INFLUENCE OF INFORMATION SOURCES ON KNOWLEDGE, ATTITUDE AND PRACTICE OF EXCLUSIVE BREASTFEEDING AMONG NURSING MOTHERS IN OGUN STATE, NIGERIA

BY

Noeem Taiwo THANNY

MATRIC NO: 107721

A Thesis in the Department of Communication and Language Arts
Submitted to the Faculty of Arts
In partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

of the

UNIVERSITY OF IBADAN

JANUARY, 2022

CERTIFICATION

This is to certify that this research work was carried out by **Noeem Taiwo Thanny** with matriculation number **107721** under my supervision.

…….

Supervisor
Prof. Olusola Oyeyinka Oyewo
Department of Communication and Language Arts
University of Ibadan

DEDICATION

This thesis is dedicated to the ever-treasured memories of my late parents; Alhajj Ridwan Aremu Thanny-Abiola (Big Teacher) and Alhaja Hidayat Motolani Thanny, who taught me very early that patience, forgiveness and contentment are the keys to leading a peaceful life.

ACKNOWLEDGEMENTS

I am eternally thankful to Almighty Allah, the One in whose hands my soul is, the Most Merciful and All-Knowing and to His Prophet (SAW) for helping me find the path to knowing my creator. Indeed, "which one of His favours shall I deny?"

This work and indeed my entire academic pursuit benefited from a God-sent supervisor and academic mentor in Prof. Olusola Oyeyinka Oyewo. There were times the programme suffered financial and emotional hitches, but his love, kindness and more importantly his belief in my ability, even when I doubted myself, have seen me through all hitches.

The fatherly role and scholarly guidance of Prof. Ademola Ajuwon is deeply appreciated. I have learnt invaluable lessons from his deep knowledge as well as his compassionate disposition to handling my work. I treasure our dear "Olori Ebi," Prof. Ayo Ojebode for his care and concern all through the programme. I also acknowledge the support and guidance afforded me by Prof. Nkechi Christopher, Dr Beatrice Adeyinka Laninhun, Dr. Olayinka Abimbola Egbokhare, Dr. Koblowe Obono (the former PG Coordinator), Dr Ebenezer Adebisi Olawuyi (the current PG Coordinator), Dr. Olugbenga Elegbe (who saved me when I was literally on the ropes), Dr Raphael Babatunde Ojebuyi and Dr Francis Amenaghawon.

My most unfeigned gratitude goes to Prof. Lai and Mrs Abimbola Oso for their love, financial, physical and emotional support before and during the data gathering and through the entire progamme; Prof. Rotimi Williams Olatunji for sticking his neck out for me many times and helping my family through the challenges of absentee fatherhood; and Dr Tunde Misbau Akanni for being a true helper when I badly needed one. I also appreciate Dr. Yakub Awodele, Prof. Sunday Olayinka Alawode, Dr. Jimi Kayode, Dr. Jide Jimoh, Drs Lade Atofojomo and Lade Sanni, Dr Toyosi Owolabi, Dr Femi Olugboji, Mr. Adewole Adeoye and Mr. Kunle Akinjogbin for their encouragement. Dr. Sesan Mabekoje (my data analyst) and Sheriff Nurain (my field assistant) are appreciated for their kind support.

I must thank my co-travelers on this journey for the kind words and emotional support. Dr Julius Adeyemo, Dr Israel Fadipe, Lanre Biobaku and Moshood Ajibola shared the exciting and tortuous moments of the programme with me. May the sacrifice be worthy for us all.

My family members, who have been my absolution and comfort since the demise of my parents, are greatly appreciated. I thank Prof. Lateef Olatunji Thanni, Mr. Adegboyega Thanni-Abiola, Mr. Ayodeji Abiola, Mr. Rasaq Abayomi Thanni and Comrade Fassy Alao Abiola- my brothers as well as Khadijah Morolayo Adedeji and Kabirat Taiwo Afolabi- my sisters. I equally appreciate the invaluable support of my cousins Teslim Abiola and Jelil Odekunle.

My deepest gratitude goes to the ones who endured the heavy toll the programme took on me the most- my wife Fatimoh Olakunbi, who had to join me on the field and afforded me everything and my children, Hidayat Abimbola, Sofiyyah Olayinka and Yaseer Olasunkanmi who showed remarkable understanding beyond what their ages suggest.

I thank you all for the support. May you all find good people in support of your cause in every endeavour.

ABSTRACT

Exclusive Breastfeeding (EB), the feeding of infants with breastmilk only in the first six months of life, is a determinant of nutritional status of children and an enhancement of nursing mothers' health. Previous studies in communication of breastfeeding messages have focused on their optimisation with interest in nursing mothers' practice. However, there is a dearth of literature on the connection between sources of nursing mothers' information on EB and practice. This study was, therefore, designed to examine the sources of EB information available to Nursing Mothers (NMs) in Ogun State, with a view to establishing the influence of these sources on NMs' knowledge of, attitude to and practice of EB.

Theory of Planned Behaviour and the Elaboration Likelihood Model were used as the framework, while the mixed methods design was adopted. Six Local Government Areas (LGA): Ado Odo/Ota, Yewa North, Abeokuta South, Odeda, Sagamu and Odogbolu (two LGAs per Senatorial District SD), were purposively selected for having the highest and lowest numbers of health facilities in each SD. Six hundred NMs, 100 per LGA were selected from five health facilities in each local government. Two focus group discussions were conducted with 10 NMs each in two Primary Health Centres. Key informant interview was also conducted with the Chief Nutrition Officer of the State Primary Health Care Board (SPHCB). Quantitative data were analysed using descriptive statistics, while qualitative data were subjected to constant comparative analysis.

Information sources available to NMs include health workers (doctors, nurses, and community health extension workers CHEW), mass media (radio and television), advocacy groups, interactions with friends, parents/parents-in-law and community leaders. Most NMs derived their EB information from health workers (85.5%). Other NMs derived EB information from parents/parents-in-law (78.5%), radio (64.8%), television (56.7%), interactions with friends (50.7%) and advocacy groups (30.8%). Knowledge of EB was above average among NMs as 53.8% of NMs believed all they needed to give their infants in the first six months were breastmilk and prescribed drugs. Attitude towards EB was positive as 86.4% of NMs believed that in spite of their ability to afford baby formula, they still preferred EB because it was good for their babies' health. Practice of EB among NMs was, however, low as NMs' continuation of EB dropped from 50.9% after two months to 45.3% after three months. The Nutrition Officer of the SPHCB confirmed that EB practice in the State was at 30.6% which was above the national average of 17% due to the quality of information being provided. Sources of information had limited influence on the practice of EB among NMs because they admitted that their work schedule determined the extent of EB practice.

Sources of information on exclusive breastfeeding among nursing mothers in Ogun State have strong influence on knowledge and attitude but limited influence on actual practice.

Keyword: Exclusive breastfeeding, Nursing mothers in Ogun State, Health communication

Word count: 463

TABLE OF CONTENTS

CHAPTER FOUR: DATA ANALYSIS AND DISCUSSION OF FINDINGS

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVATIONS

FMoH- Federal Ministry of Health

LGA- Local Government Area

NDHS- Nigerian Demography and Health Survey

NNHS- National Nutrition and Health Survey

NSHDP National Startegic Health Development Plan

NPC- National Population Commission

SD- Senatorial District

UNAIDS- United Nations Programme on HIV/AIDS

UNDP- United Nations Development Programme

UNESCO- United Nations Educational, Scientific and Cultural Organization

UNFPA- United Nations Population Fund

UNICEF- United Nations Children's Fund

WHO- World Health Organization

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Exclusive Breastfeeding (EBF) refers to the infant feeding practice which specifies that an infant should receive only breastmilk and no other liquids except prescribed drugs such as vitamins and oral re-hydration solutions in the first six months of life in other to achieve optimal growth. Not only is exclusive breastfeeding beneficial in short-term, but also in long-term. Horta, Loret de Mola and Victora (2015) have reported that babies who were breastfed appropriately were most often not likely to have obesity and most likely not to be overweight and would most often have low level of cholesterol and systolic blood pressure. These exclusively breastfed babies were also discovered to have a low risk of developing diabetes (Type 2).

There are incontestable bodies of evidence that exclusive breastfeeding practices are not just important determinants of children's nutrition and health status, but also a unique way of enhancing nursing mother's health (Oyelana, Kamanzi and Ritcher, 2020). Breastfeeding affords children across the world an opportunity of a sound beginning to their lives. It serves as the first vaccination the child receives because of the antibodies and also bestows children a chance to have the best kind of growth and development that is critical for their survival in the first twenty-four months and later in their lives (UNICEF, 2017a). Nursing mothers also benefit from exclusive breastfeeding through decrease in the risk they have of developing breast and ovarian cancer, as well as different types of diabetes. There are also evidences that EBF helps to reduce the length and frequency of post-partum hemorrhaging (UNICEF, 2012).

Gupta, Katende and Bessinger (2004) have also reported that intensive breastfeeding as detailed from mother's viewpoint is associated with longer post-partum amenorrhea and indeed longer intervals between births. In the same vein, Aidam, Perez-Escamilla and Lartey (2005) believe that exclusive breastfeeding does not only strengthen a child's immunity against gastrointestinal and respiratory infections, but also help the fight against breast and ovarian cancer. Also, a general improvement in infant health and nutrition saves costs of delivering health by impacting positively on birth spacing as well as the entire maternal and child care situations.

Exclusive breastfeeding does not only help nursing mothers and their babies. It is an essential ingredient for the realisation of several aspects of the Sustainable Development Goals. This is evident in the improvement in nutrition (SDG2), prevention of mortality in childhood and also helping in increasing the resistance to non-communicable diseases which is in line with SDG3. It acts as support for emotional development and mental well-being necessary for education (SDG4). Breastfeeding has also been identified as a way of ending poverty, because it helps in the promotion of stable economy and reduction of inequalities that are afflicting the economies of many countries by helping to lower the cost of health care, increasing opportunities and access to education, and providing boost for human development. Breastfeeding in a nutshell is perhaps the most available investment opportunity that is effective and cost efficient. According UNICEF (2017a), each dollar investment in favour of breastfeeding has the capacity to generate as much as 35 dollars in return on economic investment in most countries classified in the low or middle income categories. This is reflected in the cost of baby formula and other infant feeding options that are more expensive than breastfeeding as well as in the cost of taking care of infant that suffer from diarrhoea and other diseases that are preventable if exclusive breastfeeding is adhered to. Low breastfeeding rates, on the other hand, would then lead to loss of human productivity that translates into huge amount of money in terms of health care cost associated with treating preventable illnesses.

Unfortunately, many countries are not funding breastfeeding campaigns adequately. The promotion, protection and support for breastfeeding through formulation of policies are mostly below par in most countries (Agho et al, 2019; UNICEF, 2019).

Due to this fact, children in most parts of the world, based on recommendation of most international public health agencies, are not being breastfed effectively. On this basis, if we go by recommendations of experts around the world most of the children of breastfeeding age are not being breastfed. In essence, these children get to miss out on important values associated with breastfeeding. Globally, only 43% of infants are breastfed within an hour of their birth as prescribed by the World Health Organisation (WHO). This statistics however does not reflect the difficult situation of breastfeeding in developing countries around the world. In some countries, the breastfeeding rates are as low as 11%. According to UNICEF, the aim is improving the initiation of breastfeeding as early as possible up to 70% rate across the world. Out of 129 nations analysed, the target of 70% is only met by 22 at the moment (UNICEF, 2019). Despite the fact the decision to feed infants rests solely on mothers, this decision is strongly influenced by economic status of mothers, the environment mother and baby live in, social structure around them, and prevailing political situation. These factors are reflected in inadequate support in healthcare, excessive promotion of baby foods, and non- availability of workplace support for nursing mothers. Nations around the world owe infants the responsibility of improving funds allocated, legislations enacted, and health programmes designed to support breastfeeding. At the moment, Sub-Saharan Africa is lagging behind in this funding support as reflected in Figure 1:

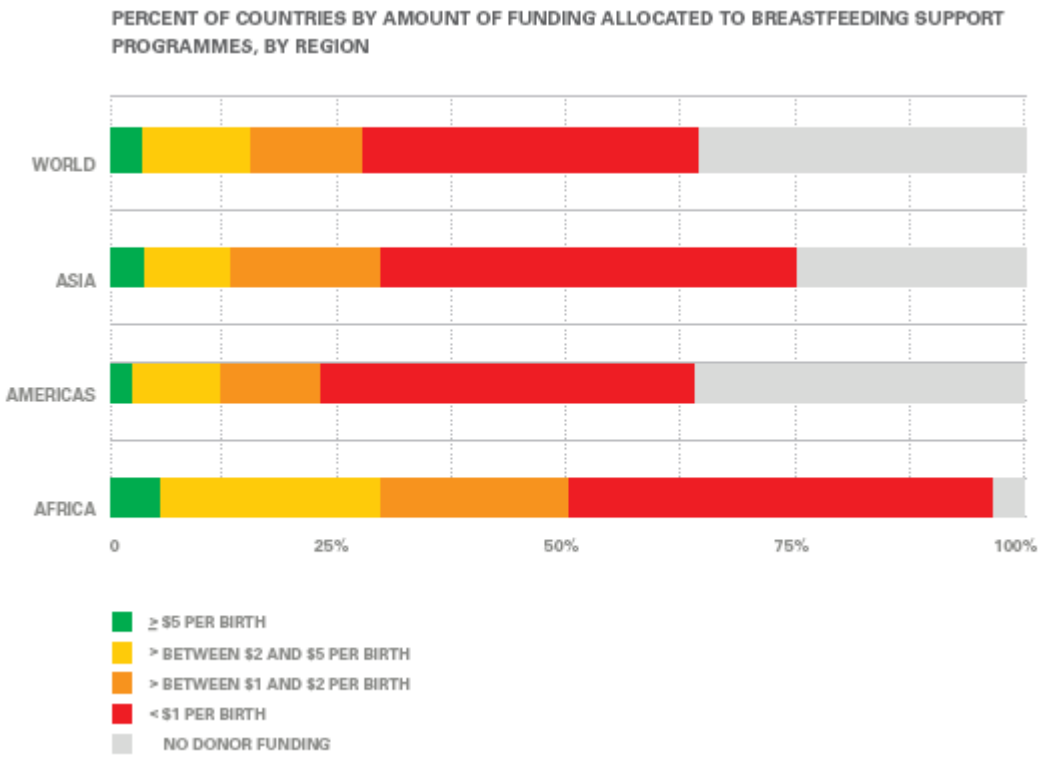


Figure 1: Showing Funding Allocated to Breastfeeding Support Programmes by Region

Source: Global Breastfeeding Scorecard, 2017: Tracking Progress for Breastfeeding Policies and Programmes. UNICEF

The Nigerian situation is not far from the global outlook. Nigeria's National Strategic Health Development Plan (NSHDP) projected that there would be a significant funding deficit based on available resources to the Federal, states and local government areas for the eight major priority areas in health. The plan projected an investment of a minimum of 3.997 trillion Naira over the period amounting to 666.3 billion Naira annually to cover the cost of providing healthcare to citizens especially women and children. In dollar terms, the estimate was 4.42 billion dollars on an annual basis; an estimate that is far out of reach for governments at all levels (FMoH, 2010a)

In spite of identified benefits of EBF and improvement in health behavioural patterns involving nursing mothers, an equivalent of forty under-five children die every minute all over the world due to malnutrition and preventable infections (UNICEF, 2015; Oyelana et al, 2020). These deaths are most times avoidable with little efforts in terms of improved nutritional and sanitation practices. According to UNICEF, 6 million deaths of children of five years and below could be avoided on an annual basis if treatment of the most prevalent illnesses among children of this age is taken more seriously. With appropriate home care, this number which is equivalent of two third of deaths at this age require more urgent steps. Apart from the risks of child birth which are attached to diverse maternal outcomes, malnutrition stands as the biggest risk to child survival (UNICEF 2017b). An estimated 54% of child death around the globe is directly as a result of malnutrition. This is a clear draw back on the goal of the Sustainable Development Goals (SDGs) 2 (nutrition), (prevention of child mortality) and (mental well-being necessary for education). Improved practices and adherence to EBF can go a long way in reversing this dire child survival situation.

At the most vulnerable stage of their lives, children under five years carry the biggest burden of diseases estimated at about one-third of global diseases burden. The most tragic reality is, however, that more than half of this burden of disease is directly related to malnutrition as a result of actions or in-actions of parents and care givers (Akinremi and Samuel, 2015). Every year, it is estimated that poor nutrition contributes to the deaths of no fewer than 5.6 million children under-five, equivalent of

one out of every four children in developing world are equally under-weight for their age and at increased risk of an early death. Even more perilous is the risk of continued low weight. This in some ways is also connected to breastfeeding pattern. Extended and intensive breastfeeding period enhances appropriate child spacing which in turn is associated with improved birth weight and increased nourishment. As IYCN/USAID, (2012) identifies, undernourished girls carry the threat of bearing unhealthy children all through their reproductive lives. Extended period of breastfeeding thus helps to reach the recommended 24 months of next pregnancy by USAID.

Whatever strides that have been made in child survival are never reflected in the poorest regions of the world. The gap in progress of child survival is evident in the fact that Sub-Saharan Africa still accounts for 49 per cent under-five deaths while India and Nigeria alone account for 35 percent of these deaths. West and Central Africa, to which Nigeria belongs, ranks highest in lifetime risk in both maternal and Neo-natal deaths. According to UNICEF (2017b), this is largely due to the poor support afforded to breastfeeding support programmes in terms of funding in these countries.

Mortality of children below the age of 5 is seen as a key yardstick for measuring improvements in the well being of children generally. Statistics from 1970 shows that 17.3 million children 5 years and below were dying annually. By 2013, this number has improved tremendously as the estimated number of children in this category who are lost in a year stood at 6.3 million. This shows a remarkable reduction in the number of children who died before their fifth birthday (UNICEF, 2015). Basic indicators of child nutrition such as birth weight, early initiation of breastfeeding, exclusive breastfeeding and breastfeeding up to two years have improved remarkably too.

It is therefore clear that child survival situation has changed significantly in numbers, but in terms of substance the story is still similar and all too familiar. According to the UNICEF's Annual State of the World's Children (UNICEF, 2017a), the world's low-income countries remain the centres of extreme poverty as well as inequalities and many impoverished families with children live in countries with either low or middle income – countries plagued with wants and economic hardship. The report stated

further that the well-being of a child at the point of birth into the world is heavily dependent share luck of where the child was born and whether the family such child is born into have the economic power to take care of the child. The inequality at birth extends through the child's early life, as evident in child food poverty, and sometimes beyond. On a global average, the report reveals further that 79 per cent of the children of the richest parents who are age five and below are registered at birth while only 51 per cent of children born to the poorest people have the privilege of official identity at birth. In addition, while 80 per cent of children who live in big urban centres are registered at birth, only 51 per cent of children living in rural areas have their birth registered. In spite of these negative statistics of child survival in Nigeria, effort at improving is slow and yielding very little result in meeting the United Nations' Sustainable Development Goals (SDGs). Nationwide effort to promote exclusive breastfeeding began in 1992 and with close to twenty years of efforts, UNICEF (2017) reported that early exclusive breastfeeding among nursing mothers was still at an average of 23 percent in West Africa while the NDHS (2018) revealed that the rate is 29 percent in Nigeria. The situation is further worsened by poverty and inequalities as 64 percent of rural dwellers in Nigeria live below poverty line and 44 percent is food insecure. Access to skilled medical personnel is also limited as only 49 percent of babies are delivered by skilled attendants.The report further stated that the proportion of underweight children in the country was at 29 percent making the attainment of health SDGs moving slowly at 2.2 per cent annual rate.

The practice of Exclusive Breastfeeding (EBF), regarded as the cheapest infant feeding option, is still very low in the most disadvantaged parts of the world (Aidam, et al 2005; UNICEF 2006). Current statistics shows that only about 41% of children of breastfeeding age are exclusively breastfed worldwide (UNICEF, 2019). To reverse this trend and attain the Sustainable Development Goals (SDGs), there are programmes directed at promotion of EBF and the re-orientation of health workers and practitioners as well as the general public. Enhancing women's access to family planning, adequate nutrition and affordable basic health care are also important in reducing mortality in mother and infants. According to Gupta et al (2004), this multi-level approach must start with mothers having access to skilled support provided by

husbands and partners. Mass media-communication, according to Gupta et al (2004), could also play a significant role in achieving breastfeeding promotion objectives. They also reported that positive effect of the behaviour change campaigns on breastfeeding knowledge and practices have been reported in Bolivia, Brazil, Columbia and Trinidad and Tobago where efforts at promoting breastfeeding in the media have led to significant increase in women and men's knowledge of early initiation of breastfeeding and EBF. It has also helped to indirectly influence various mediating social networks.

1.2 Statement of the Problem

Child mortality continues to be a big problem in Nigeria. According to the Nigeria Demography and Health Survey (NDHS, 2018), although Under-5 mortality reduced significantly in 2018 to 132 deaths in 1,000 births compared to the situation in 2008 which was 157 deaths in 1,000 births, Neo-natal mortality has not changed substantially over the same period. The report shows that there were 40 Neo-natal deaths in 1,000 in 2008 as against 39 deaths in 1,000 births in 2008. The survival of a child is dependent on different factors relating to his health. There is the question of birth size and weight which is important yardstick for measuring the vulnerability of children to the risk of illnesses in early part of their childhood. Being under-weight exposes children to even more risk of mortality associated with infections and multiplies how severe and frequent those infections occur (UNDP 2015). Another factor is vaccination which is a cost effective intervention in child mortality. Perhaps the most essential factor in child survival is nutrition. It is essential for optimal physical, mental and cognitive growth. Poor nutrition in the first 1,000 days of life is also associated with impaired cognitive ability and reduced school and work performances (FMoH, 2017).

Nutrition in infants and children under five years is greatly influenced by the level of adherence to exclusive breastfeeding (EBF). Early initiation of breastfeeding is important for both mother and child. However the level of adherence to early exclusive breastfeeding is poor in Nigeria which has one of the poorest exclusive breastfeeding rates in Africa. The NDHS (2018) report shows that only two-fifth (42%) of children

were breastfed within an hour while 82% of children were breastfed within one day of birth. While the figure has improved from the situation described in NDHS (2013), the practice is still far from satisfactory as the report also shows that only 29% of babies below six months were exclusively breastfed. This is particularly concerning because Dun-Dury and Laar (2016) have explained that breastfeeding that is sub-optimal, especially the type that is not exclusive, for a child at any point in the first 6 months leads to 1.4 million mortality and ten percent of diseases that under-five children suffer in middle and low income countries.

As Ogbo, Page, Isoko, Claudio and Agho (2017) rightly observed, following the WHO/UNICEF recommendations on improvement of infant feeding practices, several programmes and policies were initiated to support infant feeding practices. These programmes include Baby Friendly Hospital Initiative (BFHI) in 1992, the National Breastfeeding Policy in 1998, and the National Policy on Infant and Young Child Feeding launched in 2005. With the introduction of these programmes, there were noticeable improvements in early or timely initiation of breastfeeding from 31.4% in 1990 to 39.2% in 2008. In spite of these efforts, malnutrition and diseases related to inadequate early childhood feeding and child mortality are still some of the biggest public health challenges facing the country. For instance, there is an estimate of approximately 2,300 deaths on a daily basis among under- five children in Nigeria. These deaths are ascribable to diseases that are avoidable if infant feeding which plays a major role in the deaths are improved (Ogbo et al 2017). There has also been a decline in the percentage of children two years and below whose feeding followed the IYCF guidelines. Ogbo et al, 2015 reported a reduction from 30% to 10% from 2009 to 2014.

The study by Elegbe (2009) identifies that establishing a desirable behavioural change can only be complete with translating level of awareness to knowledge, approval, intention and ultimately practice which eventually lead to advocacy for change. Hence, to what extent do nursing mothers' high level of awareness translate into actual practice of exclusive breastfeeding in the face of poor adherence to early exclusive breastfeeding in Nigeria? Although studies by Okolie (2012) and Ajibade (2013) suggest that the level of awareness of exclusive breastfeeding among nursing mothers

in Nigeria is high, there is then an apparent disconnection between the level of awareness of exclusive breastfeeding and the actual practice. Past studies such as Aidam et al (2005), Okolie (2003) and Lawoyin (2001) have focused on the receiver elements of the communication process only with little attention to the sources of the messages. Source of health information are crucial to the believability and credibility of such information. This study, therefore, examines the level of knowledge, attitude to and practice of exclusive breastfeeding among nursing mothers in Ogun State in relation to sources that they get information from. To what extent do sources from which nursing mothers receive information about exclusive breastfeeding influence their adherence to the practice of exclusive breastfeeding?

1.3 Research Questions

1. What are the available sources of information on EBF to nursing mothers in Ogun State?
2. What is the level of knowledge of nursing mothers about EBF in Ogun State?
3. What is the attitude of nursing mothers to EBF in Ogun State?
4. What are the practices of EBF among nursing mothers in Ogun State?
5. To what extent do sources of information influence nursing mothers' knowledge and attitude to EBF?
6. To what extent do sources of information influence nursing mothers' practice of EBF in Ogun State?

1.4 Objectives of the Study

The main objective was to examine the influence of information sources on nursing mothers' knowledge of exclusive breastfeeding as well as their attitude and practices.

Specifically the study sought to:

1. Determine sources of information on EBF available to nursing mothers in Ogun State.
2. Assess the level of knowledge of nursing mothers on EBF in Ogun State.
3. Examine the attitude of nursing mothers to EBF in Ogun State.

4. Determine the practices of EBF among nursing mothers in Ogun State.
5. Assess the extent to which sources of information affect nursing mothers' knowledge and attitude to EBF.
6. Examine the extent to which sources of information on EBF affect behavioural practices of nursing mothers in Ogun State.

1.5 Scope of the Study

The interest in this study is to analyse the role that sources of information play in nursing mothers' awareness of messages they receive on exclusive breastfeeding, the quantum knowledge they receive from such sources and their eventual willingness to adopt the infant feeding option. Information sources have some influential roles in attitudinal change in relation to child care and health seeking behaviour.

