



EXCLUSIVE BREASTFEEDING PERCEPTION AND PRACTICE AMONG NURSING MOTHERS ATTENDING INFANT WELFARE CLINIC IN A SECONDARY HEALTH FACILITY IN SOUTHERN NIGERIA

Ojong Idang Neji¹ and Chukwudozie Chioma Chidiebere²

¹Department of Nursing Science, PAMO University of Medical Sciences, Port Harcourt, Rivers State, Nigeria

²Department of Nursing Science, University of Calabar, Cross River State, Nigeria

ABSTRACT: *The purpose of the study was to investigate the perception and practice of exclusive breast feeding among mothers attending infant welfare clinic in Secondary Health Facility in Southern Nigeria. The research design was descriptive survey. The sample size was three hundred (300) mothers. The instrument for data collection was a validated questionnaire with reliability coefficient of 0.80. Data were subjected to descriptive statistics. Hypothesis was tested using a Chi-square test analysis, major findings showed that majority of the respondents had high knowledge 178 (59.3%). The overall practice was highly adequate with grand mean of 3.03. There was a significant association between level of knowledge and practice of exclusive breastfeeding with minimum expected count of 14.08 with 3 degrees of freedom. Based on the findings it was recommended that intensive awareness creation on benefits of exclusive breast feeding should be carried out for mothers during ante natal period.*

KEYWORDS: Exclusive Breastfeeding, Perception and Practice, Nursing Mothers, Infant Welfare Clinic, Health Facility, Nigeria

INTRODUCTION

The Nigerian Demographic and Health Survey (NDHS, 2008) report showed a 13% exclusive breastfeeding rate which is a decline from 17% indicated in 2003 report. The 2008 report also revealed that 34% of the infants aged 0-5 months were given plain water in addition to breast milk, while 10% were given non-milk liquids and juice and 6% were given milk other than breast milk. Furthermore, only 32% of children less than 24 months of age were still on breast milk. Considering the percentage of mothers practicing breast feeding, it should not be surprising that Nigeria is still saddled with high incidence of malnutrition and its associated infant mortality.

In Nigeria, the perception of mothers towards exclusive breastfeeding is discouraging as most mothers complain of financial and physical challenges, not having enough breast milk, working and breastfeeding, breast and nipples problem and pressure from family and sometimes the effects of drugs taken while breast feeding (Agunbaide & Ogunleye 2012). These factors have hampered the practice of EBF.

The practice of EBF has been less than optimal in many developing countries including Nigeria. Variations in the level of practice of exclusive breastfeeding have been related to prominent socio-economic and cultural factors which influence breastfeeding practices. Social factors like maternal education, occupation, family background and utilization of basic health



services may affect breastfeeding practices. Educational attainment had been adjudged to be a factor enhancing the practice of exclusive breastfeeding, this is attributed to access to information about exclusive breastfeeding while breastfeeding practices did not differ significantly with respect to maternal age and occupation (Brown, Dewey & Allen, 2012). Certain assertions have also been identified as undermining factors to the practice of EBF. Such factors include; excessive crying of the infant, the need to resume duty, maternal illness, delay in establishing lactation, poor growth of infant and pressure from family and friends (Ogunbaide & Ogunleye, 2012). Essentially therefore, there is need for improved infant breastfeeding practices because Nigerian children need to be protected. In the area of study, there is paucity of data in studies on EBF. The researchers therefore felt the studies on exclusive breastfeeding on infants should continue until there is a dramatic change in behaviour among Nigeria nursing mothers. This is why the present study is considered necessary because it is an additional effort in the direction of improving exclusive breastfeeding practices in the study area.

Specific Objectives of the Study

The specific objectives of the study are to:

- Determine the perception of mothers on exclusive breastfeeding.
- Assess the knowledge of mothers towards exclusive breastfeeding.
- Identify the practice of exclusive breastfeeding by mothers.

Hypothesis

There is no significant association between the level of knowledge and the practice of exclusive breastfeeding among mothers attending Ante Natal Clinic in Secondary Health Facility in Southern Nigeria.

