

LIMITATIONS OF EXCLUSIVE BREASTFEEDING AMONG WORKING CLASS WOMEN IN A TEACHING HOSPITAL SOUTH EAST, NIGERIA

ABSTRACT

This research work seeks to investigate the challenges of exclusive breastfeeding among working class mothers in Nnamdi Azikiwe University Teaching Hospital Nnewi Anambra State Nigeria. The objective of the present study is to investigate the attitude of working mothers to exclusive breastfeeding (EBF) in Nnamdi Azikiwe Teaching Hospital, Nnewi North L.G.A., Anambra State, Nigeria. The study unravel those socio-economic determinates of exclusive breastfeeding among working mother's in Nnamdi Azikiwe Teaching Hospital, Nnewi in order to give recommendations that will help improve the rate of exclusive breastfeeding. Descriptive survey design was used in the study. Descriptive survey method was used to observe, describe and document aspects of the attitude of working class mothers towards exclusive breastfeeding. Data from the survey was statistically analyzed using the Statistical Package for Social Sciences (SPSS) (version 12.0). 120 mothers participated in this study; they were selected based on the inclusion criteria and their availability at the time of the survey. Socio-demographic characteristics of mothers were presented in a cross-tabulation.

Keywords: challenges, exclusive breastfeeding, working class women

INTRODUCTION

Exclusive breastfeeding has been shown as feeding of an infant with breast milk only without giving any other foods, not even water except the prescribed medicines, immunizations, vitamins and mineral supplements. WHO (2003), also recommended exclusive breastfeeding of infants for the first 6 months of their life and continued breastfeeding for up to 2 years, with the introduction of other foods.

During 1940s, exclusive breastfeeding was a communal way in all corners of the globe; subsequent to the World War II the ritual instigated to diminish and converted to modern trend of the use of fabricated formula milk particularly in the western world to the contemporary eras.

Breastfeeding is the act of milk transference from mother to baby that is needed for the survival and healthy growth of the baby into an adult. Breastfeeding creates an inimitable psychosocial bond between the mother and baby, enhances modest cognitive development and it is the underpinning of the infant's wellbeing in the first year of life even into the second year of life with appropriate complementary foods from 6 months. Furthermore, breastfeeding reduces the risk of neonatal complications, respiratory and other varieties of illnesses.

Based on anecdotal and empirical evidence on the benefits of breastfeeding to the mother and baby, the World Health Organization (WHO) has recommended 2 year breastfeeding that is; first 6 months exclusive breastfeeding; more than 8 times breastfeeding of the baby per day in the first 3 months of an infant's life. The WHO and the United Nations Children's Fund (UNICEF) global effort to implement practices that protect, promote and support breastfeeding through the Baby-Friendly Hospital Initiative has recorded attendant successes.

However, a gamut of factors not limited to race and cultural beliefs, maternal characteristics, infant health problems, socio-economic status and some psychosocial factors may hamper the full

realization of the baby-friendly initiative. Information about the beliefs and knowledge that may constitute barriers and in turn influence practices are needed in order to optimally utilize the benefits of the baby-friendly initiative.

In line with this agreement, Nigeria prohibits the advertisement of such products on all media in an effort to promote exclusive breastfeeding.

It is estimated that sub-optimal breastfeeding, especially non-exclusive breastfeeding in the first 6 months of life, results in 1.4 million deaths and 10% of the disease burden in children younger than 5 years of age. Exclusive breastfeeding (EBF) for the first 6 months of life improves with the growth, health and survival status of newborns (WHO, 2003) and is one of the most natural and best forms of preventive medicine.

The study was done to investigate the challenges of exclusive breastfeeding among working class mothers in Nnamdi Azikiwe University Teaching Hospital Nnewi Anambra State Nigeria.

RESEARCH METHODOLOGY

Research design

Descriptive survey design was used in the study. Descriptive survey method was used to observe, describe and document aspects of the attitude of working class mothers towards exclusive breastfeeding in Nnamdi Azikiwe Teaching Hospital, Nnewi North L.G.A. 'Anambra state of Nigeria. This design was chosen because the study was concerned with specific prediction and describing characteristics of a particular group (mothers and infants).