As a result, the study concerns itself with nursing mothers who are nursing babies that are from zero months to twenty four months. The aim was to see the level of knowledge and practice of exclusive breastfeeding among nursing mothers attending post-natal programme as well as women who have practiced child nutrition over an extended period. However, the study does not limit itself to women attending public and private health facilities. According to UNICEF (2014), 60% of child birth in Nigeria occurs outside of standard health facilities mostly at home or with traditional birth attendants (T.B.A) and religious centres. As a result, the researcher chose to visit health facilities on designated days for child immunization so that mothers who gave birth at different facilities and at homes could be captured in the study.

Ogun State, one of the six states in the South western part of Nigeria, has an estimated population of 3.7 million people according to the 2006 population census. It has three senatorial districts that are geographically contiguous to Lagos, Agbara axis in the western part, Ifo/Akute axis in the central part and Sagamu/Ikorodu axis in the east. The state is also bordered by Ondo State, Oyo State, Osun State and the Republic of Benin. Ogun State is well served by health care services. There are 5 major tertiary health care facilities in the state:

- The Olabisi Onabanjo Teaching Hospital Sagamu.
- Neuro-psychiatry Hospital, Aro, Abeokuta, established about 60years ago and which now serves as WHO training centre for mental health.
- Federal Medical Centre, Idi Aba, Abeokuta.
- Babcock University Teaching Hospital, Ilishan-Remo
- Otunba Tunwase National Paediatrics Centre, Mobalufon, Odogbolu

One of the oldest private hospitals in the country the Sacred Heart Hospital, Lantoro, Abeokuta was established in 1959. In addition the State Government funds/manages schools of nursing and midwifery. One school of health technology, four specialist hospitals, one each in one of the major towns in each of its four divisions along with other general, cottage and primary health care facilities. There are over 800 registered private health care facilities scattered all over the state that can be categorized into three tiers of health care. Finally, Ogun State has 428 Primary Health Care Centres.

1.6 Significance of the Study

The rate of child survival is improving globally. While the news of reduction in deaths of under-five worldwide is cheering, the grim reality is that Sub-Saharan Africa and South Asia still account for 82% of deaths of children under five. Nigeria, the third largest contributors to global under-five deaths according to IYCN/USAID (2015) could do with findings from this study. It is expected that findings from this study would help different sectors that are in association with planning and delivery of services relating to child survival programme as integrated young child nutrition programmes.

The theoretical framework for this study rests on the Theory of Planned Behaviour and the Elaboration Likelihood Model. It is expected that the outcome of this inquiry would help in understanding other sociologically attached issues to understanding behaviour such as moral norms, descriptive norms, self-identity and social relations. These variables are important extensions of the Theory of Planned Behaviour and the Elaboration Likelihood Model. Findings from this study should provide new insights for exclusive breastfeeding campaigners specifically and child survival campaigners

generally on sources that nursing mothers find most credible among the ones that are available to them. This could help in deciding on information channels to be strengthened and the ones to be de-emphasized in the campaign on exclusive breastfeeding and other child survival issues. It could also provide them the template for implementing the development of interpersonal information channels hinged on key influences in the practice of exclusive breastfeeding.

From this study, it is expected that government ministries, department and agencies concerned with child care, early child nutrition and public health, especially in the state would benefit in terms of understanding the role that perceived risks and benefits as well as interpersonal influences play in individual mother's choice of infant nutrition and overall welfare of the child. This may help in planning for methods that should be used in disseminating information during prenatal and post-natal education of nursing mothers.

Global agencies concerned with child care such as UNICEF, WHO, USAID, UNDP, DFID, the European Commission and African Union Commission and their partners are likely to find recommendations from this study a useful addition to available data in their quest to revitalize and galvanize action in support of an integrated child survival activities in both urban and rural areas of Ogun State and Nigeria. This study would add to the existing body of knowledge in behavioral change communication and health promotion. Critically, the study should appeal to researchers interested in advancing the role of the theory of planned behaviour in disseminating health messages in different settings.

CHAPTER TWO

REVIEW OF RELEVANT LITERATURE AND THEORETICAL FRAMEWORK

In this section, the researcher attempts a review of concepts, theories and empirical findings relevant to this study from existing literature.

2.1 Conceptual Review

Concepts that are relevant and best help to situate the study appropriate are reviewed in this section.

2.1.1 Health and Human Behaviour

When issues of health are discussed, wellness takes a back seat and attention is most times paid inevitably to illness and the modes of treatment of diseases. Therefore, interrogating the concept from wellness perspective is very rare. The World Health Organisation (WHO), according to Owens-Ibie in Oso (2000:15), has given a definition that closely captures the essence of wellness in health by stating that health is a "state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity." WHO's proposition is that the absence of disease cannot be the only standard for defining the state of an individuals' well-being. There are certain levels of spiritual, physical and material development that must be attained by a person before he or she can be described as healthy.

Insel and Roth (2004) have identified three main approaches to the evaluation of health. They are the biomedical, the psychological and the sociological approaches. Health, according to the traditional model, is simply the absence of disease or

physiological malnutrition; it is not a positive state, but the absence of the negative state- if you are not sick, it is believed that you are well. This approach has limited utility in understanding health and illness based on its four primary assumptions identified by Wolinsky (1988) cited by Insel and Roth (2004: 106) as:

1. The presence of disease, its diagnosis, and its treatment are all completely objective phenomena that symptoms and signs provide accurate and unbiased information from which diagnosis can unfailingly be made.
2. Only medical professionals are capable of defining health and illness.
3. Health and illness should be defined solely in terms of physiological malnutrition.
4. Health is defined as merely the absence of disease. This focuses attention on the malfunctioning part of the organism but excludes the rest of positively functioning.

These positions have since been faulted by experts. Insel and Roth (2004) citing Zola (1966) and Mechanic (1980) contend that cultural backgrounds affect not just evidences of symptoms of illness but the reaction that individuals show to these symptoms and how different individuals report the symptoms to doctors and other health workers. The presentation of symptoms, to a very large extent, affects the way physicians diagnose illness. They further posited that humans are not just biological beings, they are also creatures that have psychological and social aspects, and all of these three aspects affect the state of human health.

Defining the concept of health through psychological approach means that individual regularly makes subjective review of his or her own health status. Initially, the thinking was that health is based on overall well-being. However, there is now a realization that pleasurable involvement associated with personal accomplishment, long-term satisfaction, and absence of negative affect, all have some kind of direct bearing on health and well-being. There is however an alternative definition of health, developed from a sociological perspective, that is more complete and all encompassing. It approaches health from a person's ability and capabilities to assume roles and take on tasks and also pays attention to the issue of social differences as

defining factor in health. Insel and Roth capture this perspective by identifying four separate dimensions:

1. **Prevention**: preventive dimension to health behaviour has as its goal the minimization of the risk of disease, illness and deformities. The kinds of behaviour that help in preventive health behaviour include: exercise, maintaining a favourable body mass, ensuring healthy diet, avoiding cigarette, and getting immunized against communicable diseases.
2. **Detection**: detective health behaviour covers activities that help to detect diseases, injury, or disability before the symptoms appear. These include medical examinations (such as taking blood sugar or pressure test) or screening the body to detect specific disease.
3. **Promotion**: promotion of healthy habits and attitude involves activities and efforts that encourage and persuade people to engage in behaviours that helps to improve health and to avoid activities that can harm individual's health.
4. **Protection**: protection of health involves activities that occur at the level of the society rather than the individual level. These activities include efforts to make as healthy as possible the environment that people live in.

Insel and Roth's explanation clearly shows that virtually every discussion surrounding health is multi-dimensional.The concept of exclusive breastfeeding therefore has aspects relating to preventive, promotion and protective health behaviour. Proper infant feeding as earlier pointed out can help prevent infectious diseases in both mother and child. Breastfeeding also protects the child from so many diseases and its promotion can lead to further adoption and general well-being.

How humans react in different health situations has been an area of scholarly concern to different researchers in the field of health promotion and education. Health behaviour, which is concerned with these reactions, includes all actions that individuals perform to maintain or improve their health Lewis and Rimer cited by Eskilsson and Jansson (2007). They also opined that health behaviour is not limited to actions taken by individuals to ensure healthy lifestyle, it includes the functions and

structures of groups and organizations around the management of health systems an individual is connected to and how those groups take actions to protect the individual.

Based on this fact, intrapersonal factors such as beliefs, expectations and traits would be meaningfully assessed only when interpersonal processes, institutional factors and public policies are put in proper perspective (Wright, Sparks and O'Hair 2009). Therefore, individual's intentions and actions about his health are the determinants of his mental processes and feelings as well as the kind of support he or she gets from people around. In spite of the well known fact that promoting healthy behaviour in a positive can only be helped by communication (Piotrow et al, 2003), ensuring that its design is all inclusive and widely participatory helps to reduce scientific uncertainties that are associated with vulnerabilities and risks risks that are personally and environmentally influenced. The level of vulnerability of individuals, which is what health behaviour seeks to understand, can only be put into proper perspective with concerted efforts not only at interpersonal but also at group level (UNFPA, 2005).

Research however has indicated that education by itself is not adequate in effecting the desired change to people and their health behaviour (UNAIDS 1999). The understanding now is that the health behaviour of an individual is dependent on a nexus of issues that are complex and inexplicably attached to the social cultural milieu and the factors in the environment around such person (UNESCO, 2005).These viewpoints are all deeply rooted in perspectives that are theory driven and have been employed in the design of campaigns aimed at behaviour change that have been reviewed, tested and evaluated overtime.As Glanz and Rimer (2005) put it, theories work like cups of coffee that have no content inside but with shapes and boundaries. In essence, with no content inside the cup, brilliant researchers and designers and planners of programmes pick theories and apply to situations, events and health behaviour contexts as they deem necessary.

2.1.2 Attitude and Behaviour Formation

Attitudes are the drivers of human behaviour. The possibility of performing a behaviour, which is regarded as behavioural intentions, is usually based on two factors.

These factors are attitude towards that behaviour- a personal factor and subjective norm- a factor determined by social influences. This is why attitude has been a central issue in the study of social psychology for a long time (Sweldens, Van Osselae and Janiszewski, 2010).When individual's attitude is mentioned, what we talk about are sets of beliefs and feelings that define the individual or events and that lead to his/her behaviour. It is the totality of favourable or unfavourable reactions that can be evaluated, either reflected in beliefs, feelings, or willingness to take action, typifies an individual's attitude (Frymier and Nadler, 2017). It is sensible therefore to imagine that attitude would to some degree be a defining factor or the defining factor in human behaviour. There are however divergence in standpoint of experts regarding the extent to which attitude has correlation with behaviour.

Perhaps the most extreme position is taken by La Piere (1934) cited by Krosslyn, Rosenberg and Lambert (2014). La Piere studied a Chinese couple's journey around the United States hotels, restaurants and auto camps. They visited 251 businesses of this nature and were only refused service once. Six months after visiting each establishment, La Piere distributed copies of questionnaire to proprietors asking if they would allow guests in their establishment that are of Chinese race. It turned out that 90% of respondents said they would not accept Chinese guests leading La Piere to conclude that attitude did not influence behaviour at all.

There are however more tempered and moderate positions on the relationship between attitude and behaviour. Wicker (1969), Schumann and Johnson (1976) and Campbell et al (1960) all presented slightly different viewpoints according to Frymier and Nadler (2017). Wicker made a case for a lack of an attitude-behaviour relationship, Schumman and Johnson (1976) argue that there was small to moderate correlation, while Campbell et al (1960) believe that there is evidence of strong relationship between attitude and behaviour. There is some form of agreement in the position that attitude has a correlation to behaviour. The extent of this correlation is what has not been agreed on. When does attitude affect behaviour is also a question that has not been agreed satisfactorily answered by experts in behavioural studies. There are times that attitude is linked to behaviour, but as Petty et al (2009) have established, it is not a simple relationship and attitude is not the only factor that influences behaviour.

2.1.3 Influencing Human Behaviour

Human behaviour is believed to be affected in some ways. As earlier established, there is some kind of relationship between attitude and behaviour. However, a relationship between attitude and behaviour is complex and multiple factors are usually considered when the relationship is discussed. These factors according to Frymier and Nadler fall into five categories: measurement issues, perception of behavioural control, attitude formation, cognitive processing and situational factors. According to Petty et al (2009), these factors will help us better understand how to shape, reinforce, and change both attitude and behaviour which are central persuasion goals.

(a) Measurement Factors

Measurement factors are important in determining whether or not attitude leads to behaviour. At the heart of the measurement factor is the need to have a full understanding of the behaviour. Kosslyn and Rosenberg (2006) argue that an unclear definition of the attitude in focus, which is a measurement factor, was the problem with much of early attitude research. They opine that whereas behaviour was measured specifically, attitude was generally measured. Attitude and behaviour were therefore measured with a different level of specificity. A specific attitude predicts a specific behaviour

In measuring attitudes and behaviours, Ajzen (2011) reminds us of four factors that are to be taken into account. These factors allow us to be very detailed about the kinds of behaviour that can help us measure attitude. The first factor refers to the **action** that is performed. It refers to the actual behaviour such as watching Nigerian made home video or preparing locally made food supplement for infant. The second factor is the **target** of the action: or in other words, what object the behaviour targets. Third is the **context** of action which can refer to the location of the action or the situation. The context according to Frymier and Nadler (2017) can help specify attitude. Ajzen (2011) also considered the time of action which he argues can influence and predict behaviour.

(b) Behavioural Control Beliefs

Behavioural control belief is also central in understanding the link between attitude and behaviour. It is the measure of the extent to which the individual feels that actions and decisions he or she takes are purely of his or her own volition. According to Ajzen (2011) perceived behavioural control refers to an individual's perception of the level of control he or she has over behaviour. When individuals' belief that target behaviour is desirable but is beyond their capabilities, the likelihood of attitude to behaviour is weak.

In addition to measuring people's attitude towards a positive behaviour, there is also the need to measure the person's perceived behavioural control with regards to that behaviour. For instance, many individuals are aware of healthy eating which should include fruits and vegetables, but different factors make them believe they have little control over their eating habit. Such factors may include job prescriptions and income level. The overall success of messages directed at these individuals would be determined by the level at which they could control their dietary patterns.

(c) Formation Factors

Attitude's influence on behaviour is also affected by the way such attitude is formed. When a person has a **direct experience** of attitude formation, he has the stronger tendency of being influenced in his behaviour by such attitude. Attitude formed through indirect experience is however weaker in tendency to influence behaviour. A person who forms an attitude through indirect experience does not have direct interaction with the attitude object. The influence of direct experience with the attitude object is further strengthened by the position of Regan and Fazio (1977) who examined attitude formation in naturalistic setting with the issue of housing shortage among fresh students of Cornell University. The series of responses to the survey showed marked differences between students who used temporary facilities and those who moved directly into permanent housing (Frymier and Nadler, 2017).

(d) Cognitive Processing Factors

The position in this factor is that frequency of use of a particular attitude can affect the level to which it affects behaviour. When attitudes are in regular use, they come at the forefront of our thoughts. On the other hand, when they are infrequently used, it would take a while to recall them thereby having little influence on behaviour. Attitude accessibility then is all about the level of accessibility that the individual has given to a particular attitude in his personal storage. Only attitudes that are activated can affect behaviour, and highly accessible attitudes are more easily activated.

Fazio, Chen, McDonel and Sherman (1982) cited in Frymier and Nadler (2017) postulate that direct experience of an individual is a function of his attitude accessibility. So attitude becomes more accessible and can be retrieved easily when direct experience is involved. They measured attitude on the strength of the time it took there subjects while responding to questions. The most accessible attitudes based on their analysis are the ones that get retrieved faster than others.The attitude, as a result, can predict behaviour better. The easiest attitude to retrieve is the attitude that is frequently used or most accessible.

(e) Situational Factors

Situational factors are also very crucial factors in the examination of when and how attitude predict behaviour. They are the situation in which an individual performs the behaviour in reference. Abelson (1982) cited by Myers (2017) identifies three situations that affect attitude-behaviour relationship. They are individuated situations, de-individuated situations and scripted situations. As the situation is altered, the expected relationship between attitudes and behaviour is altered.

Individuated situations are situations that encourage individuals to focus on their internal states such as attitudes, beliefs and values. This causes individuals to feel more in control of their behaviour of taking more responsibility for their actions. De-individuated situations offer more anonymity and less focus on internal states such as attitude and feelings. When the focus of action is on the group, individuals are less required to take responsibility for actions. So there is less correspondence between

attitude and behaviour in de-individuated situations. Actions such as riot, mass protest, religious and ethnic killings are prime examples of de-individuated situations (Myers, 2017). Scripted situations are situations in which individuals know the expected behaviour and therefore do not need to think in order to behave. In classroom situation for instance, a student does not need to be told to quiet down when a teacher begins to speak. This is a scripted situation in which you do not need to think about behaviour. Scripted behaviour is guided less by an individual's attitude and more by social norms, habits or previously thought out patterns. These attitude-behaviour correlations are much weaker in scripted situations.

Social psychologists agree that attitudes and actions feed each other. Popular wisdom stresses the impact of attitudes on action. Surprisingly, attitudes— usually assessed as feelings toward some object or person—are often poor predictors of actions. Moreover, changing people's attitudes typically fails to produce much change in their behaviour. It takes more than simply influencing attitude in order to change behaviour. Understanding the relationship between attitude and behaviour may be very important, but by itself it is insufficient in successfully changing behaviour or altering a cause of action.

2.1.4 Steps in Behaviour Change

In the process of adopting or accepting a new behaviour, an individual passes through different stages. These stages have been well discussed in literature. Elegbe (2009) identified five commonly used models of communication effects. Citing De Fossard, Baptiste, Corrales and Bosch (1993), he identified knowledge, approval, intention, practice and advocacy as these five stages. Knowing how to perform behaviour, he asserts, usually leads to a positive approval towards that behaviour. When individuals can give public approval of behaviour they are likely to form good intention that leads to actual practice. Individuals that practice behaviour out of volition usual become advocates of that behaviour.

NIJ and Johns Hopkins University (1993) provide a more detailed analysis of these stages and the information needs of individuals at each stage. The stages are as follows:

(a) **Awareness/Motivation:** refers to the stage where individuals become conscious of the existence of a new or healthier way of doing things. This is characterized by the need for exposure, attention and attraction. Intended audience is exposed to the idea of a desirable behaviour, for instance, by describing the benefits of exclusive breastfeeding to an infant's better mental development. The audience then takes some interest in the idea or information especially the ones perceived as having direct impact on them. This leads to favourable disposition to the idea.

(b) **Information/Education:** when information and education is intensified the audience is better able to attain comprehension, knowledge, favourable attitude and retention. At this stage the audience understands the idea and knows how to act. They are also mentally and physically capable of engaging in the desired action. When there is appreciable knowledge, the audience is comfortable with the desired behaviour and willing to consider it. Retention is also enhanced as audience remembers the idea and recalls how to act it.

(c) **Acceptance/Adoption:** motivation, decision, skills acquisition and behaviour decision are important at this stage. The audience considers acting on the idea and eventually decides to try or adopt the desired behaviour. The individual also learns to do the desired behaviour and that leads the audience to actual practice.

(d) **Reinforcement/Continuous Use:** this is similar to what Prochaska and DiClemente (1983) refer to as maintenance. It is about reinforcement and consolidation and the audience needs support and encouragement from others to continue the desired behaviour. The audience that has adopted the behaviour or practice understands the importance and the benefits of their decision. They try to persuade others to try it. That is the level of advocacy.

2.1.5 Attitude Change and Health Behaviour

Making attitude change processes to influence behaviour can take different forms. At the heart of these forms of influences are persuasive messages that are geared towards causing a change in behaviour. Health behaviours which are behaviours undertaken by people to enhance or maintain their health could be influenced in two ways as identified by Taylor (1999). Health behaviours can be influenced through educational appeals or fear appeals.

Educational appeals "make the assumption that people will change their health habits if they have correct information" about the health in question according to Taylor (1999:62). In using this appeal source credibility is expected to be at the highest level of likeability, trustworthiness and perceived expertise could be in convincing message receivers. Messages are also expected to be crafted in the most appealing ways with short, clear and direct points. Despite careful construction of health messages along these lines, informational approaches to attitudinal change, which has education as its focus, has limited effects. Informational appeals alone are insufficient to produce behaviour change because provision of adequate information is not a guarantee that the receiver will process the information appropriately and accurately (1999). People are usually defensive in their processing of information when they receive negative health information.

On the other hand, fear appeal is predicated on the belief that people are fearful when they receive negative information about the risks associated with their health and will change their behaviour to reduce their fear. There is the expectation that fear should have some kind of relationship with change. The belief is that this relationship should be a direct one. The degree of fearfulness of an individual is expected to determine his/her willingness to change the relevant behaviour. The likelihood of change should therefore be dependent on the degree of fear in an individual about behaviour (Glanz and Rimer, 2005). However, Taylor (1999) posits that this relationship does not always hold. Citing Becker and Janz (1987), Taylor views that persuasive messages that bring up too much fear may subvert rather than advance change towards health behaviour. The reality of the relationship between fear and behaviour change is that it is

insufficient to rely on fear alone as fear may even affect positive intentions towards change. Fear may also not be effective in causing enduring changes in health behaviour except when it has a call to action.

2.1.6 Sources of Health Information

Today, health information has become more sophisticated, more diverse and available. This, in some ways, has also made it less authoritative and credible to seekers and users. With the widespread use of the Internet, increasing use of tele-medicine and alterations in the way media report health issues, the context of consumption of health information has evolved distinctly. According to Hesse (2005), tele-medicine and information tailoring tools have now made health care specialists to be able to expand their reach beyond the constraints of traditional office. There are now increases in patient advocacy and consumerism which has prompted large pharmaceutical companies to launch advertising campaign directly to consumers.

The wide diversity and availability of health information is further enhanced by abundant sources offered by the Internet. Added to the usage of the Internet for information search, other related activities relating to health and medicine on the Internet have been highlighted by experts. Andreassen et al's study identified by Higgins et al (2011) was a Europe wide study which revealed that up to 27% health information seekers took part in Internet based groups or forums dedicated to seeking help while 30% engaged with medical workers.

In spite of the wide array of sources relating information to health information seekers, FMoH (2017) has identified the most common and effective sources of health information especially the one that have influence on behaviour change process. They are:

a. Mothers' Group and Community Based Organizations

These community based organisations (CBOs) usually conduct community based educational sessions with young mothers, fathers and mother-in-law who are babies' first level care givers using model mothers and fathers. In doing this, they also provide

demonstration to enlighten and stir up mothers especially mothers in special circumstances on the need for exclusive breastfeeding and other health related issues.

b. Traditional Birth Attendants

The TBAs help in providing information on major health and nutrition related issues to mothers. In some places in Nigeria, they conduct systematic house-to-house visit and enlighten them on the need to practice exclusive breastfeeding and complementary feeding when the child has grown beyond six months.

c. Community Volunteers (CVs)

They work with mothers-in-law, fathers, TBAs and traditional leaders in other to identify and engage mothers in the community who do not believe in EIB, EBF and CP through one-on-one meetings, compound meetings, and group meetings. They also help in specific circumstances such as in sick children, mothers living with HIV/AIDS and children with malnutrition.

d. Religious Leaders

Religious leaders develop nutrition related messages with community volunteers, LGA Nutrition Officers (LNOs) and other focal persons for nutrition information in their areas. Through preaching/sermon during religious gatherings and other social events, religious leaders help to drive home the message of infant nutrition education especially exclusive breastfeeding among the people who hold them in high esteem.

e. Traditional Leaders

Traditional leaders call for and facilitate dialogue sessions with various community groups (fathers, mother-in-law, TBAs and others) on the benefits of healthy nutrition practices and the need to give support(provision of food, money, materials and other forms of encouragement) to mothers for them to carry out healthy nutrition practices. They also work with CVs and CBOs to address negative cultural practices that are barriers to effective child nutrition practices in the community through community dialogue sessions and public pronouncements during ceremonies and festivals.

f. Community Opinion Leaders

Opinion leaders are significant network of communication as they participate in meetings on nutrition. They also actively support and promote appropriate nutrition practices during ceremonies, festivals, and health programmes in the community by public statements in support of exclusive breastfeeding practices and sometimes showcasing own child or children who benefited from EBF along with testimonies from wives.

g. Health Workers

Health workers are active promoters of early initiation of breastfeeding, exclusive breastfeeding and complementary feeding. They hold health talks during ante-natal and post-natal sessions with pregnant women and nursing mothers. Health workers also promote these appropriate infant feeding in one-on-one consultation sessions in health facilities. Their participation in group meetings with demonstration exercises help to strengthen nursing mothers' conviction about correct infant feeding practices and the role that spouse and family members can play in support of the nursing mother.

h. Media

Television, radio, print and news agency reporters and other personnel participate in round-table discussions organized to increase media visibility of nutrition activities especially exclusive breastfeeding. Campaigns on exclusive breastfeeding and other child nutrition issues appear as jingles, public service announcements, talk shows and magazine.

i. Traditional Media

Traditional media groups work with community volunteers, mother-to-mother groups and community based organisations to develop local scripts to promote different positive child nutrition practices by demonstrating best practices and pointing out wrong and negative practices. Community theatre and dance groups work with

traditional leaders, community volunteers and community based organisations to present drama, dance and stories highlighting child nutrition.

2.1.7 Characteristics of Health Information Sources

Source characteristics are features of sources that are based on technical and structural details. Sources of information in any given context are viewed as having many unique attributes, with the context determining the important characteristics of the source. As argued by Ruppel and Rains (2012), previous studies on health communication and information seeking reveal that there are four consistent characteristics directly relating to the milieu of information seeking regarding health and wellness. They are the level of access to medical expertise, tailorability, anonymity, and convenience. All the quadruple of variables are believed considerations relating to the assessment of sources. However, possibility exists that a handful of individuals see health information source in a different way in relation to a particular variable. There is however the need for consistency in the perceptions of information seekers that would require treating the four variables.

The first characteristic of sources of information that is considered almost non-negotiable in the realm of health information has to do with the extent to which sources afford information seekers access to expertise that are medically relevant. Citing Lenz (1984), Ruppel and Rains (2012) believe that accessibility involves having the requisite medical training, certification and licensing such as that which physicians and other health-care providers have. Getting information on health and wellness from medical experts is a potentially important objective for many health information seekers. Based on their depth of training, health and medical professionals have some authority in their field and are reliable and credible sources. Individuals most times consult health professionals due to the fact they believe these professionals offer them reliable and authoritative information and medical advise (Higgins et al 2010). As Lenz (1984) cited by Ruppel and Rains (2012) argued, the quality of information

coming from low level sources, with weak qualification are doubted by information seekers. Although information from medical experts is almost always available in a range of sources provided by mass media such as television news, newspapers, and magazines as well as computer mediated communication, these sources generally naturally offer reduced access to medical expertise than health-care providers would (Hesse et al, 2005).

