of an estimated 1.5 million children annually.

Statement of the Problem

Nigeria Demographic and Health Survey (NDHS) (2008), declared that about 820,000 children under 5years die every year globally for illnesses which could be prevented with increased practice of exclusive breastfeeding (Agunbiade & Ogunleye, 2012). With the Multiple Indicator Cluster Survey of 2016/2017 indicating that breastfeeding in Nigeria is low (only 23.7%). Studies variously showed that malnutrition resulted into 45% of all deaths globally of children under 5years while Nigeria takes the second position of stunted children in the world (UNICEF <http://www.unicef.org/Nigeria>). These grim statistics had prompted several efforts to unravel the cause, nature and prevalence of infant malnutrition.

The apparent gap between the level of knowledge available and the failure of nursing mothers to go exclusive breastfeeding despite various advocacies and extension services is a major prompter to undertake this study. Indeed, Tyessi (2018) lamented the state of malnutrition in Africa, stating that huge budgetary allocations notwithstanding, the menace of malnutrition in early life has been unabated.

Objectives of the Study

The main objective of the study is to evaluate the practice of exclusive breastfeeding among rural women in Ibarapa East in Southwest Nigeria. The specific objectives of the study are to:

- i. determine the practice of exclusive breastfeeding among rural women;
- ii. examine the factors affecting the practice of exclusive breastfeeding by nursing mothers in rural areas of Nigeria; and,
- iii. analyse the barriers to exclusive breastfeeding among nursing mothers in rural areas of Nigeria.

Literature Review

Breast milk is a natural creamy renewable fluid, rich in almost all nutrients required by an infant. It is complete food source adequate for the first six month after birth (Al-Nuaimi, Katende, & Arulappan, 2017). Breastfeeding is the process of feeding a child with human breast milk. This is a natural way of making essential nutrients needed available to infants for healthy growth and development, almost all nutrients required for healthy growth and development of young infants up to age six months are available in breast milk. When there is information and support from health care system, the family and the society, every woman can breastfeed (WHO 2016).

Breastfeeding is recommended to be given to infants within the first hour of delivery of a baby to benefit from the early breast milk secretion and continue the intake as much as the baby desires. There is no exception to breastfeeding, the premature and sick babies all need the breast milk (Shiel Jr, 2018). Early initiation of breastfeeding is referred to as best practice. United Nations International Children’s Emergency Fund (UNICEF) defines optimal breastfeeding as the practice of exclusive breastfeeding during the first six months, followed by breastfeeding with appropriate addition of complementary food thereafter up until two years of age. According to Al-Nuaimi, et al. (2017), breastfeeding is of eminent benefit to both mother and

the child due to its immunological and anti-inflammatory properties, protection against illness, improving bonding between the mother and her child and save the family the cost of purchasing infant formula. World Health Organization (WHO, 2017) projects to achieve 50% universal exclusive breastfeeding which will significantly reduce maternal, neonatal, infant and childhood mortality. In Gulf Cooperation Council (GCC) Countries, breastfeeding rates were reported to be sub-optimal such that the WHO breastfeeding goal of 50% coverage is a serious challenge.

Researchers have found that it is difficult for mothers to meet their personal goals and follow what experts recommend for continued and exclusive breastfeeding. Factors responsible for this challenge include breast problems, mother's perception of the adequacy of her breast milk to meet the infant's needs. Others include societal disturbance in respect of occupation and maternity leave, limited knowledge about breastfeeding, inadequate support from family and community, and absence of guidance and encouragement from health care professionals (Ashmika, Deerajen, Prity, & Rajesh, 2013). Ashmika, et al. (2013), admit that these factors vary among countries and even within countries in some instances. It is common to find factors like urban or rural difference, age, mode of delivery, health system practices and community belief also ranking alongside the earlier identified ones to influence breastfeeding practices.