LITERATURE REVIEW

Perception About Exclusive Breastfeeding

Many stories and myths are passed around regarding Exclusive Breastfeeding (EBF). Most of that information are passed by family and friends. Most of them are out of date or inaccurate. A study conducted by Rockville (2012) in the USA on perception of mothers on exclusive breastfeeding. Out the 1,237 mothers 36% are of the perception that EBF would protect the baby against diarrhea. Most mothers are uncertain about what to expect with breastfeeding and how to carry it out. The perceived inconvenience of EBF was also an issue as 45% of the respondents indicated that they have to give up many habits and change their lifestyle.

In another study conducted by National Health Survey (NHS) UK (2013) on perception of mothers on exclusive breastfeeding practices. Most of the mothers (67%) are of the perception that EBF will make their breast sag. They are also of the perception that infant formula is basically the same as breast milk. A study conducted by Dipen, Bansal, Ajay, Phatak and Rajendra (2015) on their perception about EBF practices in Bangalore province in India. More than half of mothers (57.5%) started breastfeeding within an hour of birth, 55.9% gave EBF for



six months, 18.2% of the mothers' bottle fed their babies and 15.6% had problems during breastfeeding in first six months. Early initiation of breastfeeding within one hour of birth promoted EBF. The study found out that, they have a positive perception about EBF as more than half of the respondents practiced EBF. The issue of lack of time, finance and environmental conditions also contributed to the situation.

The Knowledge of Exclusive Breastfeeding

In a study conducted by Saied, Mohammed, Suliman, and Anazi (2013) on breastfeeding knowledge and attitude among Saudi women in Riyadh, majority of the study participants have a good knowledge regarding breastfeeding's health benefit for baby and mother (64.7%). In another study conducted by Petit, (2014) on knowledge of exclusive breastfeeding among women attending Ante natal and Post Natal Clinic in Mbarara hospital, Uganda. The study showed that from a total of 203 respondents, 49.8% had exclusively breastfed their infants for six months, 12.3% for more than six months. The majority of the respondents, 73.8%, knew that a child is supposed to be exclusively breastfed for six months. Milk not being enough was the main reason why women did not exclusively breastfed. The main source of information was the health facilities for 48% of the women.

In a similar study conducted by Essien, Samson-Akpan, Ndebbio, and John (2009) on mothers knowledge, attitude, beliefs and practices concerning exclusive breastfeeding in Calabar, results revealed that the majority of the respondents 2409(80%) were aware of exclusive breastfeeding; 162 (54.0%) were knowledgeable about exclusive breastfeeding while 180(60%) practiced exclusive breastfeeding.

The Practice of Exclusive Breastfeeding

A study conducted by Oniyangi, Oyerinde and Olawore (2012) on Practice of Exclusive Breastfeeding among mothers in Ilorin, Nigeria. The study revealed that most of the respondents were not aware of the benefits of exclusive breastfeeding; the nature of their job does not permit them to give exclusive breastfeeding. In a related study conducted by Maduforo, Ubah and Okeke(2013) on the practice of exclusive breast feeding by lactating women in Owerri Metropolis. The study revealed that about 91% of lactating women have correct knowledge of exclusive breastfeeding. It also showed that not all that have the knowledge were practicing it (56.41%) in that area. However, some constraints were identified to be responsible, lack of time, lack of knowledge, lack of support from the husband and family members.

In a study conducted by Ojong, Chiotu and Nlumanze (2015) factors influencing the practice of EBF among mothers in Tertiary health Facility in Calabar. The study revealed a no significant relationship between education and practice of EBF. Further results showed that there was a statistically significant relationship between occupation and practice of EBF, marital status and practice of EBF. The study suggests the need for midwives to create awareness on the need for exclusive breastfeeding and the need for provision of crèches in ministries and parastatals for nursing mothers.

THEORETICAL FRAME WORK

The health belief model was developed to provide a framework to explain why some people take specific actions to avoid illness while others fail to protect themselves. This model was designed by Hochbaum (1958), modified and used by Kegels (1965), Rosenstock (1974) and Becker, M. (1974). The model addresses the relationship between a person's belief and behavior. It provides a way of understanding and predicting how clients will behave in relation to their health, how they will comply with health care therapies.