There are clear evidences that health-care providers are generally viewed to be more important, trustworthy and credible sources of information because they are able to offer more useful medical information (Hesse et al 2005) than the Internet, friends and family, or mass media sources. Given the importance of acquiring information from medical experts, sources that provide greater access to medical expertise (i.e., health-care providers) should be used complementarily.

The second characteristic essentially associated with sources of health information is the tailor-ability. It has to do with the extent that sources make it possible for information seekers to gather or access situation specific information. As Ruppel and Rains rightly observed, the most critical sources in this instance are sources with the potential to give information that is specifically tailored to receiver's situation. Citing Ling et al. (2006), they identified one large-scale survey, in which over seventy five percent of health-information seekers admitted that they would prefer cancer information that comes in materials that meet their personal needs. Invariably, health information provided by friends, family, and health-care providers may be considered as that which is tailored to the individual. They also cited, Johnson and Meischke's (1992) explanation that interpersonal sources such as friends, family, and health-care providers are better suited to handle special individual needs and questions than are mass media sources such as television, newspapers, or magazines. Tailorability of health information is also made possible for individuals by the Internet in order to pursue answers to idiosyncratic health questions by searching the plethora of websites that provide information about health or posing a question to an online social-support group (Rains, 2007 citing Wright & Bell, 2003).

The level of anonymity an information source offers is also a primary basis for the use of complementary source in the process of information-seeking. Anonymity involves the extent to which individual seeking information is easily known to others. When information seekers come across sources that allow them to remain anonymous, they tend to move towards such sources.This is particularly important for individuals that are concerned with maintaining their privacy, such as when a health topic is one that has stigma attached to it (Berger, Wagner & Baker, 2005 cited by Ruppel and Rains, 2012). For example, individuals can obtain health information from the Internet without necessarily revealing their identities to those giving out the information they seek. There are evidences that the Internet affords an individual an essential reason for such individual to make it his or her choice of information source (Hesse et al, 2005). Similarly, books, brochures, magazines, newspapers, and television allow individuals to access health information without requiring disclosure of their identities to others. Individuals report valuing books brochures and videotapes for the anonymity those sources can provide when seeking health information. Sources that allow greater anonymity, such as television, magazines, newspapers, books, brochures, and the Internet, should be used complementarily (Ruppel and Rains 2012).

A fourth essential characteristic of information sources in the context of health is convenience or the relative ease the source affords the individual seeking health information through that particular source. Dutta-Bergman (2006a, p. 90) cited by Rains (2007) contends that, 'the specific [source] chosen for retrieval of health information at any particular time depends on what is available and convenient'' and cites source accessibility as one expedient factor in complementary source use. Evidences suggest that individuals place high priority on the convenience of information sources. For example, individuals report that convenience is an important reason for using the Internet to acquire health information (Fox & Rainie, 2000 and Gray et al., 2005 cited by Ruppel and Rains, 2012).

Seeking information from one's friends or family also tends to be relatively convenient. Citing Case (2007: 153), Ruppel and Rains (2012) explain that friends and family members also provide information on health that is convenient in relative terms and that reviews and analysis of studies and cases in health information seeking for

over a decade show that information seekers prefer to get information from sources that have interpersonal relationships with them, This is due to the fact that such sources are easier to reach and could be mostly available that most authoritative sources. Newspapers and magazines provide such relative convenience as they could be easily searched and archived for future use in relation to specific health issue. Television on the other hand is more fleeting and does not have a long shelf life. It is also prone to damage if not properly stored and protected. This factor makes television a more difficult source for health information seekers to use (Rains, 2007). Using books or brochures as an information source might require a trip to one's doctor's office or the library. McCree et al. (2006) also reported that books are also seen as inconvenient because of the significant time they take to read.

2.1.8 Communicating Health Behavioural Change Issues

Since United Nations Millennium Development Goals (MDGs) were adopted in year 2000, there have renewed interest in the extent and possibilities of communication binge used in helping to solve global problems related to the economy, health and human rights. Fukuda-Parr (2004) cited by WHO (2007) emphasizes that these myriads of problems the world face have not been effectively solved by global leaders and the international community in the last fifty years. With MDGs and now SDGs, issues relating to poverty, wealth and other human development issues are now at the centre of global development agenda.

The importance of communication within the context of global development agenda becomes relevant when viewed in line with its capabilities to make development programmes more effective through adaptability to different language context and re-linking or facilitating interactions between economically, politically and culturally disconnected groups and ideas. That position is further strengthened by Melkote's (1991) argument that development communication practitioners are now starting to recognize communication as the objective in itself, seeing that communication empowers people to dialogue and raise awareness of social-structural programs even among the most disadvantaged population.

A central issue in development is how communication helps in mobilising people and in changing their attitude. As UNESCO (2002) describes it, communication helps development in the area of promoting changes in people's attitudes and behaviours and increases their participation in the development process. The role of communication is further emphasized by Laninhun in Soola (ed) (2007) citing McBride et al (1981) who believes that communication should be designed with three intentions, which are to "increase understanding of development problems, build up a spirit of solidarity in a common effort; and enlarge the capacity of men and women to take charge of their own development" 72.

Good communication strategies for development must be adapted to the extent that it uses concepts that range from psycho-social learning theories of role modeling communicated through media, advocacy and social mobilization (UNICEF, 2005). Dialogue with and active participation of individuals are essential elements in communication for behavioural and social change. These help behavioural change on the large scale especially when cultural values, societal norms and structural inequalities have been factored in.

In specific terms, the practice of health communication can help raise awareness of health risks and solutions, provide the motivation and skills needed to reduce these risks help them find support from other people in similar situations and affect or reinforce attitudes. According to Healthy People 2010, "health communication encompasses the study use of communication strategies to inform and influence individual and community decisions that enhance health" (11:3). The relevance of communication in health covers areas such as (1) health professional-patient relations, (2) individual's exposure to, search for, and use health information, (3) individual's response to clinical recommendation and regimens, (4) construction of public health messages and campaigns, (5) dissemination of individual and population health risk information, (6) images of health in the mass media and the culture at large, (7) education of consumers about how to gain access to the public health and health care systems, and (8) the development of tele-health application.

The promotion of health and communication of its benefits demands changes in behaviour and modification in the way of living. The behaviour change viewpoint to prevention of diseases promotion of health is heavily dependent on the modification of the persons' health related behaviour. This, by Stokols's (1996) explanation, includes managing diets and exercising regularly, avoiding smoking and consumption of alcohol, practicing safe sex and reducing activities that can lead to the risk of bodily injuries such as reckless driving and abuse of substance.

2.1.9 Child Nutrition, Growth and Survival in Nigeria

A child's future is determined to a large extent by the quality of nutrition or otherwise in the early stages of his or her life and specifically during the first 1,000 days. This period, which spreads between the beginning of pregnancy to the child's second birthday, "is in fact a critical window, since the brain and body grow rapidly during this period and good nutrition is essential to laying the foundation for a healthy cognitive and physical development" (NNHS, 2015:55). When children get the right nutrient at this age, they are well formed and well-rounded physically and mentally. Malnutrition at this stage could lead to irreversible damage.

Nutritional status of an infant is usually measured by four standards. These standards are well spelt out in the WHO Child Growth Standard (WHO, 2006) cited by (NNHS, 2015). They are acute malnutrition, underweight, stunting and overweight. These four critical standards measure the nutritional progression of a child and how a country, state or local area is performing in improving child nutrition. Acute malnutrition in children can either be moderate or severe. It is calculated using either the weight for height or the presence of bilateral oedema. According to UNICEF (2017) a child with severe acute malnutrition has 9-fold increased risk of death compared to a child with no acute malnutrition.

The nutritional status is determined largely by how well the child is breastfed. There is however the recognition of the fact that the main barrier to proper implementation of breastfeeding and especially exclusive breastfeeding practices is the insistence on giving water to babies at birth and under the age of six months, and giving them solid

or semi-solid food before six months, in the belief that they need it or that it will make them stronger (Federal Ministry of Health, 2017). This insistence is usually far from a decision taken out of the nursing mother's volition. Social pressure especially from mothers-in-law, is very strong: many mothers-in-law believe that it is important that the mother takes a rest after having given birth, " and some mothers-in-law or relatives physically take the baby away and give him or her back to the mother one or two days after birth" (FMoH, 2017:2). By preventing the mother access to the baby within the first hour, a vital nutrient in child survival, the colostrum, passed from mother to the baby is missing.

According to UNICEF (2017), the colostrum is most times "washed away" as mothers believe that their breast should be "washed" before the baby is breastfed after birth. In some customs, the presence of the father of the baby is necessary before the baby is breastfed for the first time and in the process of waiting for the arrival of the father, the baby is given water to "quench" his or her thirst. Malnutrition often begins at conception and child malnutrition is linked to poverty, low levels of education, and poor access to health services, including reproductive health and family planning. Since all children deserve good care, nutrition and health that encourage their social, emotional, physical and intellectual growth, there is the urgent need for an enabling environment through well-articulated policies, projects, and programmes/interventions to ensure wholesome development of Nigerian children and to enhance their quality of life.

Improvements in this line have not been significant. A UNICEF (2011) study showed that nationally, under-five stunting was 52 percent, underweight was 28 percent and wasting was 11 percent. The study also showed that nationally, 34 percent of the under-fives were stunted, 31 percent were underweight and 16 percent suffered from wasting. Another recent survey showed that nationally, 42% of children were stunted, 25% underweight and 9% wasted. Whereas the NDHS reported 38 percent of under-five children to be stunted, 29 percent underweight and 9 percent were wasted. All these data sources confirm that child under-nutrition is high and that Nigeria did not meet the targets recommended for achievement by 2015. Besides, a critical comparison of the data indicates a little improvement in the menace of malnutrition

since the beginning of major health reforms in Nigeria. The incidence of low birth weight in Nigeria is about 14% from 1998-2005. Both protein-energy malnutrition and low birth weight were considered leading causes of infant mortality. The infant mortality rate in 1990 was 100 per 1,000 births, above average for Sub-Saharan Africa with only 17% of infants (1996-2005).

Deficiency in micro-nutrient is a serious nutritional challenge in the country for Neo-nates and all children below the age of five years. A report cited by UNICEF (2011) revealed that there is Vitamin A Deficiency (VAD) present in over twenty nine percent of children in this age. The report further revealed that twenty percent of deaths in children and infants as well as all aspects of maternal mortality can be traced to VAD in Nigeria. This is due to the fact that lack of protein energy which is related to VAD can reduce ability to fight diarrhoea, respiratory diseases, acute malaria and measles. Deficiency in Vitamin A also makes children less resistant to suffering night blindness and xerophthalamia. FMoH (2017) reports that as many as 9 million children as well as 6 million mothers across the country have deficiency in Vitamin A. Rural dwellers carry the biggest burden of malnutrition relating to micro-nutrients as cases are more prominent there than in urban areas. There is therefore the need for consistent promotion and education regarding nutrition so as to reverse this ugly trend in rural areas in Nigeria.

In spite of all the health teaching, human and material resources expended in the fight against childhood malnutrition in Nigeria, infant and under-five mortality rates continue to increase unabated. UNICEF in 1995 reported that “hidden” rather than overt (obvious or frank) malnutrition is the main cause. Incidentally, Nigeria was one of the ten nations with 80% of the malnourished under-fives with 8 million; other countries are India with 72 million, China, 24 million, Bangladesh, 13 million, Pakistan, 9 million, Indonesia, 9 million, Vietnam, 4 million, Iran, 4 million, Ethiopia, 4 million, and Philippines, 3 million.

Some of the causes of childhood malnutrition in Nigeria include poverty, infection, diarrhea, poor feeding practices, cultural food taboos, large family size, educational status of mothers, shift from traditional breastfeeding to early introduction of artificial

milk, unavailability of nutritious foodstuffs at affordable prices, lack of nutrition rehabilitation centres and poor monitoring and supervision of community health workers. Exclusive breastfeeding for the first six months of life has been prescribed to be effective for child survival in developing countries.

2.1.11 History of Exclusive Breastfeeding and the Baby Friendly Hospital Initiative

Breastfeeding has been important since the beginning of mankind, as a matter of fact it has a long history associated with existence of first mammal. The term refers to the act of feeding infant with milk that is produced in the breast from a female body. Breast milk itself is a unique creature of nature. Throughout the last trimesters of pregnancy, a female body releases hormones which stimulate the milk duct system of the breast resulting into the production of breast milk.

There have however been instances of differences in breastfeeding practices over the years. A detailed historical account of breastfeeding practice by Greiner (1998) reveals a unique type of breastfeeding called wet nursing as far back as 1800 B.C based on Hammurabi's Code for regulation of the behaviour of wet nurses. A wet nurse is someone who nurses another person's baby regularly with breast milk.

Greiner's review of anthropological literature also shows that wet nursing was widely practised in Spartan society as women were required to nurse only their eldest son as the child that would inherit the family name. He equally found evidences of this practice in Pharaonic Egypt by giving account of the Biblical passage that described how a wet nurse was obtained for baby Moses in Exodus (2:7:9). Lawrence and Lawrence (2011) argue that in 1800 A.D French society, breastfeeding was seen as something only for the lower class or poor people as upper class women hired wet nurses for their infants. There are also evidences of wide disparity in breastfeeding period in different societies according to Greiner. Hawaiians were said to breastfeed for five years while Eskimos did for seven years, but most common period of breastfeeding across ancient societies ranged from six months to three years.

In the nineteenth century, the overwhelming majority of infants received their nourishment at the breast; many people considered bottle feeding a death warrant for the unfortunate baby whose mother could not, or would not, breast feed; and few physicians concerned themselves with infant feeding (Apple, 1987). Mothers who did not breast feed depended upon wet-nurses to nourish their children, or they prepared paps or cow's-milk mixtures from recipes listed in home medical manuals or supplied by friends and relatives. During the second half of the century, concern for the high rate of infant mortality stimulated interest in the question of infant feeding, since a high proportion of infant deaths were blamed on inadequate nutrition, due either to deficient breast milk or to poor artificial food. Using the findings of contemporary science, research-oriented physicians, according to Apple (1987), fashioned theories of healthful infant feeding. These researchers were faced with the problems of breast-fed infants who did not thrive and mothers who could not or would not nurse their children, practitioners too wanted a satisfactory substitute for mother's milk. Commercial infant-food products, typically devised by chemists, appeared on the market, providing alternatives to maternal nursing. Furthermore, women who feared that their milk was deficient wanted an artificial food that they could use safely.

Subsequently, the actions and interests of the medical profession, manufacturers, and mothers reached far beyond the development of efficacious artificial feeding for ill children and babies deprived of breast milk. Manufacturers of infant food, condensed milk, and, later, evaporated milk found bottle feeding highly profitable. Based on increasingly sophisticated analyses of human and cow's milk, the creation of "scientific" infant formulas provided a rationale for growing medical intervention in child care. Once their research had disclosed the variable nature of breast milk, some physicians promoted artificial feeding with a food compounded of known ingredients in preference to the uncertainty of maternal nursing. For medical practitioners, artificial feeding came to represent an important and lucrative aspect of medical practice. Moreover, as increasing numbers of mothers worried that they could not successfully nurse their infants, women sought out healthful substitutes for mother's milk. Mothers' changing perceptions coupled with developments in medical practice,

the growth of infant-food manufacture, and scientific research resulted in American mothers' typically bottle feeding their infants under medical supervision.

Over the last two decades, the major bilateral and multilateral aid agencies began or strengthened breastfeeding promotion and support efforts. The United States Agency for International Development (USAID) was a major participant and supporter of the processes that led up to the World Health Organization (WHO)/United Nations Children‘s Fund (UNICEF)/USAID/Swedish International Development Cooperation Agency (SIDA) Innocenti Declaration on the Protection, Promotion and Support of Breastfeeding (1990. The four operational targets from the Innocenti Declaration are:

1. Appoint a national breastfeeding coordinator with appropriate authority, and establish a multi-sectoral national breastfeeding committee composed of representatives from relevant government departments, NGOs, and health professional associations.
2. Ensure that every facility providing maternity services fully practices all of the ―Ten Steps to Successful Breastfeeding‖ set out in the WHO/UNICEF statement on breastfeeding and maternity services.
3. Give effect to the principles and aim of the International Code of Marketing of Breast-milk Substitutes (The Code) and subsequent relevant Health Assembly resolutions in their entirety.
4. Enact imaginative legislation to protect the breastfeeding rights of working women, and establish means for its enforcement.

2.1.12 Meaning of Exclusive Breastfeeding

Exclusive breastfeeding means that an infant receives only breast milk with no additional food or liquids not even water in the first six months of life. A baby that is exclusively breastfed feeds approximately 6-14 times daily. This is internationally recognised as the psychological standard for growth and development of human infants. It is an essential ingredient for normal physical and cognitive development with both immediate and long term benefits to mother and child. It is an essential

ingredient in increased neo-natal and infant survival and equally boosts food security leading to improved child nutrition.

Optimal infant and young child feeding includes six months' exclusive breastfeeding, starting at delivery, and continued breastfeeding with appropriate complementary foods and feeding for two years and beyond, as well as related maternal nutrition and care. There are benefits in delaying another pregnancy until the child is no longer breastfeeding and is able to eat independently, and the mother has recovered her nutrient stores (WHO and UNICEF, 2009). During this period, one of the major policy changes based on evidence was the shift to a recommendation of six months' exclusive breastfeeding for optimal outcomes. While the Innocenti Declaration referred to six months of exclusive breastfeeding in the preamble, the text of the Declaration itself referred to four to six months.

A 2001 expert panel reviewed all the findings for WHO and concluded that there was no evidence of any benefit in giving other foods besides breastmilk prior to 6 months. This shift from a WHO recommendation of four to six months of exclusive breastfeeding is expected to have considerable influence on efforts to sustain exclusive breastfeeding, as it increases by 50 per cent the age at which complementary feeding is considered appropriate (UNICEF, 2005). The last 30 years have witnessed much success in increasing exclusive breastfeeding. In 1990, only about 34 per cent of mothers of children 0–6 months of age surveyed were seen to be exclusively breastfeeding. Extrapolating from those countries for which trend data are available, UNICEF analyses showed an increase to 39 per cent.

The latest data from all countries in The State of the World's Children, 2017 indicate a level of 38 per cent and 17 per cent in Nigeria. While overall increase in exclusive breastfeeding was about 5–6 per cent, some countries doubled, tripled and even quadrupled exclusive breastfeeding rates, especially in the most threatened urban areas, and levels of continued breastfeeding at about 2 years of age increased by about 5 per cent (UNICEF, 2017). New evidence has become available about exclusive breastfeeding in this 15-year interval. Some of the research advances in recent years have been in the immunological components of breastmilk and in long- term health

benefits. Many studies have confirmed that exclusive breastfeeding saves lives in the neonatal and post-neonatal periods of infancy and beyond (UNICEF, 2005).

The Baby Friendly Hospital Initiative (BFHI) was launched by UNICEF and WHO in 1991-1992 as a response to the 1990 Innocenti Declaration on the Protection and Promotion of Breastfeeding to specifically provide guidance on strategies for infant and young child feeding. By 2009, UNICEF/WHO (2009) identify that 20,000 hospitals have been designated as Baby Friendly Centres in 156 countries. It involves an integrated and expanded care of baby and mother in hospitals. There ten guidelines provided by UNICEF and WHO that a hospital must follow before it could be rated as a baby friendly centre:

(i) Have a written breastfeeding policy that is routinely communicated to all health care staff.
(ii) Train all health care staff in skills necessary to implement the policy
(iii) Inform all pregnant women about the benefits and the management of breastfeeding.
(iv) Help mothers to initiate breastfeeding within half-hour of birth
(v) Show mothers how to breastfeed and how to maintain lactation, even if they should be separated from infants.
(vi) Give newborn infants no food or drink other than breast milk unless medically indicated.
(vii) Practice rooming-in -allowing mothers and infant to remain together- 24 hours a day.
(viii) Encourage breastfeeding on demand.
(ix) Give no artificial teats or pacifiers (also called dummies or soothers) to breastfeeding infants.
(x) Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from hospital and clinic.

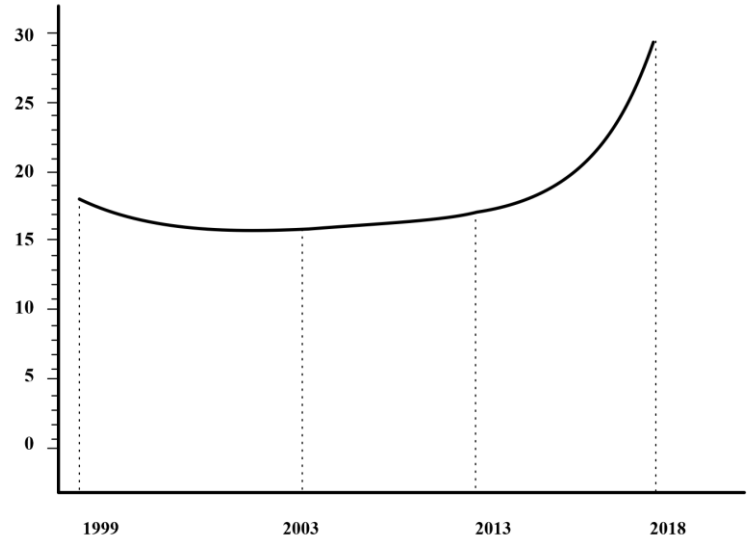
For campaign plans in the area of breastfeeding to have a desired impact, attitudes, skills and social norms are three critical factors that must be taken into account. There must the understanding of and efforts made to change negative public attitudes

towards breastfeeding. Inadequate knowledge of many skills of breastfeeding like correct positioning and increasing milk production must also be addressed. The most critical factor however is the strong social norms that define aspects of breastfeeding such as early initiation and feeding babies with colostrum as unusual behaviour. Most efforts at improving breastfeeding practices begin with an assumption that women automatically change their practice of breastfeeding as soon as they have adequate information. Information sharing can influence significant change in practice, but as Hornick (1988) cited by Green (1989) reasons, breastfeeding practices may be largely determined by expectations within a social network with group norms rather than individual preferences influencing breastfeeding behaviour. The eventual behaviour outcome is then the measure of the level of control the nursing mother is able to exert over the influences of her social network especially when the social expectations like keeping babies away from mothers for specific hours or days differ from the mother's conviction of appropriate breastfeeding behaviour.

2.1.13 Trends in the Practice of Exclusive Breastfeeding in Nigeria

According to Adewuyi and Adefemi (2016), the rate of EBF has been generally low in Nigeria over the past two decades with no more than 60% compliance reported at six months of infants' life in any of the studies reviewed by the two researchers. There are however differences in compliance from one geo-political zone to another with the zones in the Southern part of the country, expectedly, exhibiting higher compliance than zones in the North. They also reported a sharp decline in general compliance with EBF from 42% in the year 2000 to 29% in 2014. These findings are in line with the report of NDHS (2013) which puts the rate of EBF at 18% in 1999, 16% in 2003 and 17% in 2013, though the figures are not exactly the same.

Fig. 2.1: Trends in EBF Practice in Nigeria



Source: Nigerian Demography and Health Survey. 2018. National Population Commission Abuja, Nigeria: NPC, ICF International

The practice has improved slightly over the past five years. Ogbo, Page Agho and Claudio's (2015) longitudinal study of breastfeeding practice is a clear indication of this fact. They reported a marginal increase of 4% (from 26% to 30%) in the practice of exclusive breastfeeding among educated mothers between 1999 an 2013. A similar trend of increase was also reported among non-educated mothers over the same period. There is however a marked improvement in general practices of EBF recently. The NDHS (2018) reports that EBF practices have improved from 17% in 2013 to 29% in 2018. The implication is that there is steady improvement in general practice. There are still concerns though regarding sustaining the efforts towards improvement. There are evidences that exclusive breastfeeding declines with the age of the baby. Data from NDHS (2018) shows that 39% of children age 0-1 month are exclusively breastfed, 29% of those between age 2-3 months and only 18% of babies of age 4-6 months have been breastfed exclusively.

2.2 Theoretical Framework

Theories relating to the study are examined so as to develop an effective theoretical framework for the study. The researcher therefore adopts one model, the Elaboration Likelihood Model (ELM) and one theory, the Theory of Planned Behaviour.

2.2.1 Elaboration Likelihood Model

The Elaboration Likelihood Model, as a model of attitude change, attempts to provide a framework for understanding the basic processes involved in the effectiveness of persuasive communication. Since the late 1970s, the model has become a major focus of persuasion. Developed by Petty and Cacioppo (1981), the ELM was specifically designed to explain and organize past conflicts in persuasion literature. At the core of it, according to Petty et al in Seiter and Gass (2004), is the elaboration continuum which is based on a person's "motivation" and "ability" to think about and assess the qualities of issue-relevant information available in the persuasion context. They further argue that when both motivation and ability to think are high, individuals do scrutinize information from source, message and context more carefully in order to make an

accurate judgment of the issue. If, on the other hand, either the motivation or the ability is low, attitude can be changed by relatively low-effort processes.

According to Petty and Cacioppo (1986a), there are two routes to persuasion- the central route and the peripheral route. The central route to persuasion derives from the early advocacy on cognitive-response championed by Greenwald's cognitive approach to persuasion (Allen 1991). Elaboration is therefore, a "thoughtful" processing of communication content with deliberate effort. There is, then, an effort on the part of the recipient to actively think about issue-relevant information in the central route of persuasion. This is viewed as the direct determinant of the direction and amount of attitude change.

Drawing upon prior experience and knowledge in scrutinizing and elaborating the issue-relevant arguments in the persuasive messages are crucial as the central route to persuasion. It is central because it creates "cognitive responses that are rehearsed and stored in the long term memory" (Petty and Cacioppo, 1981: 266). They also viewed that persuasion that result from central processing should be "relatively permanent, resistant to counter-persuasion and more predictive of behaviour" (Petty and Cacioppo 1986a), whereas that of the peripheral route should be temporary.

The peripheral route, on the other hand, is about "pairing the recommendation with a simple cue that either alters recipients' moods directly, or provides them with basis for a simple interference as to the appropriate attitude" (Petty and Cacioppo, 1986a: 29). It is, to a large extent, a route to attitudinal change without active evaluation of the issue. The peripheral route is devoid of issue-relevant thinking. As a result, it induces a temporary effect on attitude. This temporary effect could stay long enough to the extent that it becomes permanent.