Methodology

The study was essentially a survey design carried out in Ibarapa East Local Government Area of Oyo State, Nigeria. It has an area of 838 km² and the towns in the Local Government Area are Oke-Oba, Anko, Isaba, Oke-Ola Aborerin, New Eruwa, Sango, Oke-Imale, Maya, Idi-Ata and Itabo. These are rural and agrarian communities where women are involved in farming, trading and manufacture of home crafts and some simple objects.

Population of the study area

The targeted population of the study was the inhabitants of Ibarapa East Local Government area. By 2006 population census, Ibarapa East Local Government Area comprise of a population of 117,182 of which 50.6% (59,315) were males, and 49.4% (57,867) were females. Age distribution of the population showed that 53,871 persons or 45.97% fall within the age range 20-59 years which was considered active child bearing age. If the proportion of female population was applied, that means 26,612. However, a projection of population yearly growth rate of 3.46% is applied uniformly in Nigeria giving us 37,363 women.

Sampling techniques and sample Size

The sampling techniques adopted for the purpose of the study was random sampling. Source of data were from people living in the study area. A sample size of hundred and twenty (120) was purposively selected. The local government comprised of ten wards and thus twelve respondents were drawn from each ward giving a total of one hundred and twenty respondents.

Methods of data collection

Primary data was used to realize the objective of this study through a cross-sectional survey. A questionnaire was structured to determine the practice of exclusive breastfeeding among rural women in the study area portraying such questions as socioeconomic characteristics of the respondents and the assessment of the practice of exclusive breastfeeding among rural women. Barriers to exclusive breastfeeding were also explored.

Methods of data analysis

For the purpose of this study, data were presented using descriptive statistics tools, like frequency table, distribution and percentages. Inferential statistics adopted for the study was t-statistics.

Results and Discussion

Description of socio-economic characteristics of respondents

The socioeconomic statuses of the respondents are shown in Table 1 and it showed that 5% of nursing mothers sampled were single while 70% were married and the rest 25% were distributed into: divorced (10.84%), widowed (5.83%) and separated (8.33%). The levels of education of respondents were: Primary School leaving certificate (18.33%), SSCE (47.5%), NCE/ND (16.67%) and HND/Degree (17.5%). The occupations of the respondents were: Farming (20.83%), Artisans (7.5%), Civil Service (40%), Trading (12.5%) and those not occupied were (19.17%). Religious affiliations were distributed among Christianity (31.67%), Islam (34.17%), Traditional religions (20.83%), others (13.33%). The age range of respondents showed that 67.5% were below 40 years of age and 32.5% were between 40- and 60- year-old.

Table 1: Socio-Economic Characteristics of Respondents

Marital Status	Education		Occupation			Religion			Age					
	Status	freq	%	Levels	freq	%	Type	freq	%	Types	freq	%	Range	freq
Single	06	05.0	Pry.Sc h	22	18.33	Farming	25	20.83	Christian	38	31.67	20-29	19	15.83
Married	84	70.0	SSCE	57	47.5	Artisan	09	07.5	Islam	41	34.17	30-39	62	51.67
Divorced	13	10.84	NCE/ND	20	16.67	Civ. Ser	48	40.0	Tradition	25	20.83	40-49	31	25.83
Widowed	07	05.83	HND/BSc	21	17.5	Trading	15	12.5	Others	16	13.33	50-59	08	06.67
Separated	10	08.33	Others	-	0	None	23	19.17						
Total	120	100.0		120	100.0		120	100.0		120	100.0		120	100.0

Source: Field survey

Practice of Breastfeeding among Rural Women

Exclusive breastfeeding was practiced by 44.17% of the respondents for up to recommended six-month duration while 55.83% observed the practice for less than six months. This shows that majority of nursing mothers do not practice exclusive breastfeeding for recommended six months.

The timing of breastfeeding after delivery of the baby commenced within the first one hour by 87.5% of respondents, while 12.5 were only able to commence breastfeeding after the first one hour.