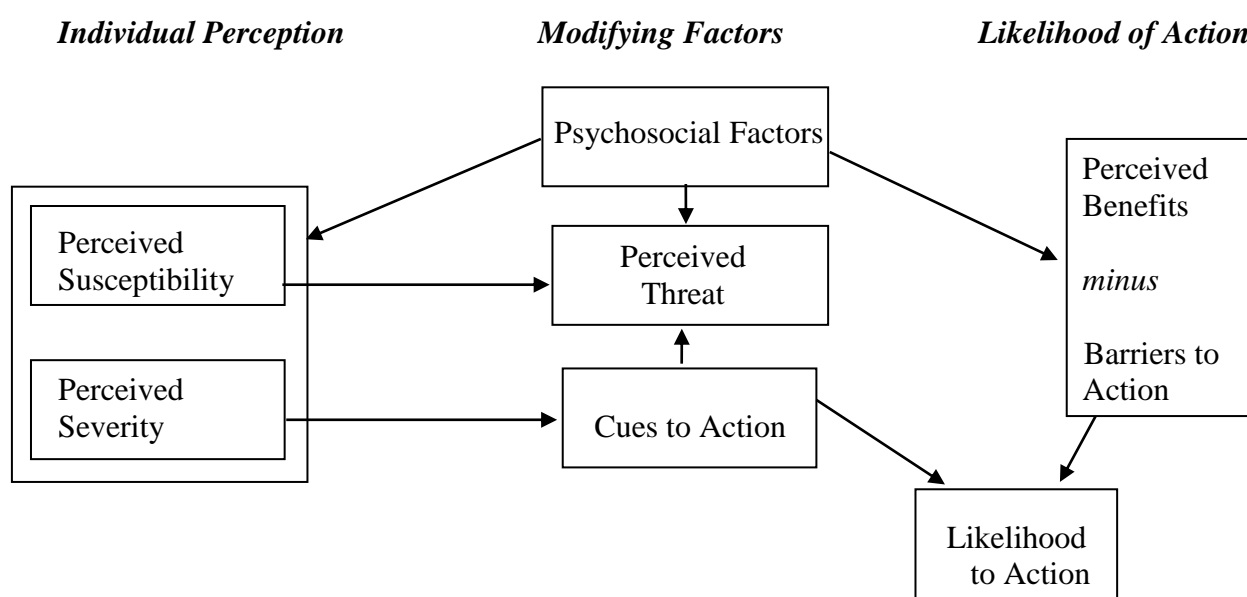


Figure 1: Health Belief Model

The model is divided into three components.

1. Individual perception
2. Modifying factors
3. Variables affecting the likelihood of imitating actions.

Individual Perception

The perceived susceptibility to disease and the seriousness of the disease combine to form their perceived threat of an illness.

Modifying Factors

Include such demographic variables as age, sex, race and ethnicity as well as personality, social class and pressure from a reference group and cues of action example, mass media, campaign and advice from family, friends and medical professionals.



Variables Affecting the Likelihood of Action

Influenced by the perceived benefits of action weighed against the barriers to acting example, barriers are cost, inconvenience, unpleasantness or how much change it requires.

Application of the Theory to this Study

According to Etifit and Samson Akpan (2008), the health belief model plays an important role in explaining or determining health behavior or utilization of health services. The premise for the conceptual base of the model is that an individual's perceived susceptibility of and perceived severity of disease determine a perceived threat that would increase the likelihood of the preventive action or participation in a health intervention that will decrease or lessen that perceived threat. Acknowledgement of both perceived susceptibility and perceived severity must exist before a perceived threat becomes sufficient to motivate a readiness for action and behavior change (Bassavanthapa, 2008).

Individual perception has to do with perceived susceptibility and severity of a disease, perceived benefits and perceived barriers. One of the mothers attending Infant Welfare Clinic in Secondary Health Facility in Calabar perceived that her child is susceptible to infection and other illnesses (diarrheal diseases). The mother knows that the consequences of her child contracting a disease (perceived seriousness) are significant enough to avoid it by practicing Exclusive Breastfeeding (EBF). The mother perceived the benefits of EBF among which are; it increases the child's immunity, aids digestion and prevents diarrheal diseases. This will make her overcome the barriers like lack of time and support from spouse and relatives.