Petty et al (2009) further argue that attitude change on the basis of peripheral route requires effortful evaluation of information presented by the mass media or other information sources. It is therefore "neither adaptive nor possible for people to exert considerable mental effort in thinking about all media communication to which they are exposed" (pg. 135). The fact that peripheral route require less active engagement

does not necessarily mean that it is ineffective. Petty et al (2009) posit that they are quite powerful in the short term. But when it has to do with long term consideration of messages, emotions dissipated, feelings and cues also become dissociated from the message to the extent that rejection becomes likely.

The central route holds that a person is more likely to be persuaded if he is able to elaborate on a message extensively. That is, if he is motivated to think about the message, is able to think about it, and if the message is a strong one, he will be persuaded in accordance with the message. The peripheral route, in contrast, states that if a person is unable to elaborate on a message extensively, then she may still be persuaded by factors that have nothing do with the actual content of the message itself. That is that she would be drawn to the message by factors that she is already familiar with and has positive attitudes about and would associate those attitudes with the message. She would then be persuaded toward the message, albeit weakly and temporarily.

The distinction between routes of processing remains both a theoretical and a methodological issue. As Allen (1991) rightly observes, the theoretical issue is whether or not the conceptual distinction between the two methods of processing is recognizable. Can the routes of processing be defined as separate entities permitting independent operationalisation? The methodological issue involves the question; can the effects of a message on a receiver be separated into effects due to central and peripheral processing? The only methodological distinction offered by Petty and Cacioppo considers the difference in the temporal effects of the message: Central processes have long-term impact whereas peripheral cues have only a temporary impact. The key to elaboration or central processing is whether the cue is "issue relevant." In order for the receiver to have motivation to process the message it must have some relevance to her. It should pertain to something that she already knows about. At least some familiarity with the subject matter of a message will encourage the receiver to process it. Even when there is relevance the credibility of the source may affect the elaboration of such message.

It is never in doubt that persuasion is a function of thought and that persuading people would mean staying in their thought. The cognitive response approach to persuasion as Petty (2018) contended holds that nearly all thoughtful influence was self-persuasion because even when people were exposed to external messages, their effectiveness depended on the extent to which individuals articulated their own favorable thoughts about the information. When people generate primarily favorable thoughts toward a proposal, there is attitude change, whereas recommendations that attract primarily unfavourable thoughts are less effective in changing attitudes in the intended direction.

2.2.2 The Theory of Planned Behaviour

The Theory of Planned Behaviour is a model of attitude-behaviour relationship widely accepted as one expectancy-value model that has succeeded in predicting human behaviour to some degree. It is a further development on the Theory of Reasoned Action developed in 1967 by Icek Ajzen, a professor of Psychology at the University of Massachusetts and Martin Fishbein of the Department of Psychology, University of Illinois at Urbana.

The development of both the Theory of Planned Behaviour and its forerunner, the Theory of Reasoned Action originated from social psychology with specific interest in the prediction of behaviours and outcomes. Fishbein and Ajzen's framework for predicting behaviour and attitude was then referred to as the theory of reasoned action and it looks at behavioural intentions rather than attitudes as the main predictors of behaviours. But as the theory of reasoned action began to take a good hold in the social sciences, Godin and Kok (1996) noted that, Ajzen and other researchers realized that this theory was not adequate and had several limitations. One of the greatest limitations it has was with people who have little control over their behaviours or attitudes. As a result, Ajzen advanced the theory to include a key element called perceived behavioural control which led to the theory of planned behaviour.

A key interest in the development of the theory is the prediction and understanding of motivational influences on behaviour that are not under the individual's volitional control. The theory also tries to identify how and where to introduce strategies for

changing behaviour and to explain virtually any human behaviour such as why a person buys a new car, votes against certain candidate in elections, declines to use condom in premarital sex or even refuses to quit smoking cigarette.

Human action based on this theory, according to (Ajzen 2006) is guided by three kinds of consideration: beliefs about the likely outcomes of the behaviour and the evaluations of these outcomes (behavioural beliefs), beliefs about the normative expectations of others and motivation to comply with these expectations (normative beliefs), and beliefs about the presence of factors that may facilitate or impede performance of the behaviour and the perceived power of these factors (control beliefs). He further isolated the outcome of each consideration by identifying that behavioural beliefs produce a favourable or unfavourable attitude toward the behaviour; normative beliefs lead to perceived social pressure or subjective norm; while control beliefs gives rise to perceived behavioural control. They all then lead to intention and the actual behaviour. When the actual control is sufficient, people are then willing to carry out the intentions.

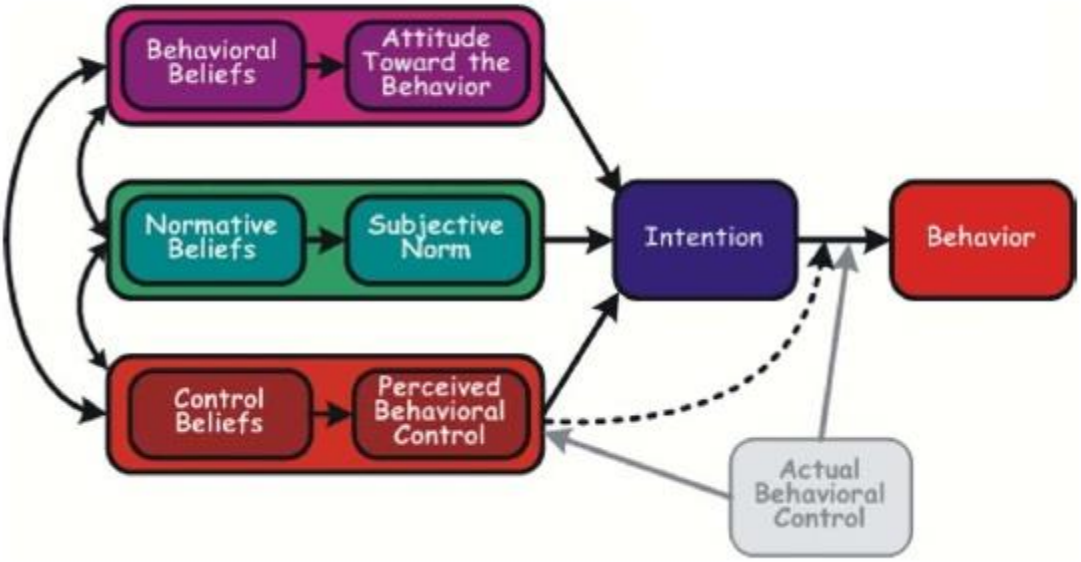


Fig 2.2: Ajzen's Graphic Representation of the Theory of Planned Behaviour

Source: Ajzen I. 2006. Constructing a TpB questionnaire: Conceptual and methodological considerations.

The core tenet of the reasoned action or planned behaviour approach to explaining human behaviour is that as individuals we are aware of the thoughts and feelings that lead up to our decisions and we find explanation for our behaviour. The most important determinant of a person's behaviour is the behaviour intent (Ajzen in Lange, Kruglanski and Higgins, 2012). It is believed that the stronger a person's intention to perform a particular behaviour, the more successful they are expected to be. Intentions are a function of two basic determinants: attitude towards behaviour and subjective norms of behaviour, while the theory of planned behaviour added perceived behavioural control as a key determinant.

Attitude towards Behaviour

Attitude is the first determinant of behavioural intention. It is the degree to which a person has a favourable or unfavourable evaluation of the said behaviour. To a very large extent attitude either positive or negative can, according to Smith (1998), help predict behavioural tendencies. Since the key proposition in the TPB is rationality attitude is crucial in understanding intentions and then action.

Subjective Norm

The second determinant of behavioural intention is subject norm. It is the influence of social pressure that is perceived by the individual (normative beliefs) to perform or not to perform certain behaviour. This weighted by the individual's motivation to comply with those perceived expectation. As Smith (1998) puts it, it is the individuals beliefs about what other people would think of his action. An individual according (Ajzen 2006) will have stronger intention to perform certain behaviour when he/she perceives that important others around him or her have positive feeling about the behaviour. These important others night the individual's spouse, close friend mother, mother –in-law or even physician and health workers.

Perceived Behavioural Control

This refers to the degree to which an individual feels that performance or non-performance of the behaviour in question is under his or her volitional control. People

are not likely to form a strong intention to perform behaviour if they do not have any resources or opportunities to do so even if they hold positive attitudes toward the behaviour and believe that important others would approve of their behaviour. Ajzen (2011) beliefs that perceived behavioural control can influence behaviour directly or indirectly through behavioural intentions. In his attempt to emphasize a clear distinction between the TRA and TPB, Ajzen cited by Tlou (2007) suggested that intentions can only be expected to predict a person's attempt to perform a behaviour, one would have to not only assess intention but also obtain estimate of the extent to which individuals are apt to exercise control over the behaviour in question. So, actual behavioural control is different from perceived behavioural control.

Criticisms of the Theory of Planned Behaviour

Judging by the volume of the citation it has received; the Theory of Planned Behaviour and the Theory of Reasoned Action are some of the most influential models for predicting human social behaviour. Ajzen (2011) notes that the annual mention of TPB and TRA in Google Scholar search grew from 22 citations in 1985 to 4,550 in 2010. Criticisms of the theory have ranged from outright rejection to the acceptance of basic reasoned foundation of it but non-acceptance of its limiting conditions.

The TPB is based on identification and weighing of behaviour in line with attitude formation. It assumes that behavioural change can be caused or induced by adding a new belief. This new belief could be systematically effected through persuasive information which could change favourability status of an individual regarding certain behaviour. While this may be acceptable within a paradigmatic analysis, individuals still may not carry out this behaviour in actual sense owing to other sociological complexities around her.

In the case of breastfeeding for instance collective existence within the traditional African contexts is strong and that is overlooked by the theory. The theory places so much emphasis on individual doer of action ignoring the one context which is collectively determined. One strong argument for the TPB is however the subject norms proposition, which talks about significant but even that would not be sufficient

in explaining the social context regarding accepting or rejecting a behaviour like breastfeeding. If a campaign is based on a classical TPB, the approach would be required to influence pregnant women and nursing mothers' attitude to the extent that they see it as a desirable infant feeding option. Then there would be the need to make them associate view significant others as possible to unacceptability of the practice. According to Kippex and Crawford cited by Tlou (2009), this could be irrelevant because it does not address the shared meanings around this practice within the context that nursing mothers and pregnant women live. A key proposition in EBF is non-usage of supplements at all, but in instances where cultural contexts make concoction and supplement inevitable, that position may be hard to advance. Such social convictions are more influential than individually held belief or cognition.

Another key criticism of the TPB and essentially all cognitive models is that they may be more suitable for small high risk populations, rather than large scale high risk population. Behavioural intentions may also be less important in non-Western cultures, as these theories assume a degree of autonomy alongside the Western bio-medical model (King et al 1995, Elder 2001 cited by Corcoran 2007). Within the African context these autonomy may be less relevant as social support are always available to individuals at risk.

There are however opportunities for the extension or modification of the Theory of Planned Behaviour. Tlou (2007) noted that Ajzen in his discussion of the theory in 1991 concedes that the theory is open to inclusion of additional predictors if they capture significant proportion of the variance in intention and behaviour. Following the lead by Ajzen (1991), Armitage and Conner (2001) as well as Sheeran and Orbell (1998), Tlou discussed few additional variables that should be considered in the modification of the Theory of Planned Behaviour to increase its predictive value. They include such variables as:

(a) **Belief salience:** Adopted from Armitage and Conner (2001) refers to the most salient(s) belief that determines individual's attitude at a particular point. Armitage and Conner argue that this far outweighs other beliefs that a person possesses at that time.

(b) **Past behaviours and habits:** Although this is rather inconclusive but certain studies have shown that past behaviour, rather than cognition as advanced by the TRA and TPB, may influence current behaviour.

(c) **Moral norms:** In behaviour that has ethical dimension, individuals usually develop a sense of obligation to perform ethical behaviour and not to perform unethical behaviour. It works, according to Conner and Armitage in parallel with subjective norm and perceived behavioural control.

(d) **Descriptive norms:** This is about the perception and action of significant others on a particular subject. It is assumed that this provides information that people may use in deciding what to and what not to do.

(e) **Self-identity:** The way an individual perceives himself or herself relating to a particular behaviour is crucial. It is determined by the social role expected of such individual in line with the behaviour under consideration. For instance how would a pediatrician handle breastfeeding his own child and how would a beauty queen who is mindful of her body shape handle breastfeeding.

(f) **Affect:** There are emotional or affective aspects to behavioural tendencies and it is crucial in explaining an individual's choice of behaviour.

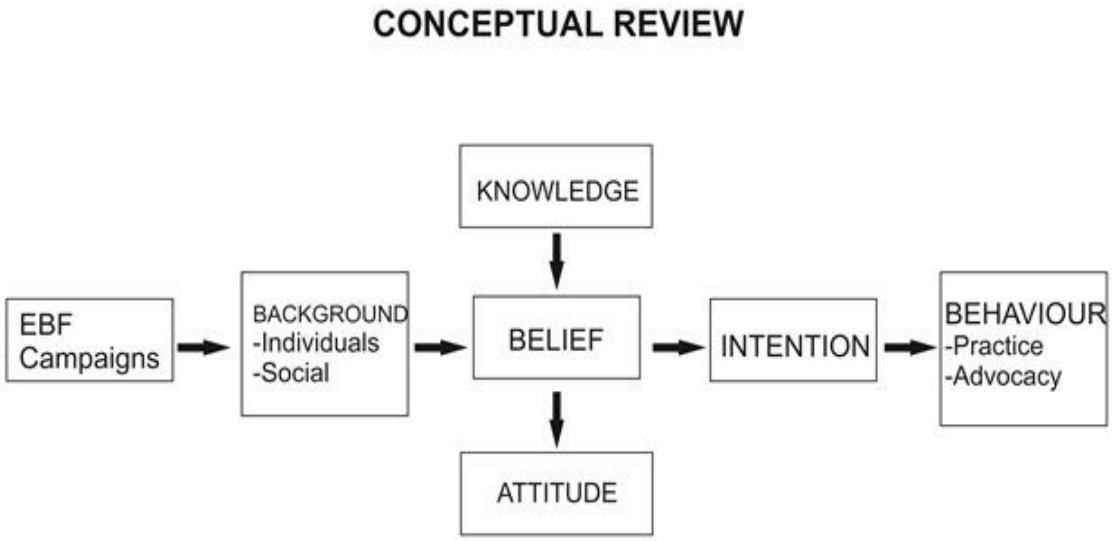
(g) Anticipated regrets: These are beliefs about the extent of regret, disappointment and unhappiness that could arise from non-performance of a behaviour. It is closely related to affect.

(h) **Desire:** Armitage and Conner (2001) made a distinction between desire and intention. While intention implies that a decision has been made to a behaviour, desire reflects wishes and wants and it precedes intention.

(i) **Social relations:** Citing Landridge (2007), Tlou identified social relations as a second component of subjective norm. It refers to beliefs about the likelihood and importance attached to a particular behaviour defined by friendship formation. The possibility of developing new social relationship is, according to Tlou, a major motivation for changing intention to perform behaviour.

The interest of the researcher is in how two main variables identified in this modification, that is self-identity and social relations, affect the processing of information by nursing mothers from all background in Ogun State.

2.3 Conceptual Framework



The conceptual framework for the study is derived from the Theory of Planned Behaviour and the impact that messages or campaign on exclusive breastfeeding is expected to have on individual woman who is expected to engage in exclusive breastfeeding. The first stage of the framework provides information of different EBF campaigns. The intention here is not to review the content but the impact that it is expected make in the actions or behavioural intention of the target. This is, at the first stage dependent on the background of the individual framed by references or field of experience. This field of experience is determined by factors such as education and social interaction or influences.

2.4 Empirical Review

Studies in the application of theory of planned behaviour are numerous and they have different dimension in themes and methods. Conner, Lawton, Parker, Chorlton, Manstead and Stradling (2007), applied the theory of planned behaviour to the prediction of objectivity assessed breaking of posted speed limits across different roads in the United Kingdom. The study attempted an explanation of variance that exists between a self-report questionnaire and an observation. All measures except behaviour were taken by self-report questionnaire referring to different scenarios, while behaviour measures were based on performance in a simulator or un-obtrusive on-road speed camera assessment taken without driver awareness across roads with varying posted speed limits. Conner et al reports that variance in intention to speed was explained with attitudes, subjective norms, perceived behavioural control, moral norms, anticipated regret and previous accidents being significant predictions. There is however, huge variance in these predictors as the self-reported questionnaire returned 82% while the driving simulator returned 35%.

In a different setting, Mirkuzie, Sisay, Moland and Astron (2011), applied the theory of planned behaviour to explain HIV testing of pregnant women attending public and private ante natal care facilities. A sequential exploratory mixed method was used to test first time ante natal attendances. Three focus group discussions were conducted and that helped the researchers to structure a TPB questionnaire. A total of 3,033 women completed the baseline interviews, including attitudes, subjective norms,

perceived behavioural control and intention with respect to HIV testing; whereas, 2928 completed actual HIV testing as follow up.

The following findings were reported:

- Women attending both private and public health care facilities had high intention, favourable attitude, perceived strong normative pressures and perceived less barriers to undertake HIV testing.
- There were statistically significant differences between women attending public and private health care across theoretical constraints except for descriptive norms. Women attending public health care facilities reported slightly stronger intention, more favourable attitude and stronger perceived normative pressure to undergo HIV testing compared to their counterparts attending private health care facilities.
- Intention was significantly and positively associated with attitude, subjective norm, descriptive norm, PMTCT knowledge, previous HIV testing experience and previous HIV testing experience with partner among attendance of both public and private health care facilities.
- Based on cross tabulation of intention and behaviour majority of the women who tested for HIV, had high intention to do so.

One assumption that is consistent in these two studies is that, knowledge level is taken for granted. In both cases subjects who should know form the sampled population for the study. In Mirkuzie et al in particular, pregnant women who were attending health facilities were sampled. The position of pregnant women who do not attend health care facilities was taken for granted. This is significant in the socio-cultural context of the current study.

Several other studies have also been conducted on exclusive breastfeeding behaviour of nursing mothers in different contexts. Bovell-Benjamin, Benjamin, Ivory and Simeon (2001), ran a cross-sectional survey of 509 adults in Eastern Tobago to test their knowledge and beliefs. From their findings, 95% of adult women involved in the reported that they breastfed their infants at birth. 69% of the subject reported that they

breastfed their infants exclusively for only three months while 48% reported that they adhered to the six months period of exclusive breastfeeding. In terms of influence on nursing mothers to continue or discontinue exclusive breastfeeding over the six month period, mothers and mothers-in-law had the biggest influence on nursing mothers' continued breastfeeding practices. Subjects also showed poor knowledge of expressed breast milk as 63% are unaware of such practices.

Gupta et al (2004) is a nationwide evaluation of post-campaign knowledge and practices of exclusive breastfeeding in Uganda focusing on the extent to which exposure to behaviour change communication messages in the media determined recent improvements in exclusive breastfeeding knowledge and practices selected areas in Uganda. With data collected from representative sample of women and men of reproductive age analysed through multiple logistics repression with attention to influence of BCC exposure on breastfeeding knowledge and practices. Results from the evaluation shows that the exposure to BCC messages was strongly associated with women's knowledge of six months as the ideal duration for exclusive breastfeeding. There were also reports of positive influences on knowledge by men. An important dimension that this study introduced was that it did not sample subject in health care facilities but in their homes. It also widens the sampled population to include men and adult women who play significant role in influencing nursing mothers' decision to continue exclusive breastfeeding over the period of six months.

In the Eastern part of Africa, breastfeeding on demand for babies is equally a challenge. Dukuzumuremyi, Acheampong, Abesig and Luo (2020) conducted a systematic review of peer-reviewed literature. There was a search for literature conducted using 6 electronic databases, Google Scholar, Embase, Web of Science, Science Direct, Pub Med and Cochrane library in order to conduct a meta-analytical study of research articles published in English in Eastern part of Africa between Year 2000 and Year 2019. The review focused on studies that are on knowledge, attitude and practices of EBF. The meta-analytical review suggested that 96.2% of mothers have heard the term EBF before, 84% of the mothers in the review are well aware of what EBF is all about and 49.2% can state clearly that the duration of EBF was the

first six months of a baby's life. Only 42% of mothers in the review preferred showed willingness to practice EBF the first six months.

Lawoyin, Olawuyi and Onadeko (2001), randomly selected 2,794 mothers attending clinics in Ibadan, Oyo State to evaluate factors associated with exclusive breastfeeding adoption among them. The researchers discovered that exclusive breastfeeding rate dropped from 57.4% at first month to 23.4% in the sixth month. Using multiple regression to analyse demographics of the respondents, it was discovered that age of infants, maternal occupation and delivery in tertiary or secondary health facilities were predictive of EBF practice. Mothers who are 24 years and younger were reported to be less likely to breastfeed their babies exclusively. This is an indication of what role self-identity could play in the intention to practice exclusive breastfeeding regardless of the strength of other variables of persuasion.

Ajibade et al (2013), whose study is in some ways similar to the work of Okolie (2013) is a randomised cross-sectional study aimed at identifying factors that influence the practice of Exclusive breast feeding (EBF) in rural communities of Osun State, Nigeria. The sample size consists of four hundred and eighty (480) nursing mothers drawn randomly from five (5) selected communities (Aayegbogbo, Ola, Isoko, Ilawo and Masifa). Data were analysed using simple percentage and chi-square at 0.05 level of significance. The study reveals a high percentage (80%) resistance to change from Inclusive Breast Feeding (IBF) to Exclusive Breast Feeding (EBF). The identified factors that influences the practice of EBF include; nursing mother's age, marital status, occupation, education, parity and financial status of the family. About 47% of the respondents who started EBF at birth stopped the practice in less than one month, only about 10% continued with EBF till 6 months. Perceived reason for not practising EBF is attributable to cultural factors. Generally, only 20% of the respondents practice EBF while majority (80%) do not. It was concluded that there is the need for midwives to intensify their health education on rural women which will address all issues of cultural barriers that militate against nursing mother from practising EBF.

Alade et al (2013) explored the antecedent factors influencing the practice of exclusive breast feeding (EBF) among lactating mothers in Ayete, a rural community in

Southwest Nigeria. A three-stage random sampling technique was used to select 410 mothers of newborns and infants less than six months from households. A pretested semi-structured questionnaire which included a 14-point knowledge scale was used for data collection. Data were analyzed using descriptive statistics, Chi-square test and analysis of variance (ANOVA). Mean age was 27.4±5.9 years and 67.1% respondents were aware that EBF should be initiated immediately after birth. Mean knowledge score on EBF was 8.2±2.9. Age, educational level and occupation were significantly associated with knowledge of EBF ($p<0.05$). Main perceived challenges associated with EBF were loss of essential nutrients by mothers (87.6%) and inducement of hunger (26.2%). Only 10.2% of respondents were practicing EBF as at the time of the study. Reasons for not practicing EBF included baby needs herbs for strength and vitality (31.3%), baby needed water to quench thirst (23.9%) and non-satisfaction with breast milk alone (20.8%). Practice of EBF was significantly more among respondents earning less than N5000.00 monthly ($p<0.05$). Continuous sensitization activities are needed to promote exclusive breast feeding among lactating mothers.

Past studies have focused on the receiver elements of the communication process only with little attention to the sources of the messages. Sources of health information are crucial to the believability and credibility of such information. This study, therefore, examines the level of knowledge, attitude to and practice of exclusive breastfeeding among nursing mothers in Ogun State in relation to sources that they get information from. To what extent do sources from which nursing mother's receive information about exclusive breastfeeding influence their adherence to the practice of exclusive breastfeeding?

CHAPTER THREE

METHODOLOGY

This section is a description of the approach that was adopted in conducting the study. It contains a detailed explanation of the design, the description of the population of the study, the procedure for drawing a representative sample, the description of instruments for collection of data as well as the process of administration of instrument to collect data and the method of analyzing the data.

3.1 Research Design

The study is concerned with acquisition of information on breastfeeding by nursing mothers and the extent to which the major sources that they get exclusive breastfeeding information from influence how they act on the information. A description of the social structure around nursing mothers and how it influences their choices of acceptance and rejection of EBF can best be explained with survey.

As a result, the descriptive design was adopted for this study. This involves the use of survey which, according to Salkand (2000), describes the characteristics of an existing phenomenon and it is the most frequently used mode of observation in the social sciences. Survey is also the most widely used method in observing behaviour (past and present) and the underlying attitude, beliefs and intentions of a particular set of respondents (Bordens & Abbolt 2008). With careful sampling, survey can provide a group of respondents whose characteristics may be taken to reflect those of the larger population (Babbie, 2007). The study also adopted in-depth interview and Focus Group Discussion.

The study sets out to provide answer to the following research questions:

1. What are the available sources of information on EBF to nursing mothers in Ogun State?
2. What is the level of knowledge of nursing mothers about EBF in Ogun State?
3. What is the attitude of nursing mothers to EBF in Ogun State?
4. What are the practices of EBF among nursing mothers in Ogun State?
5. To what extent do sources of information influence nursing mothers' knowledge and attitude to EBF?
6. To what extent do sources of information influence behaviour of nursing mothers to the practice of EBF in Ogun State?

3.2 Area of Study

The area for the study was Ogun State, the third most populated state in the South-Western part of Nigeria with a population of 5.2 million people. The state has the unique feature of being a transit point for so many travelers owing to the fact that it is bothered by Lagos along Eastern, Western and Southern part; Oyo and Osun in the northern axis, Ondo in the mid-Eastern part and the Republic of Benin in the mid-Western part.

There are three senatorial districts that are mainly defined along ethnic proximity. Ogun East with 9 local governments is the biggest senatorial district with largely people of Ijebu and Remo extraction as inhabitants, Ogun Central has six local governments and it is populated mostly by people with Egba dialect as a common identity. Ogun West is slightly more diverse in ethnic composition. The five local governments are inhabited by mostly people of Yewa, Awori, Ogwu, and Ohori.

Ogun State is well served by health care services. There are 5 major tertiary health care facilities in the state.

i. The Olabisi Onabanjo Teaching Hospital, Sagamu
ii. Neuropsychiatry Hospital, Aro Abeokuta, established about 60 years ago and which now serves as WHO training center for the mentally ill.
iii. Federal Medical Center, Idi Aba Abeokuta.
iv. Otunba Tunwase National Paedeatric Centre, Mobalufon, Odogbolu.

v. Babcock University Teaching Hospital, Ilisan-Remo.