Study area

The study was carried out at Nnamdi Azikiwe University Teaching Hospital, Nnewi in Anambra State, Nigeria.

Target Population

All mothers and infants who attends infants welfare clinic at Nnamdi Azikiwe University Teaching Hospital, Nnewi, Anambra State Nigeria.

Population of Study

It has an area of 40,000 hectares (400 km²) and a population of some 2 million. It is one of the fastest growing urban areas in the world, with a growth rate of 40 percent recorded annually. Mothers of infants aged 0-6 months drawn from the target population.

Inclusion Criteria

Mothers of infants aged 0-6 months that were willing to participate in the study.

Exclusion Criteria

Mothers of children aged 0-6 months not willing to participate. Mothers of children aged 0-6 months that were unwell.

Sampling Techniques

Each of the infant welfare clinics was visited on different days for 4 consecutive weeks. Each visit lasted 4 hours. This is because each clinic had 2 different specific Mothers and Child Health Care clinic days which operated from 8 am to 12 noon. Simple random sampling was used. Papers with two written choices yes and no were placed in a container. On each visit, mothers of children aged 0-6 months attending Mothers and Child Health Care clinics willing to participate, picked the papers at random. The subjects who picked the yes response were included in the sample. On each

day, the total number of mothers and infants was recorded. Once the sample size of 296 mothers and infants was achieved, the visits ended.

Sample Size

From the Municipality report of June 2007, out of the 2,523 clients, 1,337 mothers attended the Mothers and Child Health Care clinics. Based on this, the desired sample size was calculated using the formula $n = Z^2pq / d^2$ by Fisher, Where N is the desired sample size if the target population is greater than 10,000 Z is the standard normal deviate at the required confidence level P is the proportion in the target population estimated to have the characteristic $q = 1-p$ d is the level of statistical significance Hence $p = 1337/2523 = 0.53$, $n = 1.96^2(0.53)(0.47)/0.05^2$ $Z = 1.96$ $d = 0.05$ $q = 1-p = 1-0.53 = 0.47$ Since the target population was less than 10,000, that is, 1,337, a final sample estimate was calculated using the formula: $n_f = n / (1 + n / N) = 382 / (1 + 382 / 1337) = 296$ Therefore the sample size was 296.

Data Collection Instruments

Research instruments used were questionnaire and personal interview schedules. Closed ended questions and structured interview schedules were constructed. A six-part questionnaire was developed on the basis of literature review. Part A - Socio- demographic characteristics of the mother Part B – Nutritional status of the baby Part C - Employment Part D – Knowledge level Part E – Personal factors Part F – Social support Anthropometric Method that involved height and weight measurements was used to assess the nutritional status of infants.

Reliability of the Instrument

The questionnaire was initially pretested on 20 mothers who were not among the final 296 respondents and the instrument proved reliable with 0.6% reliability.

Validity of the Instrument

The face and content of the instrument were validated by researcher's supervisor.

Data Collection Procedure

The questionnaire and the structured, face - to - face interview schedule were administered by the researcher. Personal interviews were done using a structured questionnaire for the participants who cannot read. Mothers were asked to state how much they knew about EBF. Established true facts about breastfeeding were used to rate maternal knowledge on breastfeeding. Mothers were asked to respond to established true facts testing knowledge (under part B of the questionnaire), as strongly agree, agree or disagree. Anthropometric Measurements Infant weight was taken using a 25 kg Salter Scale graduated in 100gm. The infant's clothes were removed except the vest, before being placed on the weighing pan. Before each series of weight measurement, the scale was adjusted to read zero. Weight was read twice and recorded to the nearest 100gm, (in kg). Infant height was taken by the use of a calibrated measuring board from the forehead to the toe. The infant was placed on the hospital bed lying flat straight and facing up. Measurements were taken twice; one immediately after another and recorded to the nearest 0.1 cm. The average reading was used to ensure accuracy. Infant's age (in months) was determined using the child health card and also by asking the mother when the baby was born. All mothers who attended the Mothers and Child

Health Care clinics had been issued with child health cards.