RESEARCH METHODOLOGY

Research Design: A non-experimental, descriptive design was adopted. Descriptive design aims at observing, describing and documenting aspect of a situation on the phenomenon of the life situation as it normally occurs. **Research Setting:** The study was carried out in Infant Welfare Clinic in Secondary Health Facility in Southern Nigeria the hospital is in the capital of Cross River State. It was established in 1991. The Hospital renders medical, surgical, maternity and gynecological services, it is also a referral centre for Primary Health Care Centre and other health institutions.

Research Population: The target population of the study was one thousand two hundred (1200) mothers attending child welfare clinic in a month in General Hospital Calabar. From Monday 16th November, 2018 - Friday 11th December, 2018.

Sample and Sampling Technique

Taro Yamane's sample size determination was used to get 300 respondents from the total population of 1200. The researchers used simple balloting sampling technique based on clinic days in picking three hundred (300) mothers. The Infant Welfare Clinic runs twice a week; on Mondays and Fridays. Selection was done based on eight (8) days in one month. Using simple random sampling technique, the researchers picked the sample that was used for the study.



Instrument for Data Collection: A validated questionnaire consisting of 4 sections, was adopted to collect data for this study. Scoring of the instrument: In order to produce a more objective assessment of perception and practice of Exclusive Breastfeeding, a scoring method was adopted. knowledge score of each of the respondents was obtained by adding up the scores for correct answers to question under C and D on the questionnaire. A score above 18 points indicates high knowledge, a score between 10-17 points indicate moderate knowledge and a score less than 10 points indicates low knowledge.

Practice of exclusive breast feeding was rated as highly adequate, moderately adequate and inadequate practice. A mean score of > 3 points was highly adequate, a mean score of < 3 but > 2 points was moderately adequate, while a mean score of < 2 points was inadequate practice.

Validity of Instrument: the face validity of the instrument was ascertained and used as the validated questionnaire for the study.

Reliability of Instrument: A test-retest reliability was used. The two scores were correlated using Pearson Product Moment Correlation Coefficient. The reliability was then calculated using Cronbach's Alpha at a level of 0.80 significance.

Ethical Consideration: Permission to conduct the study was obtained from the management of the secondary health facility. The respondents were adequately informed about the study and its objectives and their consent was obtained. Confidentiality was strictly adhered to throughout the study. Participation was voluntarily. Inclusion criteria was only nursing mothers with infant 0-6months attending the child welfare clinic in the study area.

Method of Data Analysis

Data collected for the study was analyzed using SPSS 21.0 statistical packages, and presented in simple percentages on frequency tables, while the hypothesis was tested using Chi-Square test analysis at a level of 0.05 significance.

RESULTS

Table 1: Socio-Demographic Data of Respondents (n=300)

Variables	Frequency	Percentage (%)
Age in Years		
15-24	85	28.3
25-34	119	39.7
35-44	65	21.7
45 Years and Above.	31	10.3
Total	300	100
Marital Status		
Single	102	34.0
Married	178	59.4
Divorce/Separated	13	4.3
Widow	7	2.3
Total	300	100



Occupation		
House wife	60	20.0
Self employed	102	34.0
Civil Servant	138	46.0
Total	300	Too
Educational Attainment		
Non-Formal Education		
Primary	89	29.7
Primary Education	100	
Secondary Education	71	23.7
Tertiary education	40	13.3
Total	300	100
Parity		
1-2	65	21.7
3-4	120	40.0
5-6	80	26.7
6 and Above	35	11.6
Total	300	100

The result from table 1 indicated that, majority 119 (39.7%) were between age 25 - 34 years, while the least was 31 (10.3%) respondents were 45 years and above. On marital status, many of them 178 (59.4%) were married, while 7 (2.3%) mothers were widowed. Few were house wife, 60(20%), while many 138(46%) mothers were civil servants. On educational attainment, majority of mothers 100(33.3%) had primary education, while few 40(13.3%) mothers had tertiary education. Most of the women, 120 (40%) had between 3-4 children, while few 35(11.6%) had 6 and above children.

Research Question One

What is the perception of mothers on exclusive breast feeding?