3.3 Population of Study

The estimated population of Ogun State is put at just over 5.2 million people at 2016 (NBS, 2018), making it the third largest state in the South Western part of Nigeria behind Lagos and Oyo States.The actual population of study comprises of nursing mothers in Ogun State. By this description, we mean women who have babies from age 0-24 months. The expectation is that mothers with babies in this age range would either be practicing breastfeeding or would have just practiced breastfeeding fairly recently. The population includes mothers who are nursing their first babies as well as experienced mothers who are nursing second or subsequent babies.

There are four specialist hospitals one each in one of the major towns in each of its four divisions along with other general, cottage and primary health care facilities. There are over 800 registered private health care facilities scattered all over the state that can be categorized into three tiers of health care. Finally, Ogun State has 428 Primary Health Care Centers (Ogun State Strategic Health Development Plan, 2010-2015).

3.4 Sample Size

The sample size for the study is 600 respondents. The 600 respondents were nursing mothers who were accessed at public health facilities. In each LGA, 100 nursing mothers were selected for the study in their health facilities. Description of sample selected in each LGA is reflected in Table 3.1 below.

Table 3.1 Showing List of Selected LGAs, Health Facilities and Sample Size

S/N	Local Government Areas	Health Facility and State Code	Number of Respondents	Type of Health Facility
1.	Abeokuta South	i. Health Centre, Keesi (0077) ii. Health Centre, Kugba (0096) iii. Family Health Centre, OkeIlewo (0132) iv. Adigbe Health Centre, Adigbe (0144) v. Oba Ademola Maternity Hospital (0199)	25 10 25 10 30	i. Primary ii. Primary iii. Primary iv. Primary v. Secondary
2.	Sagamu	i. Health Centre, Sabo Agura (0067) ii. Health Centre, Ajaka (0032) iii. General Hospital, Ode Lemo (0042) iv. Isote Health Post, Isote (0033) v. Idado/Ayegbami Health Clinic, vi. Ayegbami (0014)	20 25 25 15 15	i. Primary ii. Primary iii. Secondary iv. Primary v. Primary
3.	Ado Odo/ Ota	i. Primary Health Centre, Agbara. (0017) ii. Ajegunle Health Centre. (0024) iii. State Hospital, Ota. (00 iv. Ado Odo Health Centre. (0014) v. Atan Model Health Centre. (0025)	20 10 40 20 10	i. Primary vi. Primary vii. Secondary viii. Primary ix. Primary
4.	Odeda	i. Eleweran Health Clinic (0041) ii. Osiele Health Clinic (0047) iii. Odeda General Hospital (0011) iv. Opeji Health Centre (0044) v. Emulu Health Clinic (0021)	25 20 30 15 10	i. Primary ii. Primary iii. Secondary iv. Primary v. Primary
5.	Odogbolu	i. General Hospital, Ayepe (0002) ii. Health Centre, Ibefun (0005) iii. Community Health Centre, Odogbolu (0020) iv. Health Centre, Ososa (0032) v. Health Centre, Idowa (0007)	25 15 25 20 15	i. Primary ii. Primary iii. Primary iv. Primary v. Primary
6.	Yewa North	i. Joga/Orile Model Health Clinic (0081) ii. Primary Health Centre, Igbogila (0038) iii. Sawonjo Health Clinic, (0058) iv. Apetu, OjaOdan Health Clinic (0063) v. Idofoi Health Clinic (0003)	20 20 20 20 20	i. Primary ii. Primary iii. Primary iv. Primary v. Primary
	Total	**30 Health Facilities**	**600**	

Source: Survey Data (2018)

3.5 Sampling Procedure

The procedure for drawing out a representative sample for the study was basically multi-stage (involving four stages). Ogun State was first clustered or stratified into three senatorial districts: Ogun East, Ogun Central and Ogun West. From each stratum two local governments were purposively selected. The first set of local government areas were selected based on the fact that it has state/federal owned major health facility within its boundaries. In that case, Sagamu Local Government Area, which hosts the State University Teaching Hospital (OOUTH), was chosen for Ogun East. In Ogun Central, Abeokuta South Local Government Area with the Federal Medical Centre and the State General Hospital was chosen. Ado Odo/Ota Local Government with another State General Hospital was chosen for Ogun West. The three LGAs were also chosen because they have the highest number of health facilities in each senatorial district. The second local governments in each stratum were selected purposively because they have lowest number of health facilities in each senatorial district. Odogbolu, Odeda, and Yewa North Local Governments Areas were, on this basis, picked from Ogun East, Central and West respectively.

After selecting the local governments involved in the study, the researcher then used the list of accredited hospitals in Ogun State to select 5 health facilities in each local government using a simple random sampling method. The list served as a complete sampling frame for the study in each local government as health facilities already have their assigned numbers as they appear on the list. However, the researcher did not use private health facilities for the survey due challenges with access. So every time a private health facility got picked in the process of randomization, the number was returned to the basket until a public health facility is picked. Thirty health facilities owned by government across levels were therefore selected for the study. The health facilities were selected for the study across 6 LGAs in the state covering the 3 senatorial districts in the State. In each of the 6 LGAs, 5 health facilities were selected and in each of health facility, the number of respondents selected was based on the quota of nursing mothers registered for post-natal care in the facility.

3.6 Description of Instruments

Three instruments were used for collection data for the study. The instruments used were questionnaire, focus group discussion guide and key informant interview guide

Questionnaire

The questionnaire (see Appendix 1) for the study has eight different sections that address different aspects of the research problem. Section one of the questionnaire addresses demographic variables concerning respondents. Other sections were devoted to questions that could help provide answers to the objectives of the research. Section 2 has nine items designed to test respondents' knowledge. There were fourteen items in Section 3 and 4 and they sought to find out sources from which nursing mothers received EBF messages from.Sections 5 and 6 with eleven and fourteen items respectively were entirely devoted to attitude of respondents' towards EBF. All items in sections 7 and 8 addressed EBF practices. Almost all items on the questionnaire are close ended due to the nature of respondents who have limited time to respond to the instrument. There is however complementary data obtained from focus group discussion, interview and non-participant observation as part of this study. The questionnaire was also translated into Yoruba Language for nursing mothers who could not read English (see Appendix 2)

Focus Group Discussion Guide

The second instrument is the focus group discussion guide. The FGD is an in-depth qualitative method that brings together a small number of interviewees who are highly homogenous. The guide has a 10-item promptings to keep the discussion in focus (see Appendix 3).

Key Informant Interview Guide

The researcher also used a 10-item guide for an interview with the State Nutrition Officer, State Primary Health Care Board, Ogun State (see Appendix 4).

3.7 Validity and Reliability

The instrument was first validated by giving it to the supervisor and other senior academics in the Department to ensure construct validity. There was a peer-review session to incorporate inputs of other experts into the design of the instrument. A pre-test of the questionnaire was held among forty nursing mothers at the Federal Medical Centre, Idi Aba, Abeokuta. One FGD session was also held to test the FGD guide. The reliability of the instrument was determined using test-retest reliability method. 40 copies of questionnaire were administered at an interval of two weeks. The data collected was subjected to Cronbach Alpha reliability test. The instrument subscales were found reliable as follows: Knowledge of Respondents about EBF (9 items; α =.873); Sources of Information from which nursing mothers received EBF messages (14 items; α =.861); Sources of information that influence respondents knowledge of exclusive breastfeeding (14 items; α =.810); Attitude of respondents towards EBF (11 items; α =.815); Sources of information that influence respondents attitude to EBF (14 items; α =.803); Exclusive breastfeeding practices (9 items; α =.839); Sources of information that influence respondents EBF practices (16 items; α =.895).

3.8 Data Collection Procedure

Administration of Questionnaire

The researcher handed out copies of the questionnaire to respondents to fill and return. However, due to the demographics of the population which reflects a large segment of nursing mothers who could not read and write in English, the instrument was translated into Yoruba Language to specifically take care of these nursing mothers. In spite of the translation, many nursing mothers still could not fill the questionnaire either because they could not read or write in any language or because they were unwilling to fill the questionnaire while preparing their babies for immunization. The researcher and his four research assistants were therefore helping nursing mothers in this category to tick appropriately by going through the instrument with them and explaining the options to them. In spite of the efforts of the researcher and his assitants, only 574 out of the 600 copies of questionnaire were found suitable for analysis. Other copies were not neatly handled by the nursing mothers.

Focus Group Discussion Sessions

Two focus group discussions were conducted in one clinic and one TBA centre. The first session was conducted at Dauda Eweje Maternity Home, a traditional birth attendant centre at Adedotun in Abeokuta North Local Government Area. The second session was conducted at the Primary Health Centre, Sabo Agura in Sagamu Local Government Area. Discussions in both sessions were moderated by the researcher while two research assistants took notes and recorded the sessions with midget.

Key Informant Interview

The interview was conducted at the office of the State Nutrition Officer, State Primary Health Care Board in the Block D of the State Secretariat, Oke Mosan, Abeokuta. The interview lasted one hour and covered different areas necessary for the study.

3.9 Method of Data Analysis

Questionnaire

Data collected through the questionnaire were scrutinized for accuracy and collated based on local governments and the nature of health centre involved. The data were then assigned nominal values and analysed with the Statistical Package for Social Sciences (SPSS). Descriptive statistics were analysed using simple frequency counts, simple percentage and mean to establish the sources of information, knowledge and attitude of nursing members towards EBF. Inferential statistics were analysed using analysis of variance and correlation of co-efficiency to explain the practice of EBF among nursing mothers and how information sources affect nursing mothers practice of EBF.

Focus Group and Key Informant Interview

Constant comparative technique which involves identification of related theme was used to analyse qualitative data obtained through FGD and Key Informant Interview. The objective of the FGD and the Key Informant Interview was to determine the dynamics of the level to which nursing mothers process information on EBF in line

with their own self-concept and influences from significant others. Analysis of the FGD and KII data involved reviewing statements made on each general and specific issues and determining if there was consensus or disagreement. This was done by listening to recorded tapes and transcribing with notes on hesitations, silences and power talking within each session.

3.10 Ethical Considerations

The researcher addressed ethical concerns by seeking and obtaining the approval of the Ogun State Health Research Committee (SHREC) through the Department of Planning, Research and Statistics of the State Ministry of Health. The approval involved the submission of protocol/documents including the research proposal and instrument for review. The State HREC therefore approved the instrument and the data gathering. Evidence of request for approval is attached as Appendix 5 and the actual approval is Appendix 6. Chief Nursing Officers and Apex Nurses in all thirty health facilities used were also properly briefed on the nature of the study. CNOs and ANs helped in discussing informed consent with nursing mothers who responded to the questionnaire. Nursing mothers who responded to the instrument therefore did so out of volition while some other nursing mothers in health facilities visited declined inclusion.

3.11 Limitation of the Study

This study is essentially a survey involving only mothers who are currently nursing babies. As a result, the study excludes experienced nursing mothers who are not breastfeeding during the period of gathering data for the study. Knowledge of this category of nursing mothers would also have been useful in the study. However, such category of mothers may not be able to give the current information. The study is also receiver based due to the fact that receivers, as target audiences of the message, are the real testament to the effectiveness of behaviour change programmes and messages. The study therefore has not reviewed message content and how it affects attitude, knowledge and credibility. It has only focused on the influence that sources of information can have on the receivers' knowledge, attitude and practices.

Nursing mothers who are respondents in this study were assessed at government owned health facilities. Other health facilities such as private hospitals, traditional birth attendants and faith based maternity homes were excluded because of challenges with access. Mothers who gave birth in those health facilities were however captured as a good number of then came in to immunize their babies on designated days for post-natal treatment in government owned facilities. This is therefore a facility based study.

CHAPTER FOUR
DATA ANALYSIS AND DISCUSSION OF FINDINGS

This chapter contains the results of data analysis. The results of the preliminary analysis of data which provided a general description of the study data are presented first. This is then followed by a question by-question presentation of results. A summary of the major findings are then followed by discussion of the findings.

4.1 Socio-Demographic Data Analysis

In this section, socio-demographic variables of respondents are analysed.

Table 4.1: Nursing Mothers' Socio-demographic Data

Types of Health Facilities Used by Respondents	**Frequency**	**Percent**
Tertiary	44	7.7
Secondary	123	21.4
Primary	401	69.9
Traditional Birth Attendant/Faith-based	5	9
Others	1	2
Total	**574**	**100.0**
Places Respondents Delivered Current Babies		
Traditional Birth Attendants' Place	60	10.5
Private Hospital	158	27.5
Government Hospital	334	58.2
Home	22	3.8
Total	**574**	**100.0**
Respondents' Level of Education		
Below Primary School	16	2.8
Primary School Certificate	129	22.5
WASCE/GCE/NABTEB/NECO/Trade Certificate	253	44.1
B.A., / BSc., / HND and Above	176	30.7
Total	**574**	**100.0**
Distribution of Respondents by Income level		
Below ₦50,000 monthly	411	71.6
Between ₦50,000 - ₦99,000 monthly	100	17.4
Between ₦100,000 - ₦149,000 monthly	31	5.4
Between ₦150,000 - ₦199,000 monthly	10	1.7
₦200,000 and above monthly	22	3.8
Total	**574**	**100.0**

Source: Survey Data (2018)

Results in Table 4.1 showed that a total of 574 respondents were considered. 44 (7.7%) respondents claim that they patronized tertiary health institutions, while 123 (21.4%) visit secondary health institutions. However, 401 respondents constituting 69.9% of the total attend primary health institutions. 5 (0.9%) of the respondents utilize traditional birth attendant/faith-based health facilities. Only 1(0.1%) respondent patronise other type of health facilities.

Also, sixty (10.5%) of respondents claimed they were delivered of their babies at traditional birth attendants' place, whereas 158 (27.5%) give birth at private hospitals. However, 334 respondents constituting 58.2% of the total give birth at government hospitals. Only 22 (3.8%) of the respondents give birth at home. One hundred and fifty four (26.8%) respondents' youngest children are within the age bracket of 0 to two months, while 182 (31.7%) respondents have their youngest children between three and four months. Conversely, only 92 (16.0%) respondents have their youngest children between five and six months while 146 constituting 25.4% of the total have their youngest children above six months. Six (1.0%) of the respondents are below 15 years of age whereas 179 (31.2%) are aged between 15 and 24 years. However, a great number of 341 (59.4%) of the respondents are between 25 and 34 years of age. Forty one (7.1%) of the respondents are within the age bracket of 35-44 years though seven (1.2%) are above 45 years.

Sixteen (2.8%) have qualification below primary school, while 129(22.5%) claim topossess primary school leaving certificate. However, 253 respondents constituting 44.1% of the totalnumber claim to hold WASCE/GCE/NABTEB/NECO/Trade Certificates. One hundred and seventy-six (30.7%) claim to be holders of B.A., / BSc., / HND. In addition, one hundred and ten (19.2%) claim to be Government - Civil/Public Service employees, whilst 107(18.6%) indicated that they are Private Company Employees. Nevertheless, 314respondents indicated that they are self-employed while 38 respondents constituting 6.6% of the total claimed that they are unemployed. Four hundred and eleven (71.6%) claim to earn below ₦50, 000 monthly, even as 100(17.4%) said the yearnbetween ₦ 50,000 - ₦ 99,000 monthly. Conversely, 31 respondents constituting 5.4% of the total indicated that they earn Between ₦ 100,000 - ₦ 149,000 monthly whereas ten (1.7%) of the respondents said they earn

Between ₦ 150,000 - ₦ 199,000 monthly while 22 (3.8%) respondent claim they earn ₦ 200,000 and above monthly. In terms of devices respondents have access to, one hundred and twenty two respondents, representing (21.3%) claim to have access to Television (Terrestrial) while 233(40.6%) claim to have access to cable television. On the other hand, 154 respondents constituting 26.8% of the total claim that they have access to radio set when 43 (7.56%) reveal that they have access to Internet. Only six (1.0%) respondents claim to have access to newspaper whereas sixteen (2.8%) submit that they have access to other information devices.

4.2 Presentation and Analysis of Research Questions

4.2.1 Research Question One: What are the available sources of information on EBF to nursing mothers in Ogun State?

To answer this researcher question, data obtained from section three of the questionnaire are analysed and then compared in line with basic demographic variables exhibited by the nursing mothers. Responses from the first two questions of FGD sessions were also analysed to provide answers to the Research Question.

Table 4.2 shows the sources that respondents claimed were available to them. Respondents had the opportunity of picking as many options as they claimed were available to them

Table 4.2: Distribution of respondents based on available sources of information on EBF

	Very Often	Often	Sometimes	Not at all	No Response
Radio	289 (50.3%)	83 (14.5%)	88 (15.3%)	104 (18.1%)	10 (1.7%)
Television	114 (19.9%)	211 (36.8%)	123 (21.4%)	117 (20.4%)	9 (1.6%)
Newspaper/magazine	45 (7.8%)	99 (17.2%)	219 (38.2%)	198 (34.5%)	13 (2.3%)
Handbill/pamphlets	33 (5.7%)	72 (12.5%)	222 (38.7%)	232 (40.4%)	15 (2.6%)
Posters	42 (7.3%)	108 (18.8%)	254 (44.3%)	159 (27.7%)	11 (1.9%)
Video film	38 (6.6%)	59 (10.3%)	136 (23.7%)	323 (56.3%)	18 (3.1%)
Internet service	45 (7.8%)	54 (9.4%)	99 (17.2%)	321 (55.9%)	55 (9.6%)
Drama presentations	25 (4.4%)	34 (5.9%)	123 (21.4%)	346 (60.3%)	46 (8.0%)
Music	39 (6.8%)	42 (7.3%)	164 (28.6%)	317 (55.2%)	12 (2.1%)
Interaction with friends	97 (16.9%)	188 (32.8%)	235 (40.9%)	43 (7.5%)	11 (1.9%)
Doctors, nurses and other health workers	330 (57.5%)	168 (29.3%)	40 (7.0%)	30 (5.2%)	6 (1.0%)
Advocacy groups	39 (6.8%)	138 (24.0%)	253 (44.1%)	125 (21.8%)	19 (3.3%)
Parents and parents in law	177 (30.8%)	274 (47.7%)	98(17.1%)	18 (3.1%)	7 (1.2%)

Source: Survey Data (2018)

Results in Table 4.2 revealed that very often, doctors, nurses and other health workers are the most available source of information on EBF for 330 (57.5%) while 168 (29.3%) participants often have doctors, nurses and other health workers as available source of information. However, 40 (7.0%) of the participants sometimes have doctors, nurses and other health workers as available. One hundred and fifty nine 30 (5.2%) do not have information through doctors, nurses and other health workers while 6 (1.0%) provided no response.

On the other hand, Radio is an available source of information on EBF for 289 (50.3%) while 83 (14.5%) participants often have radio as available source of information. However, 88 (15.3%) of the participants sometimes have radio as available.Parents and parents in laws are an available source of information on EBF for 177 (30.8%) while 274 (47.7%) participants often have parents and parents makers as available source of information. However, 98 (17.1%) of the participants sometimes have parents and parents-in-law as available. Eighteen (3.1%) do not have information through parents and parents makers while seven (1.2%) provided no response.

In the same vein, Television is very often the available source of information to 114 (19.9%) of the participants while to 211 (36.8%) of the participants, television is often the available source of information. It is sometimes the source of information to 123 (21.4%) of the participants. Interaction with friends is an available source of information on EBF for 97 (16.9%) while 188 (32.8%) participants often have Interaction with friends as available source of information. However, 235 (40.9%) of the participants sometimes have Interaction with friends as available. Forty three (7.5%) do not have information through Interaction with friends while 11 (1.9%) provided no response.

In addition, forty five (7.8%) of the participants very often have newspaper/magazine as the source of information while 99 (17.2%) oftenhave newspaper/magazine as the available source of information. A good number, 219 (38.2%), of the respondents sometimes have the newspaper/magazine as the available source of information whereas 198 (34.5%) do not have newspaper/magazine as source of information on EBF. Internet services are an available source of information on EBF for 45 (7.8%) while 54 (9.4%) 108 (18.8%) participants often have Internet service as available

source of information. However, 99 (17.2%) of the participants sometimes have Internet service as available. Three hundred and twenty-one (55.9%) do not have information through Internet service 55 (9.6%) while 11 (1.9%) provided no response

Also, handbill/pamphlets very often recorded as the available source of information on EBF for 33 (5.7%) participants while it is often the source for 72 (12.5%) of the participants. It is sometimes the available source of information for 222 (38.7%) whereas for 232 (40.4%) it is not. Posters are an available source of information on EBF for 42 (7.3%) while 108 (18.8%) participants often have posters as available source of information. However, 254 (44.3%) of the participants sometimes have posters as available. One hundred and fifty nine (27.7%) do not have information through posters while 11 (1.9%) provided no response.

Advocacy groups are an available source of information on EBF for 39 (6.8%) while 138 (24.0%) participants often have advocacy groups as available source of information. However, 253 (44.1%) of the participants sometimes have advocacy groups as available. One hundred and twenty-five (21.8%) do not have information through advocacy groups while 19 (3.3%) provided no response.Music is an available source of information on EBF for 39 (6.8%) while 42 (7.3%) participants often have music as available source of information. However, 164 (28.6%) of the participants sometimes have music as available. Three hundred and seventeen (55.2%) do not have information through music while 12 (2.1%) provided no response

Video films are an available source of information on EBF for 38 (6.6%) while 59 (10.3%) participants often have video film as available source of information. However, 136 (23.7%) of the participants sometimes have video film as available. Three hundred and twenty-three (56.3%) do not have information through video film while18 (3.1%) provided no response.

Drama presentations are an available source of information on EBF for 25 (4.4%) while 34 (5.9%) participants often have drama presentations as available source of information. However, 123 (21.4%) of the participants sometimes have drama presentations as available. Three hundred and forty-six (60.3%) do not have information through drama presentations while46 (8.0%) provided no response.

Table 4.3: Nursing mothers' source of Information about EBF by health facilities of birth

	N	Mean	Std. Dev	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
Traditional Birth Attendants' Place	60	40.6333	8.56672	1.10596	38.4203	42.8464
Private Hospital	158	33.3671	8.47879	.67454	32.0348	34.6994
Government Hospital	334	34.6826	7.18740	.39328	33.9090	35.4563
Home	22	36.2273	10.20239	2.17516	31.7038	40.7508
Total	574	35.0017	8.07869	.33720	34.3394	35.6640

Source: Survey Data (2018)

Table 4.2 showed the descriptive statistics of sources of information of nursing mothers with respect to the health facilities of birth. The table revealed that nursing mothers who gave birth using traditional birth attendant place (M=40.63, SD=8.57), private hospital (M=33.37, SD=8.48), government hospital (M=34.68, SD=7.19), and nursing mothers who gave birth at home (M=36.23, SD=10.20) at 95% CIs [38.42, 42.85], [32.03, 34.70], [33.91, 35.46], and [31.70, 40.75]. The order of the means of sources of information of the nursing mothers with respect to the place of birth are as follows; traditional birth attendant place > home > government hospital > private hospital. This shows that nursing mothers who gave birth at traditional birth attendant place have the highest source of information while those who gave birth at the private hospital have the least source of information.

Table 4.4: Showing ANOVA of sources of information with respect to place of birth

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	2392.133	3	797.378	12.984	.000
Within Groups	35004.865	570	61.412		
Total	37396.998	573			

Source: Survey Data (2018)

The table shows that there exists a significant difference in the mean sources of information of nursing mothers with respect to the place they gave birth (traditional birth attendant place, private hospital, government hospital, and home); $F(3, 570) = 12.984$, $p < .05$. Nursing mothers who gave birth at TBAs have, to a significant level, more sources of health information that they have been exposed to compared to nursing mothers who gave birth in other health facilities.

Table 4.5: Nursing mothers' source of Information about EBF by age of youngest child

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
0 to two months	154	38.1688	8.93974	.72039	36.7456	39.5920
Three to four Months	182	33.3956	7.35205	.54497	32.3203	34.4709
Five to Six Months	92	33.8370	5.92309	.61752	32.6103	35.0636
Above Six Months	146	34.3973	8.30495	.68732	33.0388	35.7557
Total	574	35.0017	8.07869	.33720	34.3394	35.6640

Source: Survey Data (2018)

Table 4.5 showed the descriptive statistics of sources of information of nursing mothers with respect to the age of their youngest age. The table revealed that nursing mothers whose youngest child is 0 to two month (M=38.17, SD=8.94), three to four months (M=33.40, SD=7.35), five to six months (M=33.84, SD=5.92), and nursing mothers whose youngest child is above six months (M=34.40, SD=8.30) at 95% CIs [36.74, 39.59], [32.32, 34.47], [32.61, 35.06], and [33.04, 35.76]. The order of the means of sources of information of the nursing mothers with respect to the age of their youngest child are as follows; 0 to two months>above six months >five to six months>three to four months. This shows that nursing mothers whose youngest child is 0 to months old have the highest source of information while those whose child is three to four months old have the least source of information.

Table 4.6: ANOVA of sources of information with respect to nursing mothers age of youngest child

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	2192.358	3	730.786	11.832	.000
Within Groups	35204.640	570	61.763		
Total	37396.998	573			

Source: Survey Data (2018)

The table shows that there exists a significant difference in the mean sources of information of nursing mothers with respect to the age of their youngest child (0 to two months, Three to four Months, Five to Six Months and Above Six Months); F (3, 570) =11.832, p <.05. Nursing mothers with babes from age 0-two months have sources of information that are significantly higher than all other groups of mothers classified on the basis of age of youngest child.

Table 4.7: Duncan Post Hoc Test of Nursing Mothers Age of Youngest Child

Duncan[a,b,c] **Nursing Mothers Age of Youngest Child**	N	Subset 1	2
Three to four Months	182	33.3956	
Five to Six Months	92	33.8370	
Above Six Months	146	34.3973	
0 to two months	154		38.1688
Sig.		0.456	0.000

Source: Survey Data (2018)

In order to determine the direction of the difference of the significant difference between the means of nursing mothers' age of youngest child on sources of information, a Duncan Post-hoc test was conducted. The test revealed that two homogeneous groups existed among participant's means of sources of information of nursing mothers on exclusive breast feeding. The means for three to four months, five to six month and above six months form the first homogenous group which are significantly different from each other. The second homogenous group which comprise of 0 to two months was statistically significant. The ordering of the means was 0 to two months > above six months > five to six months > three to four months.