Data Analysis

Data from the survey was statistically analyzed using the Statistical Package for Social Sciences (SPSS) (version 12.0). Inferential statistics and chi- square were performed to compare the effects

of attitude of working class mothers towards exclusive breastfeeding. Since the study was about a relationship (dependency between exclusive breastfeeding practice and working class and other factors) chi-square statistic (χ^2) was used to establish whether relationships existed among the variables. Statistical significance was assumed for P – values, $<$ or $=$ 0.05. Basic descriptive analysis was done using frequency distributions.

RESULTS

Descriptive analysis

Socio-demographic characteristics of mothers

A total of 120 mothers answered the questionnaire of which the minimum age of working class mother was 20 years and the maximum age was 48 years with an overall mean age of 32.9 years. Most of the mothers were married (104 (86.7 %)), with more than 80 % (104 respondents) living in the urban area. A larger proportion of mothers (98 (81.7 %)) were Christians. Almost all the women had some level of formal education. Majority of mothers (47.5 %) did not give an answer to the question on average monthly income of their family meanwhile of those who responded, 54 (45.0 %) were from low and middle-income families.

Table 1: Socio-demographic characteristics of mothers

Characteristics	Frequency	Percentage
AGE		
20-29 years	32	26.7
30-39 years	70	58.3
40-49 years	18	15.0
Total	120	100%
MARITAL STATUS		
Married	104	86.7
Unmarried/Single	10	8.3
Divorced/Widowed	6	4.2
Total	120	100%
PLACE OF RESIDENCE		
Rural	16	13.3
Urban	104	86.7
Total	120	100%
RELIGIOUS BELIEFS		
Christianity	98	81.7
Islam	21	17.5
Traditional	1	0.8
Total	120	100%
LEVEL OF EDUCATION		
No education	3	2.5
Primary	8	6.7
Secondary	27	22.5
Tertiary	81	67.5

Total	120	100%
AVERAGE MONTHLY INCOME OF FAMILY		
10,000-20,000naira (22- 445euros)	54	45.0
21,000-40,000naira (446-890euros)	36	30.0
41,000-60,000naira (891- 1336euros)	30	25.0
Total	120	100%

Knowledge, attitude and practices of working class mothers on exclusive breastfeeding according to age and education

Among the mothers who selected the correct definition of exclusive breastfeeding, 65 were within the ages of 30-39 years, 30 mothers within 20-29 years and 15 mothers within 40-49 years. Almost all mothers especially those with secondary or tertiary education were aware of the definition of exclusive breastfeeding, of which they defined it as feeding baby with only breast milk. There was a significant association between the educational level of a mother and their knowledge in exclusive breastfeeding with a p-value of 0.001. Table 2 illustrates the distribution of mothers' responses in relation to the definition of exclusive breastfeeding according to their age and level of education.

Table 2: Age, level of education and knowledge of exclusive breastfeeding

	Giving only Breast milk	Giving Breast milk and Formula	Giving Breast milk and water	Giving Breast milk, Water and Food supplement	Do not know the definition of Exclusive breastfeeding
AGE(years)					
20-29	30(93.75%)	-	1(3.1 %)	-	1(3.1 %)
30-39	65(93 %)	1(1.4 %)	2(3 %)	-	2(3 %)
40-49	15(83.3%)	-	-	1(6 %)	2(11.1 %)
EDUCATION					
No education	2(66.7 %)	-	-	-	1(33.3 %)
Primary	4(50 %)	-	1(12.5 %)	-	3(37.5 %)
Secondary	25(93 %)	1 (3.7 %)	1(3.7 %)	-	-
Tertiary	78(96.3%)	-	1(1.2 %)	1(1.2 %)	1(1.2 %)

Knowledge, attitude and practice of working class mothers on recommended length of exclusive breastfeeding, sources of information and breast milk storage

Out of 115 mothers who answered the questionnaire, 90 (78.26 %) mothers answered that a baby should be breastfed exclusively for six months, 12 (10.43 %) mothers responded that the duration of exclusive breastfeeding should be more than six months and 13 (11.30 %) mothers indicated that babies should be breastfed for less than six months. Five mothers did not answer this question. Majority of mothers (104) with a percentage margin of 90.4 reported that they received information about the recommended length of breastfeeding from their healthcare providers. A mother failed to respond to this question. According to 93(80.9 %) of mothers, breast milk can be expressed and stored for future use. 23 (20%) mothers opposed the idea that breast milk can be stored, and 4 mothers did not respond to this question.