Table 2: Responses of Respondents on Perception of Mothers on Exclusive Breast Feedings (n=300)

Variables	Yes	No	Total
EBF causing sagging of the Breast	99(33%)	201(67%)	300(100%)
EBF dehydrates the baby	120(40%)	180(60%)	300(100%)
EBF is time consuming	140(46.7%)	160(53.3%)	300(100%)
EBF will make my baby reject other meals	116(38.7%)	184(61.3%)	300(100%)
EBF protects the baby against diarrheal diseases	200(66.7%)	100(33.3%)	300(100%)



The summary of the result from table 2 above, shows that the perception of 135(45%) nursing mothers towards exclusive breast feeding was positive, while most nursing mothers 165(55%), had negative perception towards exclusive breast feeding.

Research Question Two

What is the level of knowledge of mothers towards exclusive breast feeding?

Table 3.1: Responses on Mothers Level of Knowledge on Exclusive Breast Feeding (n=300)

Variables	Yes	No	I Don't
EBF is the giving of breast milk only for first six months of life	250(83.3%)	20(6.7%)	30(10%)
EBF increases the child's immunity	180(60%)	70(23.3%)	50(16.7%)
EBF babies are healthier than bottle fed Babies	145(48.3%)	80(26.7%)	75(25%)
EBF is cheaper than bottle feeding	150(50%)	85(28.3%)	65(21.7%)
Breast feeding is more digested than bottle Feeding	165(55%)	65(21.7%)	70(23.3%)

Table 3.2: Mothers Level of Knowledge on Exclusive Breast Feeding (n=300)

Classification of level of Knowledge	Ranking/Scores (points)	Frequency
High knowledge	> 18	178 (59.3%)
Moderate knowledge	10-18	64(21.3%)
Low knowledge	Less than 10	58(19.4%)
Total		300 (100%)

Table 3.2 Summary of respondents' knowledge on EBF shows that majority of the mothers 178(59.3%) had high. Level of knowledge on EBF, 64(21.3%) had moderate level of Knowledge of EBF, while 58(19.4%) mothers had low level of knowledge on exclusive breast feeding.

Research Question 3

Do mothers attending infant welfare clinic in Secondary Health Facility in Southern Nigeria



Table 4: Mothers Responses on Practice of EBF in Infant Welfare Clinic in Secondary Health Facility in Southern Nigeria (n=120)

Variables	Always	Often	Seldom	Never	Mean Score
I give breast milk only for 6 months	100 (83.4%)	10 (8.3%)	7 (5.8%)	3 (2.5%)	3.7
I introduce formula within the first six months	10 (8.3%)	10 (8.3%)	30 (25.1%)	70 (58.3%)	1.7
I breast feed on Demand	105 (81.5%)	10 (8.3%)	3 (2.5%)	2 (1.7%)	3.8
I express breast milk each time am not around	90 (75%)	20 (16.7%)	8 (6.6%)	2 (1.7%)	2.9

Overall mean 3.03

Decision Rule:

- A mean of > 3 indicates highly adequate practice
- Mean of < 3 but > 2 indicates moderately adequate practice Mean of < 2 indicates inadequate practice.

The result in table 4 shows out of the 300 nursing mothers in the study, only 120(40%) agreed that the practiced EBF. The mothers' practice of exclusive breast feeding was highly adequately with majority having mean score between 3.7 and 3.8 while few practiced moderately with a mean score of 2.9 while others with mean score of 1.7 practiced inadequately by introducing formula within first six month of life

Results for Research Hypothesis

Hypothesis

There is no significant association between level of knowledge and the practice of EBF.

Table 5: Cross Tabulation Between Mothers Level of Knowledge and the Practice of EBF (n=300)

Knowledge of EBF	Practice of EBF		Total (%)
	Practiced EBF %	Incomplete Practiced EBF %	
Low	10(17.2%)	48(82.8%)	58(100)
Moderate	20(31.3%)	44(68.7%)	64(100)
High	90(50.6%)	88(49.4%)	178(100)
Total	120	180	300



The result in table 5 revealed that out of 58 mothers with low level of knowledge 10(17.2%) practiced and 48(82.8%) did not. On moderate level of knowledge 20(31.3%) practiced EBF while 44(68.7%) did not. Ninety (50.6%) mothers with high level of knowledge practiced EBF while 88 (49.45) did not.

Table 6: Chi-Square Test (Cross Tabulation Between Mothers' Level of Knowledge and Practice of EBF.