.Although some of the participants in the FGD sessions could recall a programme on television that has given them useful information about appropriate period of breastfeeding and correct position of the baby during breastfeeding. A participant said:

> We listen to it (EBF messages) at the hospital and on TV that we should breastfeed our baby for 6 months before giving them water and we should make sure that babies are breastfed for a year and half or 2 years. We heard it at the hospital and my parents told me that I should be breastfeeding my baby and I should wash it (the breast) very well before feeding our babies with it. I get information on it from the hospital. I get my information from the TV and the Healthcare center but I get most of it from TV. There is a programme Ilera lo ro every Sunday on African Magic Channel 157 on DSTV. There is also Ilera on Trybe Channel 195 between 5 and 6 pm.

The position that health workers (doctors, nurses and community health workers) are the most readily available sources of EBF information to nursing mothers is supported by the Desk Officer for WHO in the State Primary Health Care Board who affirmed that programme planners in Ogun State "rely largely on dialogue session with care givers, which are the nursing mothers, especially those who are in the process of breastfeeding their children. The target is to get nursing mothers who are nursing babies whose age range between 0 and 6 months at the Primary Health Centres and Secondary Health Facilities during Post-natal and infant welfare sessions" He further stated that the choice of dialogue sessions is predicated on the need to "use skilled staff that can help in passing the technical messages of EBF across and can also help in getting accurate data regarding actual practice"

His admission that;

> there is a cost implication that comes along with engaging the mass media in the information dissemination on very regular basis, so we are trying to streamline our engagement of the media to maybe, when, we have a particular event and of course at the state level, about three to four times in a year, we air jingles as regards exclusive breastfeeding and we do encourage mothers to practice EBF, that is as far as the media is concerned but as mentioned earlier sustaining it on regular basis is very capital intensive. That is why we limit it to once in every quarter.

Basically confirms UNICEF's (2017b) position that at the moment, Sub-Saharan Africa in general and Nigeria in particular is lagging behind in funding support for breastfeeding programmes and campaigns.

Findings

Findings reveal that doctors, nurses and health workers are the most available sources of information to nursing. Fifty seven percent of respondents very often have them as their sources of information. This is followed by radio with fifty percent of respondents and parents/parents in law with thirty percent. The least available source of information to nursing mothers is music with just over 4 percent of respondents acknowledging it as a source of EBF information they have access to very often. However, facilities where nursing mothers are delivered of their babies seem to have significant bearing on the sources of information available to them as those who were delivered of their babies with TBAs identified more options as sources of information. There are also significant differences in sources of information of nursing mothers based on their own age and the age of the youngest babies they are nursing.

Table 4.8: Sources of Information on EBF in Ogun State from Focus Group Discussion

S/N	Media Sources	Types of Information	Frequency of Information	Comments
1.	Conventional Media	(i)Exclusive Breastfeeding Benefits (Positive). (ii) On infant Formulae (Negative)	High	Major sources of relevant information on exclusive breastfeeding. However, the conventional media are also the major sources of advertisements on infant formulae that tend to put nursing mothers in dilemma.
2.	Traditional Media	(i)Exclusive Breastfeeding Benefits (Positive).	Average	We see community theatre and dance groups work with traditional leaders, community volunteers and community based organisations working to present drama, dance and stories highlighting exclusive breastfeeding.
3.	Mothers' Group & Community Based Organisations	(i)Exclusive Breastfeeding Benefits (Positive).	Low	The Mothers' Group helps to provide information in order to enlighten and stir up mothers, especially mothers in special circumstances on the need for exclusive breastfeeding and other health related issues.
4.	Traditional Birth Attendants	(i) EBF Benefits (Positive).	Low	These Traditional Birth Attendants help in providing information on major health and nutrition related issues to mothers.
5.	Community Volunteers	Nil	Nil	Nil
6.	Religious Leaders	Nil	Nil	Nil
7.	Traditional Leaders	Nil	Nil	Nil
8.	Community Opinion Leaders	Nil	Nil	Nil
9.	Health Workers	(i) EBF Benefits (Positive).	Very High	Health workers are well trained and this makes them to be crucial sources of information to mothers. They hold health talks during ante-natal and post-natal sessions with pregnant women and nursing mothers. Health workers also promote these appropriate infant feeding in one-on-one consultation sessions in health facilities. Their participation in group meetings with demonstration exercises help to strengthen nursing mothers' conviction about correct infant feeding practices and the role that spouses and family members can play in support of the nursing mother.

Source: Survey Data (2018)

4.2.2 Research Question Two

What is the level of knowledge of nursing mothers about EBF in Ogun State? Section two of the questionnaire has been analysed to answer this research question. Data from

the section is also analysed in line with places of residence, where nursing mothers had their babies delivered and the age of nursing mothers' last babies.

Table 4.9:Showing knowledge of nursing mothers about EBF

	SA (%)	A (%)	N (%)	D (%)	SD (%)	NR (%)	Mean	Std. D

EBF is giving only breast milk in the first months of a baby's life	397 (69.2%)	118 (20.6%)	46 (8.0%)	9 (1.6%)	1 (.2 %)	3 (.5%)	1.4460	.79244
With EBF, I am not supposed to give my baby any other food supplement.	330 (57.5%)	150 (26.1%)	43 (7.5%)	33 (5.7%)	7 (1.2%)	11 (1.9%)	1.7282	1.10654
Breast milk without water is insufficient for the baby in the first 6 month during Breastfeeding	95 (16.6%)	92 (16.0%)	93 (16.2%)	113 (19.7%)	179 (31.2%)	2 (.3 %)	3.3397	1.47862
When I exclusively breastfeeding my baby, his chance of survival is far better	311 (54.2%)	136 (23.7%)	98 (17.1%)	19 (3.3%)	10 (1.7%)	0 (0.0%)	1.7474	.96931
Exclusive Breastfeeding will help to protect my baby against infections such as diarrhea, dysentery and respiratory infections	310 (54.0%)	165 (28.7%)	79 (13.8%)	14 (2.4%)	6 (1.0%)	0 (0.0%)	1.6777	.87567
The only things I need to give my baby in the first six months are breast milk and prescribed drugs.	309 (53.8%)	144 (25.1%)	62 (10.8%)	42 (7.3%)	15 (2.6%)	2 (.3%)	1.8084	1.09331
Exclusive breastfeeding can help reduce my susceptibility to breast cancer	254 (44.3%)	165 (28.7%)	119 (20.7%)	14 (2.4%)	19 (3.3%)	3 (.5%)	1.9338	1.06137
Not giving my baby water and other liquid supplement will make my baby thirsty	55 (9.6%)	79 (13.8%)	81 (14.1%)	119 (20.7%)	227 (39.5%)	13 (2.3%)	3.7369	1.40510
The breast milk that I express for my baby can last at least 8 hours with refrigeration	127 (22.1%)	61 (10.6%)	236 (41.1%)	71 (12.4%)	49 (8.5%)	30 (5.2%)	2.9024	1.38588

Source: Survey Data (2018)

A significant number of the respondents 397 (69.2%) strongly agreed while 118 (20.6%) agreed that EBF is giving only breast milk in the first months of a baby's life.

However, 46 (8.0%) of the respondents were neutral to the statement. Nine (1.6%) disagreed while 1 (.2 %) strongly disagreed. Only three (.5%) of the respondents provided no response. A good number of the respondents 330 (57.5%) strongly agreed while another 150 (26.1%) agreed that with EBF, I am not supposed to give my baby any other food supplement. Conversely, 43 (7.5%) of the respondents were neutral to the statement. Thirty three (5.7%) disagreed while 7 (1.2%) strongly disagreed. Only 11 (1.9%) of the respondents provided no response. Ninety five (16.6%) of the respondents strongly agreed while 92 (16.0%)agreed that breast milk without water is insufficient for the baby in the first 6 month during breastfeeding. However, 93 (16.2%) of the respondents were neutral to the statement. A good number 113 (19.7%) disagreed while 179 (31.2%) strongly disagreed. Only two (.3 %) of the respondents provided no response

Most of the respondents 311 (54.2%) strongly agreed while 136 (23.7%) agreed that when "I exclusively breastfeeding my baby, his chance of survival is far better."However, 98 (17.1%) of the respondents were neutral to the statement. Nineteen (3.3%) disagreed whereas ten (1.7%) strongly disagreed. When nursing mothers were asked if Exclusive Breastfeeding will help to protect their baby against infections such as diarrhea, dysentery and respiratory infections, many of the respondents 310 (54.0%) strongly agreed while 165 (28.7%) agreed. However, 79 (13.8%) of the respondents were neutral to the statement. Fourteen (2.4%) disagreed whereas 6 (1.0%) strongly disagreed.

A highly significant number of the respondents 309 (53.8%) strongly agreed while another 144 (25.1%) agreed that the only things I need to give my baby in the first six months are breast milk and prescribed drugs. However, 62 (10.8%) of the respondents were neutral to the statement. Forty two (7.3%) disagreed while 15 (2.6%) strongly disagreed. Only two (.3%) of the respondents provided no response. A good number of the respondents 254 (44.3%) strongly agreed while 165 (28.7%) agreed that exclusive breastfeeding can help reduce my susceptibility to breast cancer. Nevertheless, 119 (20.7%) of the respondents were neutral to the statement. Fourteen (2.4%) disagreed

while 19 (3.3%) strongly disagreed. Only three (.5%) of the respondents provided no response.

Fifty five (9.6%) of the respondents strongly agreed while 79 (13.8%) agreed that not giving my baby water and other liquid supplement will make my baby thirsty. However, 81 (14.1%) of the respondents were neutral to the statement. A significant number 119 (20.7%) of the respondents disagreed while a very good number, 227 (39.5%) strongly disagreed. Only 13 (2.3%) respondents provided no response. One hundred and twenty seven (22.1%) respondents strongly agreed even as 61 (10.6%) agreed that the breast milk that I express for my baby can last at least 8 hours with refrigeration. Nonetheless, as many as 236 (41.1%) of the respondents were neutral to the statement. 71 (12.4%) disagreed while 49 (8.5%) strongly disagreed. Thirty (5.2%) respondents provided no response.

Table 4.10: Showing knowledge of exclusive breastfeeding by type of health facilities attended

					95% Confidence Interval for Mean	
	N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound
Tertiary	44	17.8636	2.04133	.30774	17.2430	18.4843
Secondary	123	20.3902	4.70896	.42459	19.5497	21.2308
Primary	401	20.5586	5.29690	.26451	20.0386	21.0786
Traditional Birth Attendant/Faith-based	5	21.2000	4.96991	2.22261	15.0290	27.3710
Others	1	20.0000	.	.	.	.
Total	574	20.3206	5.03028	.20996	19.9082	20.7329

Source: Survey Data (2018)

Table 4.10 showed the descriptive statistics of knowledge of exclusive breastfeeding of nursing mothers with respect to the health facilities attended. The table revealed that nursing mothers attended tertiary health facilities (M=17.86, SD=2.04), secondary health facilities (M=20.39, SD=4.71), primary health facilities (M=20.56, SD=5.30), traditional birth attendant/faith based (M=21.20, SD=4.97), and nursing mothers who attended other forms of health facilities (M=20.00, SD=0) at 95% CIs [17.24, 18.48], [19.55, 21.23], [20.04, 21.08],[15.03, 27.37] and [0, 0]. The order of the means of knowledge of nursing mothers on exclusive breastfeeding based on the health facilities attended are as follows; traditional birth attended/faith-based > primary health facilities > secondary health facilities > other health facilities > tertiary health facilities. This shows that nursing mothers who attended traditional birth attendant/faith-based health facilities have the highest knowledge on exclusive breast feeding while nursing mothers who attended tertiary health facilities have the least knowledge on exclusive breastfeeding.

Table 4.11: Duncan Post Hoc Test of Nursing Mothers Type of Health Facilities Attended

Type of Health Facilities Attended	N	Subset	
		1	2
Tertiary	44	17.86	
Others	1		20.00
Secondary	123		20.39
Primary	401		20.56
Traditional Birth Attendant/Faith-based	5		21.20
Sig.		2.567	0.238

Source: Survey Data (2018)

Duncan post hoc test on nursing mothers' type of health facilities attended revealed two homogeneous groups existed among participant's means of knowledge of nursing mothers on exclusive breast feeding. The means for tertiary health facilities formed the first homogenous group. The second homogenous group which comprise of Others, Secondary, Primary, and Traditional Birth Attendant/Faith-based which were statistically non-significant. The ordering of the means was Traditional Birth Attendant/Faith-based>Primary >Secondary > Others > Tertiary.

Table 4.12: ANOVA knowledge of exclusive breastfeeding by age of youngest child

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	875.704	3	291.901	12.213	.000
Within Groups	13623.313	570	23.901		
Total	14499.017	573			

Source: Survey Data (2018)

The table shows that there exists a significant difference in the means of nursing mothers' knowledge of EBF with respect to the age of their youngest child (0 to two months, Three to four Months, Five to Six Months, and Above Six Months); F (3, 570) =12.213, p <.05.

Table 4.13: Duncan Post Hoc Test of Nursing Mothers by Age of youngest child

Duncan[a,b,c] **Age of youngest child**	N	Subset 1	Subset 2
Three to four Months	182	18.54	
			20.70
Five to six Months	92		
			21.16
Above six Months	146		
0 to two Months	154		21.41
Sig.		.098	1.009

Source: Survey Data (2018)

The outcome of the analysis revealed that there is a significant difference in the means of nursing mothers' knowledge on exclusive breast feeding based on the age of their youngest child. In order to determine the direction of the difference, a Duncan post hoc test was performed. The result revealed that two homogeneous groups existed among participant's means of knowledge of nursing mothers on exclusive breast feeding. The means for Three to four Months formed the first homogenous group which is statistically non-significant while Five to six Months, above six Months and 0 to two Months formed the second homogenous group which comprise which were also statistically non-significant. The order of the means nursing mothers' knowledge of exclusive breast feeding with respect to the age of their youngest child are as follows; 0 to two months > above six months > five to six months > three to four months.

Table 4.14: Descriptive statistics of knowledge of exclusive breastfeeding by age of respondents

					95% Confidence Interval for Mean	
	N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound
Below 15 years	6	15.8333	6.85322	2.79782	8.6413	23.0253
15 - 24 years	179	21.3464	5.41353	.40463	20.5479	22.1449
25 - 34 years	341	19.8710	4.67859	.25336	19.3726	20.3693
35 - 44 years	41	19.9268	5.21244	.81405	18.2816	21.5721
45 years and Above	7	22.1429	4.29839	1.62464	18.1675	26.1182
Total	574	20.3206	5.03028	.20996	19.9082	20.7329

Source: Survey Data (2018)

The table showed the descriptive statistics of knowledge of exclusive breastfeeding of nursing mothers with respect to the age of respondents. The table revealed that nursing mothers are below the age of 15 years (M=15.83, SD=6.85), 15 – 24 years (M=21.35, SD=5.41), 35 – 44 years (M=19.93, SD=5.21), and nursing mothers are aged 45 and above years (M=22.14, SD=4.30) at 95% CIs [8.64, 23.02], [20.55, 22.14], [19.37, 20.37], [18.28, 21.57] and [18.17, 26.19]. The order of the means nursing mothers' knowledge of exclusive breast feeding with respect to the age of respondents are as follows; 45 years and Above>15 - 24 years >35 - 44 years >25 - 34 years>Below 15 years. This shows that nursing mothers who are 45 years and above have the highest knowledge of EBF while those below 15 years old have the least knowledge of EBF.

Table 4.15: ANOVA knowledge of exclusive breastfeeding by Nursing Mothers Age

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	407.699	4	101.925	4.116	.003
Within Groups	14091.319	569	24.765		
Total	14499.017	573			

Source: Survey Data (2018)

The table shows that there exists a significant difference in the means of nursing mothers' knowledge of EBF with respect to the age of respondents (Below 15 years, 15 - 24 years, 25 - 34 years, 35 - 44 years, and 45 years and Above); $F(4, 567) = 4.116$, $p < .05$.

Table 4.16: Descriptive statistics of knowledge of exclusive breastfeeding by income level

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
Below N50,000 monthly	411	20.5888	5.06049	.24962	20.0981	21.0795
Between N50,000 - N99,000 monthly	100	18.8500	4.01355	.40136	18.0536	19.6464
Between N100,000 - N149,000 monthly	31	21.9355	5.81341	1.04412	19.8031	24.0679
Between N150,000 - N199,000 monthly	10	19.5000	6.50214	2.05616	14.8487	24.1513
N200,000 and above monthly	22	20.0909	5.67290	1.20947	17.5757	22.6061
Total	574	20.3206	5.03028	.20996	19.9082	20.7329

Source: Survey Data (2018)

The table above showed the descriptive statistics of knowledge of exclusive breastfeeding of nursing mothers with respect to their income level. The table revealed that nursing mothers who earn below N50, 000 (M=20.59, SD=5.06), Between N50,000 – N99,000 (M=18.85, SD=4.01), Between N100,000 – N149,000 (M=21.94, SD=5.81), Between N150,000 – N199,000 (M=19.50, SD=6.50) andN200,000 and above monthly (M=20.09, SD=5.67) at 95% CIs [20.09, 21.08], [18.05, 19.65], [19.80, 24.07], [14.85, 24.15], [17.58. 22.61] and feeding with respect to their income level are as follows; Between N100,000 - N149,000 monthly>Below N50,000 monthly>N200,000 and above monthly >Between N150,000 – N199,000 monthly>Between N50,000 - N99,000 monthly. This shows that nursing mothers who earn between N100,000 - N149,000 monthly have the highest knowledge of EBF while those Between N50,000 - N99,000 monthly have the least knowledge of EBF.

Table 4.17: ANOVA knowledge of exclusive breastfeeding by income level

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	334.570	4	83.642	3.360	.010
Within Groups	14164.448	569	24.894		
Total	14499.017	573			

Source: Survey Data (2018)

The table shows that there exists a significant difference in the means of nursing mothers' knowledge of EBF with respect to their income levels (Between N100,000 - N149,000 monthly, Below N50,000 monthly, N200,000 and above monthly, Between N150,000 - N199,000 monthly, and Between N50,000 - N99,000 monthly); F (4, 567) =3.360, p <.05.

Table 4.18: Descriptive statistics of knowledge of exclusive breastfeeding by accessible items

					95% Confidence Interval for Mean	
	N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound
Television (terrestrial)	122	21.6230	5.18473	.46940	20.6936	22.5523
Cable Television	233	19.1288	5.25642	.34436	18.4503	19.8072
radio set	154	21.7013	4.35384	.35084	21.0082	22.3944
Internet service	43	19.2326	4.32511	.65957	17.9015	20.5636
Newspaper	6	18.5000	3.78153	1.54380	14.5315	22.4685
Others	16	18.0625	2.51578	.62895	16.7219	19.4031
Total	574	20.3206	5.03028	.20996	19.9082	20.7329

Source: Survey Data (2018)

The table above showed the descriptive statistics of knowledge of exclusive breastfeeding of nursing mothers with respect to accessible items. The table revealed that nursing mothers who have access to Television (terrestrial) (M=21.62, SD=5.18), Cable Television (M=19.13, SD=5.26), Radio Set (M=21.70, SD=4.35), Internet Service (M=19.23, SD=4.32), Newspaper (M=18.50, SD=3.78) and Others (M=18.06, SD=2.12) at 95% CIs [20.69, 22.55], [18.45, 19.81], [21.01, 22.39], [17.90, 20.56], [14.53, 22.47], and [16.72, 19.40]. The order of the means nursing mothers' knowledge of exclusive breast feeding with respect to accessible items are as follows; Television (terrestrial)> Radio Set>Internet service>Cable Television>Newspaper>Others. This shows that nursing mothers who have access to Television (terrestrial) have the highest means of access to EBF while whouses other items have the least access to EBF.

Table 4.19: ANOVA knowledge of exclusive breastfeeding by accessible items

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	983.853	5	196.771	8.270	.000
Within Groups	13515.165	568	23.794		
Total	14499.017	573			

Source: Survey Data (2018)

The table shows that there exists a significant difference in the means of nursing mothers' knowledge of EBF with respect to their income levels Television (terrestrial), radio set, Internet service, Cable Television, Newspaper, and Others); F (5, 568) =8.270, p <.05.

Table 4. 20: Duncan Post Hoc Test of Nursing Mothers Accessible Item

Nursing Mothers Accessible Item	N	Subset	
		1	2
Others	16	18.06	
Newspaper	6	18.50	
Cable Television	233	19.13	19.13
Internet Service	43		19.23
Television	122		20.32
Radio	154		21.70
Sig.		2.135	1.076

Source: Survey Data (2018)

In order to determine the direction of the significant difference of nursing mothers' accessible item, A Duncan Post Hoc Test was conducted. The Duncan post hoc test on accessible items of nursing mothers on EBF revealed two homogeneous groups existed among participants' means of accessible items tonursing mothers on exclusive breastfeeding. The means for Others, Newspaper, and Cable Television Between formed the first homogenous group which are statistical non-significantly different. The second homogenous group which comprise of Cable Television, Internet Service, Television, and Radio set which were statistically non-significant. The ordering of the means was Television (terrestrial) > Radio Set > Internet service > Cable Television > Newspaper > Others.

Findings

The distribution of scores indicated that knowledge of nursing mothers about EBF is generally above average. This implies that greater number of nursing mothers have some level of knowledge about EBF. Significant differences however existed in the knowledge of exclusive breastfeeding among nursing mothers by age of nursing mothers and the age of the babies they are nursing. Findings further show that nursing mothers who have access to Television (terrestrial) have the highest means of access to EBF implying that they show better knowledge of EBF compared to those who claimed to have access to other sources.

4.2.3 Research Question Three

What is the attitude of nursing mothers to EBF in Ogun State?

To answer this research question, data were taken from section of the questionnaire and responses to FGD guide items and interview guide items were analysed.

Table 4.21: Showing item analysis of responses on attitude of nursing mothers to EBF

	SA (%)	A (%)	N (%)	D (%)	SD (%)	NR (%)	Mean	Std. D
I believe EBF will never satisfy my baby	96 (16.7%)	87 (15.2%)	61 (10.6%)	223 (38.9%)	106 (18.5%)	573 (99.8%)	3.27	1.37
Babies that are on EBF alone cannot be as strong as that eat supplementary	39 (6.8%)	100 (17.4%)	71 (12.4%)	242 (42.2%)	121 (21.1%)	573 (99.8%)	3.53	1.20
EBF will affect the closeness and fondness my husband and I have for each other	24 (4.2%)	45 (7.8%)	79 (13.8%)	273 (47.6%)	130 (22.6%)	22 (3.8%)	3.88	1.09
EBF will affect my health because it will not allow me to sleep well at night	43 (7.5%)	78 (13.6%)	97 (16.9%)	189 (32.9%)	164 (28.6%)	1 (2%)	3.62	1.24
Practicing EBF will affect my official duties	37 (6.4%)	108 (18.8%)	132 (23.0%)	153 (26.7%)	142 (24.7%)	1 (.2%)	3.45	1.23
Every mother should be free to choose whether practices EBF or introduced food supplement for her baby	34 (5.9%)	80 (13.9%)	127 (22.1%)	206 (35.9%)	122 (21.3%)	4 (.7%)	3.55	1.16
Practicing EBF would make me feel like I cannot afford baby food.	21 (3.7%)	9 (1.6%)	108 (18.8%)	245 (42.7%)	187 (32.6%)	3 (.5%)	4.01	.96
Practicing EBF would make me look less attractive to my husband	22 (3.8%)	41 (7.1%)	82 (14.3%)	241 (42.0%)	183 (31.9%)	4 (.7%)	3.93	1.06
Practicing EBF for six months would make me loose the firmness of my breast.	28 (4.9%)	51 (8.9%)	108 (18.8%)	229 (39.9%)	134 (23.3%)	23 (4.0%)	3.80	1.16
Feeding my baby only breast milk for six months would make me lose weight a lot.	40 (7.0%)	54 (9.4%)	92 (16.0%)	234 (40.8%)	144 (25.1%)	9 (1.6%)	3.72	1.18
EBF is not very important once you can afford to buy good baby food.	35 (6.1%)	43 (7.5%)	75 (13.1%)	225 (39.2%)	188 (32.8%)	7 (1.2%)		

Source: Survey Data (2018)

From the table above, 96 (16.7%) respondentsstrongly agreed while 87 (15.2%) agreed that EBF will never satisfy their baby. However, 61 (10.6%) of the respondents were neutral to the statement. Nine 223 (38.9%) disagreed while 106 (18.5%) strongly disagreed. Only three 573 (99.8%) of the respondents provided no response. A significant number of the respondents 39 (6.8%) strongly agreed while 100 (17.4%) agreed that babies that are on EBF alone cannot be as strong as that eat supplementary. However, 71 (12.4%) of the respondents were neutral to the statement. Nine 242 (42.2%) disagreed while 121 (21.1%) strongly disagreed. Only three 573 (99.8%)of the respondents provided no response. The table also shows that 24 (4.2%) respondents strongly agreed while 45 (7.8%) agreed that EBF will affect the closeness and fondness my husband and I have for each other. However, 79 (13.8%) of the respondents were neutral to the statement. 273 (47.6%) disagreed while 130 (22.6%) strongly disagreed. Only three 22 (3.8%) of the respondents provided no response. A significant number of the respondents 43 (7.5%) strongly agreed while 78 (13.6%) agreed that EBF will affect my health because it will not allow me to sleep well at night. However, 97 (16.9%) of the respondents were neutral to the statement. Nine 189 (32.9%) disagreed while 164 (28.6%) strongly disagreed. Only 1 (2%) of the respondents provided no response.

When asked if practicing EBF will affect their official duties37 (6.4%) respondentsstrongly agreed while 108 (18.8%) agreed. However, 132 (23.0%) of the respondents were neutral to the statement. Nine 153 (26.7%) disagreed while 142 (24.7%) strongly disagreed. Only1 (.2%) of the respondents provided no response. 34 (5.9%) of the respondents strongly agreed that every mother should be free to choose either to practice EBF or to introduce food supplement for her baby while 80 (13.9%) agreed. However, 127 (22.1%) of the respondents were neutral to the statement. Nine 206 (35.9%) disagreed while 122 (21.3%) strongly disagreed. Only four (.7%) of the respondents provided no response.