Confidence to breastfeed

A total of 117 mothers answered this question, 92 (78.6 %) of mothers strongly agreed to the idea that they had the confidence to breastfeed after the birth of their baby, with 12 (10.3 %) also agreeing to this assertion. 5 (4.3 %) of them were neutral, with 2 (1.7 %) disagreeing and 6 (5.1 %) strongly disagreeing to this statement. 3 mothers did not attempt the question.

Practicing Breastfeeding

All mothers who participated in this study breastfed their babies for either a shorter or longer period. A total of 67 (55.8 %) breastfed their babies exclusively for six months or more, while 53 (44.2 %) mothers reported that they breastfed their babies exclusively for less than six months. In assessing whether other women in their family practice breastfeeding, 110 (91.7 %) of these mothers answered that other women in their family breastfeed their babies, however a mother (0.83 %) answered that women in her family do not breastfeed their children. 4 (3.3 %) mothers responded that they were not aware of this information, while 5 mothers failed to respond to this question.

Support and advice on breastfeeding

Some mothers 47 (39.2 %) reported that assistance needed at home during the period of breastfeeding were offered by their partners. However, healthcare providers and friends were the two main sources of advice during the period of breastfeeding.

Table 3: Sources of support and advice on breastfeeding

Sources	Support	Advice
Partner	47 (39.2 %)	7 (5.83 %)
Friends	4 (3.33 %)	28 (23.33 %)
Relatives	28 (23.33 %)	17 (14.2 %)
Workmates	3 (2.5 %)	7 (5.83 %)
Doctor/Midwife/Nurse	13 (10.83 %)	35 (29.2 %)
Childcare Provider	2 (1.7 %)	2 (1.7 %)
Community group	1 (0.83 %)	3 (2.5 %)
Media/Internet	-	-

More than one answer	16 (13.3 %)	15 (12.5 %)
None of the above	6 (5. %)	6 (5 %)

When asked about the role played by spouse's family in decision making concerning breastfeeding, 110 (91.7 %) recorded that their spouse's family were supportive during the period of breastfeeding, with 4 (3.3) mothers stating that their spouse's family were not in support. 6 (5.0 %) mothers did not attempt this question.

Disapproval in breastfeeding

9 (22 %) of mothers believe their friends were not in support of breastfeeding, 8 (19.5 %) mothers answered that their families were not in support of breastfeeding, 8 (19.5 %) respondents believed they did not get approval from their workplace, with 8 (19.5%) receiving disapproval from community and 4 (9.8%) from the media. Also partners of 4 (7.3 %) mothers were against breastfeeding. However, majority of these mothers (79) who answered the questionnaire did not respond to this question.

Discussions

This was a cross-sectional study that assessed the knowledge, attitude and practice of exclusive breastfeeding among working class mothers with children aged 6 to 18 months and the social support offered to them during breastfeeding. Findings are quite consistent with similar studies conducted on the concept of exclusive breastfeeding (Tampah- Naah and Kumi-Kyereme, 2013; Mogre, 2016). A standard definition of exclusive breastfeeding and its recommendation was adopted from WHO. WHO defines exclusive breastfeeding as an act of feeding an infant with only breast milk for the first six months of the child's life (WHO, 2017). This definition was used as the basis for this study and a standard for data analysis.

120 mothers participated in this study; they were selected based on the inclusion criteria and their availability at the time of the survey. Socio-demographic characteristics of mothers were presented in a cross-tabulation. Qualitative data was used in assessing mother's level of understanding, reactions and practice in relation to the concept being studied.

Similar to the earlier studies (Tampah-Naah and Kumi-Kyereme, 2013; Mogre *et al.*, 2016), a greater number of mothers considered breastmilk as the best form of food and nutrition for infants, they agreed to the concept of six months exclusive breastfeeding of which most stated that they became aware of this information from their health care providers. The general rate of knowledge about exclusive breastfeeding was 92.4% which is almost the same as the results from a study by Dun- Dery and Laar (2016) which recorded 91.0% awareness in exclusive breastfeeding among respondents. In 2013, Tampah-Naah and Kumi-Kyereme recorded 64% rate in the knowledge in exclusive breastfeeding, this increase in the rate of awareness in exclusive breastfeeding with evidence from this study and that of Dun-Dery andLaar shows an appreciable growth in awareness over the years. Another reason for the difference in results may relate to the fact that most of this study subjects had secondary and tertiary education compared to the educational status of subjects from Tampah-Naah and Kumi-Kyereme study.