Table 2: Practice of Breastfeeding among Rural Women

SOLELY	Exclusively for 6 Months		Initiation (After Birth)		
	Freq.	%	TIMING	Freq.	%
Up to 6months	53	44.17	< 1 HOUR	105	87.5
Less than 6months	67	55.83	After 1 Hour	15	12.5
TOTAL	120	100.0	TOTAL	120	100

Source: Field survey

Factors Affecting the Practice of Exclusive Breastfeeding

Five factors were identified as responsible for the adoption of exclusive breastfeeding in rural areas of Nigeria. These factors include:

- i. Awareness of nursing mothers of the value of exclusive breastfeeding with 66 respondents showing some awareness, while 44 were unaware and 10 were not sure. This implies that a large number of nursing mothers were aware of the importance of exclusive breastfeeding. It is however of concern that almost 40% are yet unaware of the exclusive breastfeeding.
- ii. Level of Education of Nursing Mothers to influence the attitude of nursing mothers in 32 instances, while it showed no consequence in 19 cases and is undecided in 69 cases. This showed that levels of formal education cannot be said to be a major determinant of the practice.
- iii. Need for Seminars to sensitize nursing mothers on the vital role of exclusive breastfeeding in the development and health of babies was accented to by 35 respondents and rejected by 46, while 39 respondents were indifferent. This shows that few nursing mothers consider it needful to attend such seminars.
- iv. The period granted by employers for maternity leave was assessed by respondents: 39 respondents believe it is adequate, while 48 feel it is not adequate and 33 others were indifferent as to its effect on exclusive breastfeeding.
- v. Among the factors affecting working mothers is privacy needed to expose their breasts for babies to suck at workplace. 48 respondents saw privacy as a determinant of exclusive breastfeeding, while 41 disagree and 31 were undecided.

Table 3: *Factors Affecting the Practice of Exclusive Breast Feeding*

Awareness of Exclusive Breast Feeding		Education Levels of Nursing Mothers		Seminars Needed for Nursing Mothers		Adequacy of Maternity Leave		Facilities for Nursing Mothers	
Level	Freq.	Level	Freq.	Need	Freq	Adequate	Freq	Privacy	Freq
Yes	66	Yes	32	Yes	35	Yes	39	Yes	48
No	44	No	19	No	46	No	48	No	41
Undecided	10	Undecided	69	Indifferent	39	Indifferent	33	Undecided	31
Total	120	Total	120	Total	120	Total	120	Total	120

Source: Field survey

Barriers to Exclusive Breastfeeding

Five main types of barriers were identified and examined, viz:

- i. Type of Occupation: 53.33% of respondents believe that the type of work of the mother has effect on the practice of exclusive breastfeeding, while 26.67% disagree with this assertion and 20% were unsure.
- ii. Public Exposure also was assessed as capable of influencing the practice of exclusive breastfeeding by 32.5% of respondents, while 37.5% hold a contrary opinion and 30% were unsure.
- iii. Notion of insufficiency of breast milk to meet the requirements of the baby was upheld by 51.67% of the respondents, 8.33% do not agree to this proposition and 40% were no sure.
- iv. Cultural factors, including the use of herbs and concoctions in early life was seen as capable of influencing the practice of exclusive breastfeeding by only 29 respondents while 61 or about 50% and another 30 respondents do not accept that notion.
- v. The roles of religious beliefs was examined with only 7 respondents accenting to the fact that religion has a role to play, others were either opposed to the viewpoint or indifferent.

Table 4: Barriers to Exclusive Breastfeeding

Work Type	Public Exposure		Notion of Insufficiency		Cultural Inhibition		Religious Prohibitions							
	Freq	%	Freq	%	Freq	%	Freq	%						
Yes	64	53.33	Yes	39	32.5	Yes	62	51.67	Yes	29	24.17	Yes	07	05.83
No	32	26.67	No	45	37.5	No	10	8.33	No	61	50.83	No	75	62.50
Not Sure	24	20.00	Not Sure	36	30.0	Not Sure	48	40.00	Indifferent	30	25.0	Indifferent	38	31.67
Total	120	100.0	Total	120	100	Total	120	100	Total	120	100	Total	120	100

Source: Field survey

Inferential Statistics

For the purpose of drawing inferences for the study the following propositions were made:

- i. There is no significant difference in the practice of exclusive breastfeeding among nursing mothers in rural areas of Nigeria.
- ii. There is no significant difference in the factors responsible for exclusive breastfeeding among nursing mothers in rural areas of Nigeria.
- iii. There is no significant difference in the barriers to exclusive breastfeeding among rural women.