A significant number of the respondents 21 (3.7%) strongly agreed while 9 (1.6%) agreed that practicing EBF would make them feel like they cannot afford baby food. However, 108 (18.8%) of the respondents were neutral to the statement. 245 (42.7%)

disagreed while 187 (32.6%) strongly disagreed. Only three (.5%) of the respondents provided no response.

Look and attractiveness seem to have very little role in the decision to breastfeed baby as only 22 (3.8%) respondents strongly agreed while 41 (7.1%) agreed that practicing EBF would make them look less attractive to their husband. However, 82 (14.3%)of the respondents were neutral to the statement. 241 (42.0%)respondents disagreed while 183 (31.9%)strongly disagreed. Only 4 (.7%) of the respondents provided no response.

A significant number of the respondents,28 (4.9%),strongly agreed while 51 (8.9%)agreed that practicing EBF for six months would make me loose the firmness of my breast. However, 108 (18.8%) of the respondents were neutral to the statement. Nine 229 (39.9%) disagreed while 134 (23.3%) strongly disagreed. Only 23 (4.0%) of the respondents provided no response. 40 (7.0%) of respondents strongly agreed while 54 (9.4%) agreed that feeding their baby only breast milk for six months would make them lose weight a lot. However, 92 (16.0%) of the respondents were neutral to the statement. Nine 234 (40.8%) disagreed while 144 (25.1%) strongly disagreed. Only three 9 (1.6%) of the respondents provided no response. An appreciable number of the respondents, 35 (6.1%), strongly agreed while 43 (7.5%) agreed that EBF is not very important once you can afford to buy good baby food. However, 75 (13.1%) of the respondents were neutral to the statement. Nine 225 (39.2%) disagreed while 188 (32.8%) strongly disagreed. Only 7 (1.2%) of the respondents provided no response.

Table 4.22: Descriptive statistics of attitude of exclusive breastfeeding by health facilities attended

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
Tertiary	44	42.4545	5.58426	.84186	40.7568	44.1523
Secondary	122	40.6639	8.09102	.73253	39.2137	42.1142
Primary	400	40.5400	9.57379	.47869	39.5989	41.4811
Traditional Birth Attendant/Faith-based	5	33.0000	14.57738	6.51920	14.8998	51.1002
Others	1	39.0000	.	.	.	.
Total	572	40.6451	9.08483	.37986	39.8990	41.3912

Source: Survey Data (2018)

The table showed the descriptive statistics of attitude of nursing mothers to exclusive breastfeeding with respect to the health facilities attended. The mean and standard deviation of the attitudes of nursing mothers to exclusive breast feeding are as follows; mothers who attended tertiary health facilities (M=42.45, SD=5.58), secondary health facilities (M=40.66, SD=8.09), primary health facilities (M=40.54, SD=9.57), other facilities (M-39.00, SD=?) , and traditional birth attendant/faith based (M=33.0, SD=14.58), at 95% CIs [40.76, 44.15], [39.21, 42.11], [39.60, 41.48], [0, 0] and [14.90, 51.10]. The order of the means of attitude of nursing mothers on exclusive breast feeding based on the health facilities attended are as follows; tertiary health facilities > secondary health facilities > primary health facilities > other health facilities > traditional birth attended/faith-based. This shows that nursing mothers who attended tertiary health facilities have the highest positive attitude to exclusive breast feeding while nursing mothers who attended traditional birth attended/faith-based facilities have the least positive attitude to exclusive breastfeeding.

Table 4.23: Duncan Post Hoc Test of Nursing Mothers Type of Health Facilities Attended

Duncan[a,b,c] **Type of Health Facilities Attended**	N	Subset 1	2	3
Traditional Birth Attendant/Faith-based	44	33.0		
Others	1		39.0	
Primary	400		40.54	
Secondary	122		40.66	
Tertiary	44			42.45
Sig.		6.143	4.091	0.297

Source: Survey Data (2018)

In order to determine the direction of the significant difference of nursing mothers' attitude towards exclusive breastfeeding based on the health facilities attended. A Duncan Post Hoc Test was conducted. The Duncan post hoc test on attitude of nursing mothers to EBF revealed three homogeneous groups existed among participant's means of attitude to exclusive breast feeding by nursing mothers. The means for Traditional Birth Attendant/Faith-based formed the first homogenous group which is non-significantly different. The second homogenous group, formed by Others, Primary and Secondary health facilities are also statistically non-significant. The third homogenous group which was formed by Tertiary health facilities is also statistically non-significant. The ordering of the means is tertiary health facilities > secondary health facilities > primary health facilities > other health facilities > traditional birth attended/faith-based. This shows that nursing mothers who attend tertiary health facilities have the best attitude towards EBF.

Table 4.24: Descriptive statistics of Attitude towards Exclusive Breastfeeding by where gave birth

					95% Confidence Interval for Mean	
	N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound
Traditional Birth Attendants' Place	60	38.3833	9.28109	1.19818	35.9858	40.7809
Private Hospital	157	42.2866	10.09509	.80568	40.6952	43.8781
Government Hospital	333	40.4144	8.38077	.45926	39.5110	41.3178
Home	22	38.5909	9.72801	2.07402	34.2778	42.9041
Total	572	40.6451	9.08483	.37986	39.8990	41.3912

Source: Survey Data (2018)

The table showed the descriptive statistics of attitude of nursing mothers with respect to the health facilities of birth. The table revealed mean and standard deviation of attitudes of nursing mothers to exclusive breast feeding at varying places they gave birth, nursing mothers who gave birth using traditional birth attendant place (M=38.38, SD=9.28), private hospital (M=42.29, SD=10.10), government hospital (M=40.41, SD=8.38), and nursing mothers who gave birth at home (M=38.59, SD=9.72) at 95% CIs [35.98, 40.78], [40.70, 43.88], [39.51, 41.32], and [34.28, 42.90]. The order of the means of attitudes of the nursing mothers with respect to the place of birth are as follows; private hospital > government hospital >home > traditional birth attendant place. This shows that nursing mothers who gave birth at private hospitals have the highest positive attitude towards exclusive breast feeding while those who gave birth at Traditional Birth Attendants' Place have the least positive attitude to exclusive breastfeeding.

Table 4.25:ANOVA of attitude of nursing mothers by place of birth

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	840.542	3	280.181	3.438	.017
Within Groups	46286.414	568	81.490		
Total	47126.956	571			

Source: Survey Data (2018)

The table shows that there exists a significant difference in the mean attitude of nursing mothers to exclusive breast feeding with respect to the place they gave birth (traditional birth attendant place, private hospital, government hospital, and home); $F(3, 568) = 3.438$, $p < .05$

Table 4.26: Duncan Post Hoc Test of Health Facilities of Birth

Health Facilities of Birth	N	Subset	
		1	2
Traditional Birth Attendants' Place	60	38.38	
Home	22	38.59	
Government Hospital	333	40.41	40.41
Private Hospital	157		42.29
Sig.		0.519	0.821

Source: Survey Data (2018)

The outcome of the analysis had revealed that there is a significant difference in the means of attitude of nursing mothers to exclusive breastfeeding with respect to the place they gave birth. In order to determine the direction of significant difference, a Duncan Post Hoc test was conducted. The means of the places where nursing mothers gavebirth revealed two homogeneous groups existed among participant's means of attitude of nursing mothers on exclusive breast feeding. The means for the Traditional Birth Attendants' Place, Home and Government Hospital formed the first homogeneous group which were not significant different from each other. The second homogenous group which comprises of Government Hospital and Private Hospital were also statistically different from each other. The ordering of the means was private hospital > government hospital > home > traditional birth attendant place.

Table 4.27: Descriptive statistics of Attitude towards Exclusive Breastfeeding by age of youngest child

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
0 to two months	152	39.5724	10.81182	.87695	37.8397	41.3051
Three to four Months	182	41.5275	8.36309	.61991	40.3043	42.7507
Five to Six Months	92	39.2500	7.60801	.79319	37.6744	40.8256
Above Six Months	146	41.5411	8.68461	.71874	40.1205	42.9617
Total	572	40.6451	9.08483	.37986	39.8990	41.3912

Source: Survey Data (2018)

The table showed the descriptive statistics of attitude of nursing mothers to exclusive breastfeeding of nursing mothers with respect to the age of their youngest child. The table revealed the mean and standard deviation of attitudes of nursing mothers whose child is 0 to two month old (M=39.57, SD=10.81), three to four months (M=41.53, SD=8.36), five to six months (M=39.25, SD=7.61), and nursing mothers whose youngest child is above six months (M=41.54, SD=8.68) at 95% CIs [37.84, 41.31], [40.30, 42.75], [37.67, 40.83], and [40.12, 42.96]. The order of the means nursing mothers' attitude to exclusive breast feeding with respect to the age of their youngest child are as follows; above six months > three to four months > 0 to two months> five to six months. This shows that nursing mothers whose youngest child is above six months old have the highest positive attitude to EBF while those whose child is five to six monthsold have the least positive attitude to EBF

Table 4.28: ANOVA of attitude of nursing mothers to EBF by the age of their youngest child

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	612.886	3	204.295	2.495	.059
Within Groups	46514.070	568	81.891		
Total	47126.956	571			

Source: Survey Data (2018)

The table shows that there exists a significant difference in the mean attitude of nursing mothers to exclusive breast feeding with respect to age of their youngest child (0 to two months, Three to four Months, Five to Six Months, and Above Six Months); $F(3, 568) = 2.495$, $p < .05$

Table 4.29: Descriptive statistics of Attitude towards Exclusive Breastfeeding by age of respondents

					95% Confidence Interval for Mean	
	N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound
Below 15 years	6	25.8333	16.46107	6.72020	8.5585	43.1082
15 - 24 years	178	38.1685	9.24462	.69291	36.8011	39.5360
25 - 34 years	340	42.0559	8.14035	.44147	41.1875	42.9243
35 - 44 years	41	41.8293	11.10383	1.73413	38.3245	45.3341
45 years and Above	7	40.8571	4.22013	1.59506	36.9542	44.7601
Total	572	40.6451	9.08483	.37986	39.8990	41.3912

Source: Survey Data (2018)

The table showed the descriptive statistics of attitude of nursing mothers to exclusive breastfeeding of nursing mothers with their ages. The table revealed the mean and standard deviation of nursing mothers based on their ages as follows; below the age of 15 years (M=25.83, SD=16.46), 15 – 24 years (M=38.17, SD=9.24), 35 – 44 years (M=42.06, SD=8.14), and nursing mothers who are aged 45 and above years (M=40.86, SD=4.22) at 95% CIs [8.56, 43.11], [36.80, 39.54], [41.19, 42.92], [38.32, 45.33] and [36.95, 44.76]. The order of the means nursing mothers' attitude to exclusive breast feeding with respect to their age is as follows; 25 - 34 years>35 - 44 years >45 years and Above>15 - 24 years>Below 15 years. This shows that nursing mothers who are 25 - 34 years have the highest positive attitude to EBF while those below 15 years old have the least positive attitude to EBF.

Table 4.30: ANOVA of Attitude towards Exclusive Breastfeeding by age of respondents

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	3142.579	4	785.645	10.128	.000
Within Groups	43984.377	567	77.574		
Total	47126.956	571			

Source: Survey Data (2018)

The table shows that there exists a significant difference in the means of nursing mothers' attitude to EBF with respect to the age of respondents (Below 15 years, 15 - 24 years, 25 - 34 years, 35 - 44 years, and 45 years and Above); $F(4, 567) = 10.128$, $p < .05$.

Table 4.31: Duncan Post Hoc Test of Nursing Mothers Type by Age of Respondents

Duncan[a,b,c] **Age of Respondents**	N	Subset		
		1	2	3
Below 15 years	6	25.83		
			38.17	
15 – 24 years	178			
			40.86	40.86
45 years and above	7			
35 - 44 years	41			21.83
25 - 34 years	340			42.06
Sig.		1.007	2.315	2.452

Source: Survey Data (2018)

The outcome of the analysis had revealed that there is a significant difference in the means of attitude of nursing mothers to exclusive breast feeding with respect to their ages. In order to determine the direction of significant difference, a Duncan Post Hoc test was conducted. The post hoc test revealed three homogeneous groups existed among participant's means of attitude of nursing mothers to exclusive breast feeding. The means for Below 15 years formed the first homogeneous group which was not significant. The second homogenous group which comprise of 15 – 24 years and 45 years and above which were also not statistical significantly different from each other. The third homogenous group comprise of 45 years and above, 35 - 44 years, and 25 - 34 years which were not statistically different from each other. Each homogenous group differs statistically from the next. The ordering of the means was private hospital > government hospital > home > traditional birth attendant place.

Table 4.32: Descriptive statistics of Attitude towards Exclusive Breastfeeding by employment type

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
Government - Civil/Public Service	109	40.8991	9.30745	.89149	39.1320	42.6662
Private Company Employee	107	42.9065	7.97346	.77082	41.3783	44.4348
Self-employed	313	40.5527	9.09836	.51427	39.5408	41.5646
Unemployed	38	36.2105	7.82980	1.27016	33.6369	38.7841
Others	5	26.2000	12.13260	5.42586	11.1354	41.2646
Total	572	40.6451	9.08483	.37986	39.8990	41.3912

Source: Survey Data (2018)

The table is a reflection of the descriptive statistics of attitude of nursing mothers to exclusive breastfeeding of nursing mothers' employment type. The table revealed the mean and standard deviation of nursing mothers based on their employment types as follows; Government - Civil/Public Service (M=40.90, SD=9.31), Private Company Employee (M=42.91, SD=7.97), Self-employed (M=40.55, SD=7.97), Unemployed (M=36.21, SD=7.83) and nursing mothers with Others employment types (M=26.20, SD=12.13) at 95% CIs [39.13, 42.67], [41.38, 44.43], [39.54, 41.56], [33.64, 38.78], and [11.13, 41.39]. The order of the means nursing mothers' attitude to exclusive breast feeding with respect to their employment type is as follows; Private Company Employee>Government - Civil/Public Service>Self-employed>Unemployed>Others. This shows that nursing mothers who are Private Company Employee have the highest positive attitude to EBF while those others have the least positive attitude to EBF.

Table 4.33: ANOVA of attitude of nursing mothers by type of employment

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	2347.505	4	586.876	7.431	.000
Within Groups	44779.451	567	78.976		
Total	47126.956	571			

Source: Survey Data (2018)

The table shows that there exists a significant difference in the means of nursing mothers' attitude toEBF with respect to the employment type of respondents (Private Company Employee, Government - Civil/Public Service, Self-employed, Unemployed, and Others); F (4, 567) =7.431, p <.05.

Table 4.34: Duncan Post Hoc Test of Nursing Mothers Typesof Employment

Types of Employment	N	Subset		
		1	2	3
Others	5	26.20		
Unemployed	38		36.21	
Self-employed	313			40.55
Government-Civil/Public Service	109			40.90
Private Company Employee	107			42.91
Sig.		0.009	0.027	1.315

Source: Survey Data (2018)

The outcome of the analysis had revealed that there is a significant difference in the means of attitude of nursing mothers to exclusive breast feeding with respect to employment type. In order to determine the direction of significant difference, a Duncan Post Hoc test was conducted. The post hoc test revealed three homogeneous groups existed among participant's means of attitude of nursing mothers to exclusive breast feeding. The means for others formed the first homogeneous group which was significant. The second homogenous group, Unemployed was statistically significant. The third homogenous group comprise of Self-employed, Government-Civil/Public Service and Private Company Employee which were not statistically different from each other. Each homogenous group differs statistically from the next. The ordering of the means was Private Company Employee > Government - Civil/Public Service > Self-employed > Unemployed > Others.

Table 4.35: Descriptive statistics of Attitude towards Exclusive Breastfeeding by income level

					95% Confidence Interval for Mean	
	N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound
Below N50,000 monthly	410	40.5024	8.92765	.44091	39.6357	41.3692
Between N50,000 - N99,000 monthly	99	43.9192	8.67282	.87165	42.1894	45.6490
Between N100,000 - N149,000 monthly	31	38.4194	7.30650	1.31229	35.7393	41.0994
Between N150,000 - N199,000 monthly	10	40.4000	8.07190	2.55256	34.6257	46.1743
N200,000 and above monthly	22	31.8182	9.83500	2.09683	27.4576	36.1788
Total	572	40.6451	9.08483	.37986	39.8990	41.3912

Source: Survey Data (2018)

The table above showed the descriptive statistics of attitude of nursing mothers to exclusive breastfeeding of nursing mothers with respect to their income level. The table revealed the mean and standard deviation of the attitude of nursing mothers as follows; nursing mothers who earn below N50, 000 (M=40.50, SD=8.93), Between N50,000 – N99,000 (M=43.92, SD=8.67), Between N100,000 – N149,000 (M=38.42, SD=7.31), Between N150,000 – N199,000 (M=40.40, SD=8.07) and N200,000 and above monthly (M=31.82, SD=9.84) at 95% CIs [39.64, 41.37], [42.19, 45.65], [35.74, 41.10], [34.63, 46.17], and [27.46. 36.18]. The order of the means of nursing mothers' attitude to exclusive breast feeding with respect to their income level are as follows; Between N50,000 - N99,000 monthly>Below N50,000 monthly>Between N150,000 - N199,000 monthly>Between N100,000 - N149,000 monthly>N200,000 and above monthly. This shows that nursing mothers who earn Between N50,000 - N99,000 monthly have the highest positive attitude to EBF while N200,000 and above monthly have the least positive attitude to EBF.

Table 4.36: ANOVA of attitude of nursing mothers by income level

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	2937.884	4	734.471	9.424	.000
Within Groups	44189.072	567	77.935		
Total	47126.956	571			

Source: Survey Data (2018)

The table shows that there exists a significant difference in the means of nursing mothers' attitude to EBF with respect to income level of nursing mothers (Between N50,000 - N99,000 monthly, Below N50,000 monthly, Between N150,000 - N199,000 monthly, Between N100,000 - N149,000 monthly, and N200,000 and above monthly); $F(4, 567) = 9.424$, $p < .05$.

Table 4.37: Duncan Post Hoc Test of Nursing Mothers Income Level

Nursing Mothers Income Level	N	Subset		
		1	2	3
N200,000 and above monthly	22	31.82		
Between N100,000 - N149,000 monthly	31		38.42	
Between N150,000 - N199,000 monthly	10		40.40	
Below N50,000 monthly	410		40.50	
Between N50,000 - N99,000 monthly	99			43.92
Sig.		0.013	0.041	2.276

Source: Survey Data (2018)

In order to determine the direction of the significant difference of nursing mothers' income level on their attitude towards EBF, A Duncan Post Hoc Test was conducted. The Duncan post hoc test on attitude towards EBF based on their income level revealed three homogeneous groups existed among participant's means of attitude of nursing mothers on exclusive breastfeeding. The means for N200,000 and above monthly formed the first homogenous group which is statistically significant. The second homogenous group which comprise Between N100,000 - N149,000 monthly, Between N150,000 - N199,000 monthly, and Below N50,000 monthly were also statistically significant. The third homogenous is formed by income level Between N50,000 - N99,000 monthly. The ordering of the means was Between N50,000 - N99,000 monthly > Below N50,000 monthly > Between N150,000 - N199,000 monthly > Between N100,000 - N149,000 monthly > N200,000 and above monthly. By the ordering, nursing mothers with income level Between N50,000- N99,000 monthly have the highest positive attitude towards EBF while nursing mothers who earn N200,000 and above have the lowest positive attitude towards EBF.

Table 4.38: Descriptive statistics of Attitude towards Exclusive Breastfeeding by accessible items

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
Television (terrestrial	122	40.7049	8.38208	.75888	39.2025	42.2073
Cable Television	231	43.2771	9.62882	.63353	42.0288	44.5253
radio set	154	36.9286	7.57801	.61065	35.7222	38.1350
Internet service	43	41.3023	9.16914	1.39828	38.4805	44.1242
Newspaper	6	41.0000	9.57079	3.90726	30.9561	51.0439
Others	16	36.0625	5.43407	1.35852	33.1669	38.9581
Total	572	40.6451	9.08483	.37986	39.8990	41.3912

Source: Survey Data (2018)

The table showed the descriptive statistics of attitude to exclusive breastfeeding of nursing mothers with respect to accessible item. The table revealed that nursing mothers who have access to Television (terrestrial) (M=8.38, SD=8.38), Cable Television (M=43.28, SD=9.63), Radio Set (M=36.93, SD=7.58), Internet Service (M=41.30, SD=9.17), Newspaper (M=41.00, SD=9.57) and Others (M=36.06, SD=5.43) at 95% CIs [39.20, 42.21], [42.03, 44.53], [35.72, 38.14], [38.48, 44.12], [30.96, 51.04], and [33.17, 38.96]. The order of the means nursing mothers' knowledge of exclusive breast feeding with respect to accessible items are as follows; Cable Television>Internet service>Newspaper >Television (terrestrial)> Radio Set>Others. This shows that nursing mothers who have access to Television (terrestrial) have the highest positive attitude to EBF while who those who use other items have the least positive attitude to EBF.

Table 4.39: ANOVA of Attitude towards Exclusive Breastfeeding by accessible items

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	4083.089	5	816.618	10.738	.000
Within Groups	43043.867	566	76.049		
Total	47126.956	571			

Source: Survey Data (2018)

The table shows that there exists a significant difference in the means of nursing mothers' attitude to EBF with respect to income level of nursing mothers (Cable Television, Internet service, Newspaper, Television (terrestrial), Radio Set, Others); $F(5, 566) = 10.738$, $p < .05$.

Table 4.40: Duncan Post Hoc Test of Nursing Mothers Accessible Item

Nursing Mothers Accessible Item	N	Subset		
		1	2	3
Others	16	36.06		
Radio set	154	36.93		
Television (Terrestrial)	122		40.70	
Newspaper	6		41.00	
Internet Service	43		41.30	
Cable Television	231			43.28
Sig.		3.039	1.076	0.024

Source: Survey Data (2018)

In order to determine the direction of the significant difference of nursing mothers' accessible item, A Duncan Post Hoc Test was conducted. The Duncan post hoc test on accessible items of nursing mothers on EBF revealed three homogeneous groups existed among participant's means of accessible items to nursing mothers on exclusive breast feeding. The means for Others and Radio set formed the first homogenous group which are statistical non-significantly different. The second homogenous group which, comprises of Television (Terrestrial), Newspaper, Internet Service, were statistically non-significant. Cable Television formed the third homogenous group which is statistically significant. Each homogenous group statistically differs from the next. The ordering of the means was Cable Television > Internet service > Newspaper > Television (terrestrial) > Radio Set > Others.

Summary of Findings

The distribution of scores indicated that the attitude of nursing mothers to EBF is generally on the high side. This implies that greater number of nursing mothers have high attitude to EBF as the distribution is negatively skewed. Nursing mothers who have access to Television (terrestrial) have the highest positive attitude to EBF while who those who use other items have the least positive attitude to EBF.

Attitude is the first determinant of behavioural intention. It is the degree to which a person has a favourable or unfavourable evaluation of the said behaviour. To a very large extent attitude either positive or negative can, according to Smith (1998), help predict behavioural tendencies.There are times that attitude is linked to behaviour, but as Petty et al (2009) have established, it is not a simple relationship and attitude is not the only factor that influences behaviour. From the findings in this study, attitude of nursing mothers to EBF is very high and so it is expected that the behaviour in focus which is exclusive breastfeeding should also be high. However as Petty (1994) correctly puts it, ELM studies have shown that as a person's motivation and ability to form an attitude based on the merits of a persuasive communication increase, persuasion increases if the information presented is cogent, but decreases if the information is specious. Therefore, sources and content of information determines to a large extent the influence that attitude would have on behaviour.

The percentage of nursing mothers who believe that breast milk alone would not satisfy their babies in the first six months, as reflected in Table 4.32, is significant. Over 31% percent agreed that breast milk alone is insufficient to satisfy their babies. That may then be the cause of many nursing mothers refusing to continue with EBF between three and four months. Even with the right information and believable sources, some nursing mothers still do not have the conviction that water as a supplement is not necessary for their babies to be satisfied. This action could be accounted for by what Ajzen (2011) termed as perceived behavioural control which is the degree to which an individual feels that performance or non-performance of the behaviour in question is under his or her volitional control. He believes people are not likely to form a strong intention to perform behaviour if they do not have any resources or opportunities to do so. Even if they hold positive attitudes toward the behaviour, they would act appropriately when they believe that important others would approve of the behaviour.

There are indications that health workers especially in public health facilities help to give the right kind of messages that would allay some of the fears that lead to negative attitude. As the Desk Officer rightly observed in an interview,

> we always try to give them the pros and cons of breastfeeding. We relate inadequate, improper breastfeeding to the likelihood of the mother breast cancer. We also make them realize that even if you are a mother of a set of twins or triplet, the quantity of milk you produce will be quite sufficient for the baby. We always make them understand those basics facts

Attitude towards EBF may also be greatly influenced by the state of health of the nursing mother. Malnutrition is a fact of life in different parts of Nigeria and EBF requires that mothers are in good health and that special attention be given to nutritional status. However almost 16 percent of nursing mothers in this study agreed that feeding their babies with only breast milk in the first six months would make them lose weight excessively. The fears they have is also expressed in the NDHS (2013) which revealed that up to 7.9% of women of productive age across Nigeria are malnourished and that as many as 3.9% of women aged between 15 and 49 are

moderately or severely thin. Nursing mothers who do not have positive attitude to EBF may therefore be seriously concerned about their self-identity which is one major variable identified as a key component of attitudinal change and positive disposition in the theory of planned behaviour. Attitude's influence on behaviour is also affected by the way such attitude is formed. When a person has a direct experience of attitude formation, according to Petty et al (2009) and Mckee et al (2002), he or she has the stronger tendency of being influenced in his behaviour by such attitude.

4.2.4 Research Question Four

What are the practices of EBF among nursing mothers in Ogun State? Responses to Section 7 of the questionnaire were analysed along with practices of nursing mothers along demographic variables.