	Value	Df	Asymp. (sided)	Sig (2)
Pearson Chi-Square	18.020	3		
likelihood ratio	19.161	3		
Linear-by-linear association	17.595	1		
Number of valued cases	300			

A 0 cells (0%) have expected count less than 5. The minimum expected count is 14.08.

The result in table 6 on Chi-Square test analysis showing association between mothers' level of knowledge and practice of EBF revealed that cell (0%) have expected count less than 5. The minimum expected count is 14.08. Since the minimum expected count of 14.08 with 3 degrees of freedom was greater than the expected count of 5. The null hypothesis is rejected. It therefore means that mothers' level of knowledge of EBF is significantly associated with the practice of EBF.

DISCUSSION OF FINDINGS

The result on perception of mother on exclusive breastfeeding revealed that majority of the mothers indicated that EBF protect the baby against diarrheal diseases. Others indicated that breast feeding will make the breast sag while others mentioned time consuming and rejection of other feed. The above is in line with the study conducted by Dipert et al (2015) in Bangalore province in India. In contrast to the above, Rockville (2012) view was that EBF is good and had no complication both for mothers and baby. This calls for proper information dissemination to mothers during Ante Natal Clinic to clear these misconceptions.

The findings on mothers' knowledge on exclusive breast feeding revealed that majority of the respondents had high level of knowledge on exclusive breast feeding. The high level of knowledge demonstrated in the study is unexpected as majority of the respondents had no formal and primary education. The study is in line with the study conducted by Saied et. al (2013) on knowledge, attitude and practice of exclusive breast feeding among Saudi women in Riyadh. The result revealed majority of the respondents had good knowledge on EBF. Contrary to the above findings, Petit (2014) study on knowledge of EBF among mothers in Mbarara Hospital Uganda revealed low level of knowledge. The low level of knowledge may be due to lack of awareness on EBF. While the high level of knowledge demonstrated by mothers in this study may be due to awareness creation on EBF during ANC. It is hereby recommended that intensive awareness creation on EBF should be carried out for nursing mothers, and they should be helped in terms of public enlightenment, social support and modeling.



The results on practice of exclusive breast feeding revealed that majority of the respondents did not practice EBF, some mothers practiced exclusive breast feeding. The result also revealed that the few mothers that practiced EBF, the practice of EBF was highly adequate though the percentage of mothers that practiced EBF was low. The above findings were supported by Li, Darlin, Maurice & Barker (2012) who conducted a study on practice of EBF in US. The result revealed highly adequate practice of EBF among the respondents studied. The similarity in findings may be due to awareness creation whereby mothers were enlightened on EBF and hand bills and posters were presented during teachings. However, the above study is at variance with the study conducted by Oniyangi et al (2012) in florin. The study revealed respondents' low level of knowledge on EBF which affected their practice of EBF. The study revealed respondents' low level of knowledge on EBF which affected their practices of EBF. The study suggests that counseling and proper education on desirable breastfeeding practices could be adopted to achieve a change in attitudes, perceptions, knowledge and practice of EBF.

The results presented in tables 5 and 6 revealed that there was a positive significant association between mothers' level of knowledge and the practice of EBF. The above findings support the findings of Maduforo et al (2013) among lactating mothers in Owerri metropolis who discovered a significant association between knowledge and practice of EBF. The findings are also in line with the study conducted by Saied et al (2013) whose study revealed a significant association between knowledge and practice of EBF. However, the above study is not supported by a study conducted by Eeia et al (2012) on influence of knowledge of EBF and practice of EBF among rural Jamaican mothers.

The study revealed a non-significant association between knowledge of EBF and practice of EBF. Successful practice of breast feeding depends on accurate information and support from the health care system, family and the community. Inadequate knowledge about EBF is an equally determinants of malnutrition and other illness in children of 0 - 6 months. Hence, designing effective and prompt intervention initiates that could promote the provision of quality support for nursing mothers would require concrete efforts from all stake holders, not just from the hospitals or health care system. Such efforts will go a long way in creating a sustainable exclusive breastfeeding culture and bridging the existing gaps in reduction of maternal and infant mortality in Nigeria.

Implication for Nursing Practice

The study revealed that majority of the respondents had high level of knowledge on EBF. This therefore emphasized the need to intensified awareness creation on EBF during ANC visit. Nursing mothers should be helped in terms of public enlightenment, social support and modeling.