For the proposition:

There is no significant difference in the practice of exclusive breastfeeding among nursing mothers in rural areas of Nigeria.

Two core indicators of breastfeeding practices were examined, namely:

- a. Child begins breastfeeding within first hour of life. The mean response was 1.88 out of a maximum of 2 showing that most infants were put to the breast within the first hour. The t-stat value of 61.847 was a clear indication of high degree of convergence in the practice of exclusive breastfeeding of putting the baby to breast within the first hour of birth. With a probability of 0.00, that is the p-value is less than the alpha value of 0.05 and is thus significant. The null hypothesis is accepted.
- b. Child is breastfed exclusively for six months. The mean response is 1.44 out of a maximum of 2 showing that a substantial number of babies are exclusively breastfed. The t-stat value of 31.67 is sufficiently large to indicate a convergence of the practice. A probability of 0.00 is less than alpha value of 0.05 and is thus significant. The null hypothesis is accepted.

Table 5: Practice of Exclusive Breastfeeding

Practice of Exclusive Breastfeeding	Mean	t-stat	p-value
Solely for six months	1.44	31.670	0.00
Child begins breastfeeding in the first hour of birth	1.88	61.847	0.00

Source: Researcher’s computation

For the second proposition:

There is no significant difference in the factors responsible for exclusive breastfeeding among nursing mothers in rural areas of Nigeria.

Factors affecting exclusive breastfeeding were analysed (See Table 6):

- a. Awareness of the benefit of exclusive breastfeeding had a mean of 1.47 from a total of 2 showing that there is some convergence of opinion as to this factor impacting on the practice of exclusive breastfeeding. The t-stat of 24.819 and p-value of 0.00 indicate the convergence of opinions as to the factor being significant. The null hypothesis is accepted.
- b. Education levels of nursing mothers had a mean of 0.69 from a total of 2 showing that opinions were divergent on the effects of education of nursing mothers on the practice of exclusive breastfeeding. However, the t-test value of 8.732 is significant as p-value is less than 0.05 level of significance. The null hypothesis is accepted.
- c. The effect of seminars attended by nursing mothers on the practice of exclusive breastfeeding was examined. The mean response value was 0.97 from a total of 2 showing marginal convergence of opinions in respect of this factor. The t-stat 13.441, was significant as the p-value is less than 0.05 level of significance. The null hypothesis is accepted.
- d. The occupation of nursing mothers in rural areas of Nigeria was examined and the mean response value was 1.33 from a total of 2, showing some convergence of opinions on the effect of this factor on practice of exclusive breastfeeding by nursing mothers. Inferential statistics, t-stat18.439 is significant as the p-value is less than 0.05. The null hypothesis is accepted.
- e. An examination of the effect of privacy of nursing mothers for breastfeeding on the practice of exclusive breastfeeding showed a mean of 1.03 from a total of 2 indicating some level of convergence of opinions on the effect of this factor on practice of exclusive breastfeeding by nursing mothers. The t-stat of 14.151 is significant as p-value is less than 0.05 level of significance. The null hypothesis is accepted.

Table 6: Factors Responsible for Exclusive Breastfeeding among Nursing Mothers in Rural Nigeria

Factors Identified	Mean	t-stat	p-value
Awareness of exclusive breast feeding	1.47	24.819	0.000
Education levels of nursing mothers	0.69	8.732	0.000
Seminars attended by nursing mothers	0.97	13.441	0.000
Occupation of nursing mothers	1.33	18.439	0.000
Privacy of nursing mothers for breastfeeding	1.03	14.151	0.000

Source: Researcher's computation

For the third proposition:

There is no significant difference in the barriers to exclusive breastfeeding among rural women.