In reference to the response given by mothers, it was acknowledged that antenatal and postnatal hospital visits are great avenues where the right feeding knowledge is impacted into mothers (Mogre *et al.*, 2016). This shows that healthcare providers play a key role in the dissemination of information about breastfeeding and other health practices.

Contrary to the result from the study by Mogre *et al.* in 2016 on exclusive breastfeeding among rural lactating mothers, which showed that most mothers did not know that breast milk could be stored and used in future; for convenience or to be used in the absence of the nursing mother. It became evident from the result of this research that quite a sizeable number of mothers knew breast milk can be stored for future use. The difference in study subjects and setting; rural verse urban dwellers might be the reason behind the difference in results. If information on breast milk storage is communicated well enough to mothers especially working mothers and the work environment is made friendly enough to allow for breast milk storage, a private place to breastfeed or scheduled breaks to feed baby, the rate of exclusive breastfeeding among working mothers could be improved.

As a result of the inclusion criteria of this study, which enabled only literate mothers to participate in the study, almost all mothers who participated in this study have some level of formal education of which majority have tertiary level of education. In line with other studies (Oche *et al.*, 2011, Mogre *et al.*, 2016; Fosu-Brefo and Arthur, 2015), this study shows that majority of mothers especially the highly-educated have a fair knowledge about the meaning of exclusive breastfeeding and its recommendation as proposed by WHO and UNICEF. Like the result from the work by Mohammed *et al.* on exclusive breastfeeding in Egypt in 2014, there was a significant relationship between maternal education and the knowledge in exclusive breastfeeding. Reasons for this result might be attributed to the perception that educated mothers are more likely to be susceptible to health information especially that which concern their children; therefore they are more likely to be aware of the importance of exclusive breastfeeding and are more willing to practice it.

In line with the work by Mohammed *et al.* (2014), mothers' age did not have much influence on the knowledge and practice of exclusive breastfeeding. Almost all mothers irrespective of their age at the time of giving birth were familiar with the concept, unlike the results from the study by Fosu-Brefo and Arthur (2015) which showed a significant relationship between maternal age and the knowledge in exclusive breastfeeding. Majority of mothers showed prominent level of understanding about the essence of breastfeeding an infant. For instance, its role in protecting an infant from diseases, an ideal source of nutrients, family planning methods and its health benefits on lactating mothers. They also acknowledged to the fact that breastfeeding promotes the relationship between mother and child. Even though majority of mothers explained how safe, convenient and economical it is to breastfeed a baby, not every mother was able to practice it (Oche *et al.*, 2011).

The role society plays in the perception and actions of individual within the society cannot go unnoticed. The study results show a positive role played by society in breastfeeding. Breastfeeding is a common act which has been practiced in ages, the traditional duty of the Nnamdi Azikiwe University Teaching Hospital, Nnewiiian woman is to ensure that her children are been fed. Society play a communal role of ensuring that a new mother continually breastfeed her baby since breast milk is perceived as the main food for an infant..

Although society appreciates the act of breastfeeding, there were evidence from responses by mothers that certain societal beliefs and culture undermine the importance of exclusive six months breastfeeding hence, contribute to the failure by most mothers to adhere to this practice (Tampah-Naah and Kumi-Kyereme, 2013; Fosu-Brefo and Arthur, 2015). For instance, concerns were raised that a baby needs to drink water and denying him or her of such privilege is perceived as an act of punishment. Another reason was that exclusive breastfeeding is perceived as a foreign culture which was invented by Western health advocates and was not practiced in the past.

Results from the study shows that religion plays a key role in influencing the perceptions of mothers on breastfeeding. It advocates the promotion of exclusive breastfeeding and child health in general. Religious leaders acknowledge the divine responsibility of mothers in ensuring the growth and wellbeing of their children. Breastfeeding an infant is considered an ideal way of ensuring the nourishment of the child. During religious gatherings and activities, religious leaders use this avenue to advocate the positive health implications of breastfeeding on both mother and child, while emphasizing on its cost-effectiveness (Burdette *et al.*, 2012.).