The practice of EBF was highly adequate. The study suggests that counseling and proper education on desirable breastfeeding practices could be adopted to achieve a change in attitude, perceptions, knowledge and practice of EBF.

There was significant association between level of knowledge and the practice of breast feeding. Mothers should be enlightened on techniques and skills involved in practice of EBF. There should be close supervision and monitoring of mothers during breast feeding sessions to ensure that their practices and actions are carried out as expected.



CONCLUSION

Based on the research findings it can be concluded that majority of the women had high knowledge on EBF, the practice of exclusive breast feeding was highly adequate and knowledge of EBF was significantly associated with practice of EBF. This means that as level of knowledge is high, the practice of EBF is also highly adequate.

RECOMMENDATIONS

Based on the conclusions, the following recommendations were made based on baby friendly initiative which outlines the following ten (10) steps to successful breast feeding (WHO and UNICEF, 2009).

- Have a written breastfeeding policy that is routinely communicated to all health care staff.
- Train all health care staff in skills necessary to implement this policy.
- Inform all pregnant women about the benefits and management of EBF.
- Help mothers initiate breastfeeding within half an hour of birth.
- Show mothers how to breast feed and how to maintain lactation even if they should be separated from their infants.
- Give newborn infants no food or drink other than breast milk unless medically indicated.
- Practice “rooming-in” allow mother and baby to remain together 24 hours a day.
- Encourage breast feeding on demand
- Give no artificial teats or pacifiers to breast feeding infants.
- Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic.

Suggestion for further studies

Further studies could be carried out in the following areas:

- Perceptions and practice of exclusive breast feeding among mothers in Tertiary Health Institution in Southern Nigeria
- Factors associated with the practice of exclusive breast feeding among mothers in Secondary Health facility in South –South Nigeria

REFERENCES

Agunbiade, M. O. & Ogunleye, V. O. (2012). Constraints to exclusive breastfeeding practice among breastfeeding mothers in southwest Nigeria: *implications for scaling up*. International breastfeeding journal; 7:5.



- Bassavanthapa, I. (2010). *Community health nursing*. New Delhi: Jaypee brothers. Brown, K. L, Dewey, K. G. & Allen, L. H. (2012). Complementary feeding of young children in developing countries: *a review of current scientific knowledge*. UNICEF/WHO.
- Eeia, M., Michele, E., Patrick, W. & Pauline, E. (2012). Influence of knowledge and attitude on Exclusive breastfeeding practice among rural Jamaican mothers. *Birth*, 4(31).
- Essien, N.C., Samson-Akpan, P. E., Ndebbio, T. J. and John, M. E. (2009). Mothers knowledge, attitude, beliefs and practices concerning exclusive breastfeeding in Calabar. *African journal of nursing and midwifery*. 11(1). 65-75.
- Li, R., Darling, N., Maurice, E, Barker, L and Laurence M. (2012). Practice of exclusive breastfeeding in the United States. *Paediatrics* 1(115).
- Maduforo, A., Ubah, N., Okeke O. (2013). The practice of exclusive breast feeding by lactating women in Owerri Metropolis, Imo State, Nigeria. *Global Advanced Research journal of medicine and medical sciences*. 2(1), 013- 019.
- Nigeria Demographic and Health Survey. (2008). Feeding practices and the nutritional status of women and children. Retrieved from http://www.measuredhs.pdf/SR_173/SR1_73.pdf.
- Ojong, I. N., Chiotu, C. N. and Nlumanze, F. F. (2015). Factors influencing the practice of exclusive breastfeeding among mothers in tertiary health facility in Calabar, Cross River State. *American journal of nursing* 4(1): 16-21.
- Petit, A., I. (2014). Knowledge of exclusive breastfeeding among women attending Ante natal and Post Natal Clinic in Mbarara hospital, Uganda. *Ugandan journal of medicine* 2(2), 65-71.
- Rosenstock, I. M. (1974). Historical origins of the health belief model. In Becker, M. FI. (Ed.). *The health belief model and personal health behavior*. Therofare, NJ: Charles B. Slack.
- Saied, FI., Mohammed, A., Suliman, A and Anazi, W. (2013). Breastfeeding knowledge and attitude among Saudi Women in Riyadh. *Journal of national sciences research* 3(12)