Five barriers were identified as capable of hindering the practice of exclusive breastfeeding in rural Nigeria, (see Table 7):

- a. Cultural Inhibitions was examined had a mean response value of 0.75 from a total of 2 showing weak convergence of opinions on this barrier. The t-stat of 18.894 and p-value less than 0.05 level of significance corroborate the convergence of opinions in respect of the barrier being significant. The null hypothesis is accepted.
- b. Religious Prohibitions had a mean response value of 0.74 from a total of 2 showing weak convergence. The t-stat 14.572 is significant as the p-value is less than 0.05 level of significance. The null hypothesis is accepted.
- c. Inadequacy of maternity leave was examined. The mean response value of 1.05 from a total of 2 showed some level of convergence of opinions affirming the barrier. The t-stat 14.818 and p-value

less than 0.05 level of significance indicated that the barrier is significant consideration. The null hypothesis is accepted.

- d. Convenience of breastfeeding in public was examined as a barrier to exclusive breastfeeding by nursing mothers in rural Nigeria. The mean response value of 1.14 from a total of 2 showed some level of convergence of opinions affirming this barrier. The t-stat of 15.589 was significant as p-value was less than 0.05 level of significance.
- e. Notion of Insufficiency of Breast Milk was examined and the mean response rate of 1.12 from a total of 2 showed some convergence of opinions that this issue constitutes a barrier to exclusive breastfeeding among nursing mothers in rural areas of Nigeria. The t-stat was 12.819, p-value is less than 0.05 significance level. The null hypothesis is accepted.

Table 7 *Barriers to Exclusive Breastfeeding among nursing mothers in Rural Nigeria*

Barriers to Exclusive Breastfeeding	Mean	t-stat	p-value
Cultural Inhibitions	.75	18.894	.000
Religious Prohibitions	.74	14.572	.000
Inadequacy of Maternity leave	1.05	14.818	.000
Inconvenience of Breastfeeding in Public	1.14	15.589	.000
Notion of Insufficiency of Breast Milk	1.12	12.819	.000

Source: Researcher's computation

Discussion

The findings in respect of exclusive breastfeeding practices in rural Nigeria shows that there is no significant difference in the practice. This indicates the value placed on the practice and this agrees with the emphasis of Al-Nuaimi, et al. (2017) and WHO (2016) on the quality and necessity of breast milk in nurture of infants. Furthermore, the convergence of the practice of exclusive breast feeding for first six months of infant's life is in conformity with WHO (2016). The introduction of the infant to breast milk from the first hour of life corroborates the assertion of Shiel Jr. (2018) that declared that irrespective of the state of the infant, they should be introduced to breast milk at the earliest moment of life. It is however pertinent to state that although inferences point to conformance with best practices, the descriptive statistics show that a sizeable number of nursing mothers are in dereliction of this ideal.

Several authorities like Ashmika, et al. (2013) highlight the factors that could determine the practice of exclusive breastfeeding and explained that these may vary among countries. There is a general agreement among respondents on the factors relevant to exclusive breast feeding.

Conclusion and Recommendations

From findings of this study, it was concluded that exclusive breastfeeding practices are well accepted but not adequately done. The duration of breastfeeding is generally shorter than recommended. It was also concluded that although awareness of the value of exclusive breastfeeding is high, the occupation of nursing mothers in rural areas of Nigeria and absence of privacy were overriding factors. The barriers to exclusive breastfeeding were identified as cultural and religious inhibitions, inadequacy of maternity leave, and inconvenience of breastfeeding in public as well as the notion of inadequacy of breast milk.

Providing convenient environment for nursing mothers to breastfeed at work and in public with privacy in mind. Maternity leave should be granted and extended to six months to facilitate the practice of exclusive breastfeeding.

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