Despite the widespread campaigns about exclusive breastfeeding, its practice is still low (Zhang *et al.*, 2015). Results from this study recorded 55.8% practice of exclusive breastfeeding till the sixth month; this is quite low compared to the 92.4% rate of awareness in exclusive breastfeeding. Similarly, a study by Dun-Dery and Laar in 2016 showed that 91 % of participants knew about exclusive breastfeeding, but 10.3 % of them fed their child with only breastmilk till the sixth month. Like any other activity, breastfeeding can be quite challenging for mothers, especially for young and inexperienced mothers (Smith *et al.*, 2012). Probing into the possible reasons for these results, findings of this study showed sentiments about the discomforts experienced in practicing breastfeeding. While some mothers expressed concerns about the physical challenges encountered during breastfeeding, others attributed their discontinuation to the lack of adequate support from the society and challenges faced at work. Again, the study conducted by Dun-Dery and Laar in 2016 and results from this study depict concerns about the unfriendly working environment and short maternity period available to nurse a newborn baby before returning to work. Hence, most working-class mothers are left with no choice than to feed their infants with breast milk substitutes to be able to meet up with their job expectations.

There were concerns which showed lack of motivation to breastfeed due to mothers' quest to maintain the body or to avoid discomfort from cracked nipple as a result of breastfeeding, due to these reasons some mothers consciously stop breastfeeding (Aborigo, 2012). This problem can be solved given adequate education on proper feeding methods. Again, the inadequacy of information was evident in concerns raised by some mothers about the fear of transferring diseases to an infant through breastfeeding.

Having the right knowledge about breastfeeding and the right way of doing it showed great confidence in majority of mothers. In line with findings from other studies, health care providers were identified as the main point of contact when there is a need for concrete answers to problems encountered during breastfeeding (Tampah-Naah and Kumi-Kyereme, 2013; Mogre *et al.*, 2016).

Mothers whose partners assist them to breastfeed by encouraging them and aiding with house work had higher ability to breastfeed exclusively as compared to those whose spouses did not support breastfeeding (Aborigo *et al.*, 2012; Babakazo *et al.*, 2015). Likewise, family support or having other women in the family who breastfeed their infants. They provide an avenue for new mothers to learn about breastfeeding and seek help when faced with challenges.

The decision to successfully breastfeed exclusively and its successful practice is determined by other comparing factors which go beyond the support received from family and friends. For instance, responses from mothers showed that the motivation to breastfeed exclusively was personal, in the sense that practicing it becomes easier and less demanding. Confidence to breastfeed promotes the desire to breastfeed exclusively amid challenges (Babakazo *et al.*, 2015). In conclusion, it was deduced from this study that the main promoters of information about exclusive breastfeeding are health care providers; one's attitude towards exclusive breastfeeding is shaped by

socio-cultural influences. However, the strongest determinant of a successful practice of exclusive breastfeeding is self-motivation and the dedication to breastfeed.

Questionnaires from earlier studies (Mogre *et al.*, 2016) which are similar to this research work were adopted in designing questionnaire. It served as a baseline for the formulation of the questions. Using three different setting for data collection (Holy Family Hospital, Catholic church and a Muslim community) gave us an opportunity to work with a representation of mothers from the entire study area. Being a native of the study area, the primary researcher could understand and could relate to responses given by participants which facilitated in the analysis. Also, the study findings are similar to results from previous related studies, this made it easy to interpret the results.

Conclusions

One of the greatest factors influencing the attitude of working class mother towards exclusive breastfeeding is their level of education, it is seen to have contributed positively to the acceptance and practice of exclusive breastfeeding as majority of the respondents have junior secondary school certificate. Again, despite their knowledge about exclusive breastfeeding, many of them still have poor knowledge about colostrums.

A good number of them even have the misconception that it causes diarrhoea and therefore should not be given to the babies while greater proportion have no reason for rejecting it. In summary, though as much as 93.3% have heard of exclusive breast feeding, up to 31.3% still gave their babies water during the first 4-6 months leaving 74.3% as these who actually breast fed exclusively.

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