Table 4.41: Item analysis of responses on practices of EBF among nursing

	Always	Sometimes	Not at all	Total
I feed my baby with only breast milk within his/her first 2 months	292 (50.9%)	82 (14.3%)	200 (34.8%)	574
I feed my baby with only breast milk within his/her first 3 months	260 (45.3%)	100 (17.4%)	214 (37.3%)	574
I feed my baby with only breast milk within his/her first 6 months	301 (52.4%)	140 (24.4%)	133 (23.2%)	574
I fed my baby with breastmilk only since he/she was born	307 (53.5%)	105 (18.3%)	162 (28.2%)	574
I stopped/will stop giving my baby breastmilk once I resume work after my maternity leave	77 (13.4%)	126 (22.0%)	371 (64.6%)	574
I initiated breastfeeding for my baby within the first hour of birth	446 (77.7%)	29 (5.1%)	99 (17.2%)	574
I gave my baby breastmilk more than 6 times a day in spite of my work schedule.	477 (83.1%)	53 (9.2%)	44 (7.7%)	574
I try to express my breastmilk for my baby to take when I am not at home	105 (18.3%)	108 (18.8%)	361 (62.9%)	574
I ensured that my baby was fed with the thick yellow breast milk (Colostrum) that first came out of my breast	445 (77.5%)	66 (11.5%)	56 (9.8%)	574

Source: Survey Data (2018)

From the responses analysed, an important number of the respondents 292 (50.9%) always while 82 (14.3%) sometimes feed their baby with only breast milk within his/her first 2 months. However, 200 (34.8%) of the respondents do not feed their baby with only breast milk within his/her first 2 months. A noteworthy number of the respondents 260 (45.3%) always while 100 (17.4%) sometimes feed their baby with only breast milk within his/her first 3 months. However, 214 (37.3%) of the respondents do not feed their baby with only breast milk within his/her first 3 months.

Data from the Table also shows that a critical number of the respondents 301 (52.4%) always their baby with only breast milk within his/her first 6 monthswhile 140 (24.4%) sometimes do so. However, 133 (23.2%) of the respondents do not feed their baby with only breast milk within his/her first 6 months. A vital number of the respondents 307 (53.5%) claim they always feed their baby with breastmilk only since he/she was bornwhile 105 (18.3%) claim they do so sometimes. However, 162 (28.2%) of the respondents do not feed their baby with breastmilk only since he/she was born. A significant number of the respondents 446 (77.7%) recalled that they always initiated breastfeeding for their baby within the first hour of birthwhile 29 (5.1%) sometimes initiated it. However, 99 (17.2%) of the respondents do not initiate breastfeeding for their baby within the first hour of birth.

Adequate feeding for baby on breastmilk only is important. So, when respondents were asked to recount the number of times they breastfeed their babies, an overwhelming number of the respondents 477 (83.1%) say they always while 53 (9.2%) sometimes feed their baby breastmilk more than 6 times a day in spite of their work schedule. However, 44 (7.7%)of the respondents do not feed their baby breastmilk more than 6 times a day in spite of my work schedule. Only 105 (18.3%) respondents claim that they always express breastmilk while 108 (18.8%) sometimes expressed breastmilk for their baby to take when they are not at home. However, 361 (62.9%) of the respondents do not express breastmilk for their baby to take when they are not at home. Most of the nursing mothers who do not express breastmilk reason that the breast could turn sour or get contaminated in the process of expressing it.

Also a significant number of the respondents 445 (77.5%) always while 66 (11.5%) sometimes ensured that their baby was fed with the thick yellow breast milk (Colostrum) that first came out of their breast. However, 56 (9.8%) of the respondents do not ensure that their baby was fed with the thick yellow breast milk (Colostrum) that first came out of their breast.

Table 4.42: Descriptive Statistics Showing Exclusive Breastfeeding Practices by health facilities attended by mothers

					95% Confidence Interval for Mean	
	N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound
Tertiary	44	14.0682	3.72545	.56163	12.9355	15.2008
Secondary	123	15.1382	3.20943	.28938	14.5653	15.7111
Primary	395	16.7190	3.35005	.16856	16.3876	17.0504
Traditional Birth Attendant/Faith-based	5	15.8000	2.94958	1.31909	12.1376	19.4624
Others	0	.	.	.	.	.
Total	567	16.1623	3.45467	.14508	15.8773	16.4472

Source: Survey Data (2018)

The table showed the descriptive statistics of practices of nursing mothers to exclusive breastfeeding with respect to the health facilities attended. The mean and standard deviation of the practices of nursing mothers to exclusive breast feeding are as follows; mothers who attended tertiary health facilities (M=14,07, SD=3.73), secondary health facilities (M=15.14, SD=3.21), primary health facilities (M=16.72, SD=3.35),traditional birth attendant/faith based (M=15.80, SD=2.95), and no mean and standard deviation was reported as no nursing mother attended other health facilities, at 95% CIs [12.94, 15.20], [14.56, 15.71], [16.39, 17.05], [14.90, 51.10], and [0, 0]. The order of the means of practices of nursing mothers on exclusive breast feeding based on the health facilities attended are as follows; primary health facilities > traditional birth attended/faith-based > secondary health facilities > tertiary health facilities. This shows that nursing mothers who attended primary health facilities have the highest mean practices of exclusive breast feeding compared to other facilities.

The table shows that there exists a significant difference in the means of nursing mothers' practice of EBF with respect to the health facilities attended (tertiary health facilities, secondary health facilities, primary health facilities, traditional birth attended/faith-based); F (3, 563) =13.235, p <.05.

Table 4.43: Descriptive Statistics of Exclusive Breastfeeding Practices by where mothers give birth

					95% Confidence Interval for Mean	
	N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound
Traditional Birth Attendants' Place	60	18.0833	4.00970	.51765	17.0475	19.1191
Private Hospital	158	15.8481	3.46994	.27605	15.3028	16.3934
Government Hospital	328	15.8171	3.13753	.17324	15.4763	16.1579
Home	21	18.4286	3.95691	.86347	16.6274	20.2297
Total	567	16.1623	3.45467	.14508	15.8773	16.4472

Source: Survey Data (2018)

The table showed the descriptive statistics of practice of nursing mothers with respect to the health facilities of birth. The table revealed mean and standard deviation of practices of nursing mothers to exclusive breast feeding at varying places they gave birth, nursing mothers who gave birth using traditional birth attendant place (M=18.08, SD=4.01), private hospital (M=15.85, SD=3.47), government hospital (M=15.82, SD=3.14), and nursing mothers who gave birth at home (M=18.43, SD=3.96) at 95% CIs [17.05, 19.12], [15.30, 16.39], [15.48, 16.16], and [16.62, 20.23]. The order of the means of attitudes of the nursing mothers with respect to the place of birth are as follows; Home > Traditional birth attendant place > Private hospital >Government hospital. This shows that nursing mothers who gave birth at home have the highest practice of exclusive breastfeeding.

Table 4.44: Duncan Post Hoc Test of Health Facilities of Birth

Health Facilities of Birth	N	Subset	
		1	2
Government Hospital	328	15.82	
Private Hospital	158	15.85	
Traditional Birth Attendants' Place	60		18.08
Home	21		18.43
Sig.		0.781	0.341

Source: Survey Data (2018)

The outcome of the analysis had revealed that there is a significant difference in the means of practice of nursing mothers to exclusive breast feeding with respect to the place they gave birth. In order to determine the direction of significant difference, a Duncan Post Hoc test was conducted. The means of the places where nursing mothers were delivered of their babies revealed two homogeneous groups existed among participant's means of attitude of nursing mothers on exclusive breast feeding. The means for the Government Hospital and Private Hospital formed the first homogeneous groups that were not significantly different from each other. The second homogenous groups which comprise of Traditional Birth Attendants' Place and Home were also not significantly different from each other. Each homogenous group differs statistically from the next. The ordering of the means was Home > Traditional birth attendant place > Private hospital > Government hospital. This shows that nursing mothers who were delivered of their babies at TBAs and at Home practice EBF better and more frequently than nursing mothers whose babies were delivered atGovernment and Private Health Facilities.

Table 4.45: Descriptive Statistics of Exclusive Breastfeeding Practices by age of youngest child

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
0 to two months	154	16.8636	3.71020	.29898	16.2730	17.4543
Three to four Months	180	15.6167	3.49185	.26027	15.1031	16.1303
Five to Six Months	92	16.0761	2.82545	.29457	15.4910	16.6612
Above Six Months	141	16.1489	3.39103	.28558	15.5843	16.7135
Total	567	16.1623	3.45467	.14508	15.8773	16.4472

Source: Survey Data (2018)

The table showed the descriptive statistics of practices of nursing mothers to exclusive breastfeeding of nursing mothers with respect to the age of their youngest child. The table revealed the mean and standard deviation of attitudes of nursing mothers whose child is 0 to two month old (M=16.86, SD=3.71), three to four months (M=15.62, SD=3.49), five to six months (M=16.08, SD=2.83), and nursing mothers whose youngest child is above six months (M=16.15, SD=3.39) at 95% CIs [16.27, 17.45], [15.10, 16.13], [15.49, 16.66], and [15.58, 16.71]. The order of the means nursing mothers' practice of exclusive breast feeding with respect to the age of their youngest child are as follows; 0 to two months >above six months >five to six months >three to four months. This shows that nursing mothers whose youngest child is 0 to two months old have the highest practice of EBF while those whose child is three to four months old have the least practice of EBF

Table 4.46: Descriptive Statistics of Exclusive Breastfeeding Practices by age of nursing mothers

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
Below 15 years	6	14.8333	4.26224	1.74005	10.3604	19.3063
15 - 24 years	177	16.2768	3.68615	.27707	15.7300	16.8236
25 - 34 years	336	15.9196	3.21137	.17519	15.5750	16.2643
35 - 44 years	41	17.2927	3.82912	.59801	16.0841	18.5013
45 years and Above	7	19.4286	3.45722	1.30671	16.2312	22.6260
Total	567	16.1623	3.45467	.14508	15.8773	16.4472

Source: Survey Data (2018)

The table showed the descriptive statistics of practice of nursing mothers to exclusive breastfeeding of nursing mothers with their ages. The table revealed the mean and standard deviation of nursing mothers based on their ages as follows; below the age of 15 years (M=14.83, SD=4.26), 15 – 24 years (M=16.28, SD=3.69), 25 – 34 years (M=15.92, SD=3.21), 35 – 44 years (M=17.29, SD=3.83), and nursing mothers who are aged 45 and above years (M=19.43, SD=3.46) at 95% CIs [10.36, 19.31], [15.73, 16.82], [15.58, 16.26], [16.08, 18.50] and [16.23, 22.63]. The order of the means nursing mothers' practiceof exclusive breast feeding with respect to their age is as follows; 45 years and Above>35 - 44 years >25 - 34 years>15 - 24 years>Below 15 years. This shows that nursing mothers who are 45 years and Above have the highest practice of EBF while those below 15 years old have the least practice of EBF.

Table 4.47: Descriptive Statistics of Exclusive Breastfeeding Practices by employment type of nursing mothers

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
Government - Civil/Public Service	110	15.0727	2.66719	.25431	14.5687	15.5768
Private Company Employee	107	16.7944	2.99603	.28964	16.2202	17.3686
Self-employed	307	16.1433	3.57812	.20421	15.7415	16.5452
Unemployed	38	17.7632	4.44446	.72099	16.3023	19.2240
Others	5	15.6000	5.17687	2.31517	9.1721	22.0279
Total	567	16.1623	3.45467	.14508	15.8773	16.4472

Source: Survey Data (2018)

The table showed the descriptive statistics of practice of nursing mothers to exclusive breastfeeding of nursing mothers' employment type. The table revealed the mean and standard deviation of nursing mothers based on their employment types as follows; Government - Civil/Public Service (M=15.07, SD=2.67), Private Company Employee (M=16.79, SD=3.00), Self-employed (M=16.14, SD=3.58), Unemployed (M=17.76, SD=4.44) and nursing mothers with Others employment types (M=15.60, SD=5.18) at 95% CIs [14.57, 15.58], [16.22, 17.37], [15.74, 16.54], [16.30, 19.22], and [9.17, 22.03]. The order of the means nursing mothers' practice of exclusive breast feeding with respect to their employment type is as follows; Unemployed>Private Company Employee>Self-employed>Others >Government - Civil/Public Service. This shows that nursing mothers who are Unemployed have the highest practice of EBF while those who work for Government - Civil/Public Service have the least practice of EBF.

Table 4.48: Descriptive Statistics of Exclusive Breastfeeding Practices by income of nursing mothers

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
Below N50,000 monthly	405	16.4914	3.35640	.16678	16.1635	16.8192
Between N50,000 - N99,000 monthly	100	15.1600	3.38660	.33866	14.4880	15.8320
Between N100,000 - N149,000 monthly	31	15.2258	3.09526	.55593	14.0905	16.3612
Between N150,000 - N199,000 monthly	10	16.6000	3.06232	.96839	14.4094	18.7906
N200,000 and above monthly	21	15.7619	5.09809	1.11249	13.4413	18.0825
Total	567	16.1623	3.45467	.14508	15.8773	16.4472

Source: Survey Data (2018)

The table above showed the descriptive statistics of practice of nursing mothers to exclusive breastfeeding of nursing mothers with respect to their income level. The table revealed the mean and standard deviation of practice of nursing mothers as follows; nursing mothers who earn below N50, 000 (M=16.49, SD=3.36), Between N50,000 – N99,000 (M=15.16, SD=3.39), Between N100,000 – N149,000 (M=15.23, SD=3.10), Between N150,000 – N199,000 (M=16.60, SD=3.06) and N200,000 and above monthly (M=15.76, SD=5.10) at 95% CIs [16.16, 16.82], [14.49, 15.83], [14.09, 16.36], [14.41, 18.79], and [13.44. 18.08]. The order of the means of nursing mothers' practice to exclusive breast feeding with respect to their income level are as follows; Between N150,000 - N199,000 monthly>Below N50,000 monthly>N200,000 and above monthly>Between N100,000 - N149,000 monthly>Between N50,000 - N99,000 monthly. This shows that nursing mothers who earn Between N150,000 - N199,000 monthly have the highest practice of EBF while Between N50,000 - N99,000 monthly have the least practice of EBF.

Findings

The distribution of scores indicated that the practices of EBF among nursing mothers are generally on the low side. This implies that greater number of nursing mothers have low practices of EBF as the distribution is positively skewed.Results also show that significant differences existed in the knowledge of exclusive breastfeeding of nursing mothers by age of youngest child. Nursing mothers with youngest child between 0 to two months have the highest level of practice while those whose youngest babies were between 3 and 4 months have the lowest practice regarding EBF.Access to Television (terrestrial) also seems to be a stronger influence on practice of EBF more than other sources of information.

Quantitative data from findings on this research question reveals generally high practices of EBF among nursing mothers in the Ogun State. In all local government areas that data were gathered from, the practice of EBF is generally high. Nursing mothers answer in the affirmative regarding most aspects of exclusive breastfeeding practices. It is however significant that nursing mothers' willingness to continue

feeding their babies only breastmilk dropped significantly 50.9% in the first month of child birth to 45.3% after three months.

However, the fact that the willingness also picked up to 52.4% in the sixth month shows apparent lack of knowledge of tenets of EBF among nursing mothers. It is expected that nursing mothers should know well enough that by the sixth month water and complementary feeding should have been introduced.Therefore, the high rate of EBF practice negates the position of field officers as described by the Desk Officer of WHO in the State Primary Health Care Board in an interview:

> At this level we target care givers at the Primary Health Care Centre and of course some secondary health facilities. We have dialogue sessions with them at post-natal and infant welfare sessions. It demands the use of skilled staff to get accurate information because nursing mothers like to impress. If you ask them about EBF practice, they are likely to answer in the affirmative. But from the figures we have from national surveys, Ogun State is about 21.6% in terms of EBF compliance. The national average is much lower at about 17%. However, from what we get on the field, the compliance is much higher and its close to 30%

While nursing mothers would like to make researchers and field officer believe they are practicing EBF, their knowledge of what EBF is completely undermines the practice. For instance, a participant in one of the FGD session admitted that:

> if you ask us to be breastfeeding child for 6 month, would the breastfeeding only be satisfying to that child and they also said when the child is born, they should not be given water. Is it possible for someone to eat and not take water?

It is therefore obvious that the practice is still low and the reason for the low practice is poor knowledge of ideal EBF.As FMoH (2017a) rightly observes, the main barrier to proper implementation of EBF practices is nursing mothers insistence on giving water to babies at birth and under the age of six months, and giving them solid or semi solid food before six months, in the belief that they need it or it will make them stronger. This is evident from findings in the study as nursing mothers usually compromise EBF with the addition of water and mostly between the third and fourth month of breastfeeding the baby.

Poor economic condition is clearly not a point on which EBF messages can be promoted. Significant differences however existed in the source of information by nursing mothers who gave birth at traditional birth attendants' place and those who gave birth at private hospital. Nursing mothers who gave birth at traditional birth attendants place are exposed to more sources of information on exclusive breastfeeding than those who gave birth in government health facilities. According to UNICEF (2017), a key reason that women do not breastfeed or stop breastfeeding early is the need to return to work away from their babies. Nearly 100 years ago, the International Labour Organization (ILO) established as one of its first conventions the Maternity Protection Convention, indicating that a woman should have the right to paid maternity leave as well as breaks during the work day for nursing her baby. That is the practice in Ogun State where steps are even being taken to formalize building of crèche close to public work places to ensure compliance with the EBF in the six months period. As the Desk Officer further confirms, "nursing mothers are even allowed to close by 1 pm after they have resumed from the three months maternity leave." With only a combined 37.6% of nursing mothers in this study working for government and in the organized private sector, there should be a higher rate of EBF if work related distractions were a major reason for refusal to practice EBF.

It is well known that significant numbers of patients do not follow prescribed medication regiment. Many patients still do not comply with medical recommendations and as Greenberg (2004) observes, there is the challenge for health workers not to take the need to convince participants lightly on recommended actions as many participants, in this case nursing mothers, despite being convinced my messages of EBF, would refuse to change. A key proposition in the Theory of Planned Behaviour, perceived behavioural control, explains this action by nursing mothers. Nursing mothers' refusal to continue EBF may be down to the volitional control they feel that they have over breastfeeding their babies in spite of associated benefits.

4.2.5 Research Question Five*:* To what extent do sources of information influence nursing mothers' knowledge and attitude to EBF?

To answer this research question, analysis of variance is done between the dependent variable (knowledge of EBF) and the predictor (sources of information).

Table 4.49: Regression analysis showing sources of information and knowledge of nursing mothers to EBF

	Sum of Squares	Df	Mean Square	F	Sig.
Regression	2043.866	1	2043.866	93.864	.000[b]
Residual	12455.152	572	21.775		
Total	14499.017	573			
Model Summary	$R = .375$; $R^2 = .141$; $R^2_{(adj)} = .139$; $F_{(1,572)} = 93.864$; $p < .05$				

Source: Survey Data (2018)

a. Dependent Variable: Knowledge about Exclusive Breastfeeding

b. Predictors: (Constant), Source

Results in Table 4.49 indicated that there is a significant influence of source of information to the prediction of knowledge of exclusive breastfeeding practices by nursing mothers (R =.375; R^2 = .141; $R^2_{(adj)}$ = .139; F(1,572) = 93.864; p< .05). This implies that source of information accounted for 14.1% of the variance in the knowledge of exclusive breastfeeding practices by nursing mothers. In effect, sources of information influence the knowledge of EBF among nursing mothers to Exclusive Breastfeeding in Ogun State.

Table 4.50: Regression of sources of information and attitude of nursing mothers to EBF

	Sum of Squares	Df	Mean Square	F	Sig.
Regression	1825.085	1	1825.085	22.964	.000[b]
Residual	45301.872	570	79.477		
Total	47126.956	571			
Model Summary	$R = .197$; $R^2 = .039$; $R^2_{(adj)} = .037$; $F_{(1,570)} = 22.964$; $p < .05$				

Source: Survey Data (2018)

a. Dependent Variable: Attitude towards Exclusive Breastfeeding

b. Predictors: (Constant), Source

Results in Table 4.50 indicated that there is a significant influence of source of information to the prediction of attitude towards exclusive breastfeeding by nursing mothers (R =.197; R^2 = .039; $R^2_{(adj)}$ = .037; F(1,570) = 22.964; p< .05). This implies that source of information accounted for 3.9% of the variance in the attitude towards exclusive breastfeeding by nursing mothers. The research question which stated that to what extent do sources of information influence attitude towards exclusive breastfeeding of nursing mothers in Ogun State was by the findings of this study answered in the affirmative. In effect, sources of information will influence the attitude towards exclusive breastfeeding of nursing mothers in Ogun State.

Findings

There is a significant influence of source of information to the prediction of knowledge of exclusive breastfeeding practices by nursing mothers.Sources of information accounted for 14.1% of the variance in the knowledge of exclusive breastfeeding practices by nursing mothers and also accounted for 3.9% of the variance in the attitude towards exclusive breastfeeding by nursing mothers. Information and education when intensified makes the audience better able to attain comprehension, knowledge, favourable attitude and retention. At the information stage, the audience understands the idea and knows how to act. They are also mentally and physically capable of engaging in the desired action. However, the quality and credibility of information plays a vital role in the acceptance or rejection of the message. In this study, respondents generally believe their sources of information help to shape their knowledge as well as their intention towards EBF.

The approach to EBF information, as we have seen in this study, is that the sources that are available are the ones that have influenced the nursing mothers the most. In this case husbands, mothers and mothers-in-law, health workers and TBAs are the biggest influencers.

Generally speaking, nursing mothers also believe that the biggest influence on how, when and how long they breastfeed their babies are the health workers and family members that other sources are just used to reinforce what they already know. As, a participant in the FGD session in Sagamu describes it:

> on child health care, we get the information from the hospital because during the pregnancy one has to register and that is where they'll teach what we can eat while pregnant, what to do after delivery, how to take good care of the child, how long it'll take to breastfeed the child and the benefit of breastfeeding are first communicated to us at the hospital. Also those who are using smart phones can read it on social media. They also listen to it on radio too. On the aspect that the government should give six month break after delivery, to me it very important but that state of the country would not permit most people to do so because some places of work will not give more than three months.

Opinion and attitude of nursing mothers can change based on the quality of information they get on EBF and the perceived credibility of sources that they get the information from. According to FMoH (2017), at present, the communication work is done mainly in health talk and counselling sessions by health workers, older women and community leaders who have to be educated and inform first. There is the need, in their assessment that, for a shift from just information to empowerment so as to have maximum influence. There must therefore be systematic way of showcasing beautiful and healthy-looking, exclusively breastfed babies in the media.

Ruppel and Rains' (2012) position that health information sources that offer a higher degree of expertise such as health workers in government, private hospitals and TBA centres are regarded as authoritative and reliable sources of credible information is in line with findings in this study. Nursing mothers apparently consider the degree of expertise that health workers have on EBF in trusting them to a higher degree. This may be reflected in the ways health workers help with the knowledge of early initiation of breastfeeding, correct positioning as well as frequency and duration of breastfeeding.

On the other hand, the relative convenience that getting information from mothers, mothers-in-law and close elderly female in the family afford nursing mothers make them attractive sources of health information to nursing mothers. As Ruppel and Rains (2012) as well as Wakefield (2010) opine, the source that individuals choose to believe in at a particular point is also dependent on availability and convenience. Where

family members as sources are more available than sources with expertise, nursing mothers are more disposed to trusting them for vital information on EBF practices.

As Obono (2011) rightly pointed out, mass media campaigns are the easiest ways of reaching diverse people with health messages. Their distinctive advantages over other strategies which include reinforcement of messages and reach to a larger audience help to keep child survival and EBF in the public agenda. They can also offer demonstration of healthful practices close to the way health workers would do to a very large audience. They are however not always available due to the funding gap that the Desk Officer of the State Primary Health Care Board earlier identified.

4.2.6 Research Question Six

To what extent do sources of information influence behaviour of nursing mothers to the practice of EBF in Ogun State?

Table 4.51: Regression of sources of information on behaviour of nursing mothers to EBF

	Sum of Squares	Df	Mean Square	F	Sig.
Regression	934.111	1	934.111	90.668	.000[b]
Residual	5820.961	565	10.303		
Total	6755.072	566			
Model Summary	$R = .372^{a}$; $R^2 = .138$; $R^2_{(adj)} = .137$; $F(1,565) = 90.668$; $p < .05$				

Source: Survey Data (2018)

a. Dependent Variable: Exclusive Breastfeeding Practices

b. Predictors: (Constant), Sources of information

Results in Table 4.51 indicated that there is a significant influence of source of information to the prediction of exclusive breastfeeding practices by nursing mothers ($R = .372$; $R^2 = .138$; $R^2_{(adj)} = .137$; $F(1,565) = 90.668$; $p < .05$). This implies that sources of information accounted for 13.8% of the variance in the exclusive breastfeeding practices by nursing mothers. The research question which stated that to what extent do sources of information influence behaviour of nursing mothers to the practice of EBF in Ogun State was by the findings of this study answered in the affirmative. In effect, sources of information influenced the behaviour of nursing mothers to the practice of EBF in Ogun State. Findings from the study revealed that there is a significant influence of source of information to the prediction of exclusive breastfeeding practices by nursing mothers. Sources of information accounted for 13.8% of the variance in the EBF practices by nursing mothers

4.3 Discussion of Findings

Based on the analysis, it is clear that respondents regardless of social economic status, age, choice of health facilities and other demographic variables still agree that health care workers are perhaps the most available sources of information to them on exclusive breastfeeding. There are, however, other significant sources of information. Radio, advocacy groups, internet and television are available sources of information that have not been used as effectively as possible in exclusive breastfeeding campaign. This is supported by NDHS (2018: 160) that "early initiation of breastfeeding is more common among children whose deliveries were assisted by health personnel (50%) than among those whose deliveries were assisted by traditional birth attendants (33%), no one (36%), or others (37%)"

While it could be easily acknowledged that dialogue sessions between health workers and nursing mothers are useful sources of information because they offer detailed explanation especially on the early initiation of breastfeeding and exclusive breastfeeding (FMoH, 2017), the reach they provide is limited as many nursing mothers miss out on these sessions because they did not attend ante-natal programmes and have given birth at health facilities that do not have health workers that are knowledgeable enough to offer such support. The mass media offer the opportunity of

reaching out to large people in far and sometimes difficult terrain and would be a more useful support to messages in dialogue session. There are however creative options that may not be all that capital intensive. Ojebode in Soola (2003) identified different options that development message could appear mass media particularly in radio. His submission is that Ewi (oral poetry) and Testimonials are development programme types that offer a lot of credibility among the audience and are cheap to produce. These campaigns may even come as spot announcement with familiar voices lending their support to EBF.

Most of the participants in the FGD sessions however acknowledge the invaluable contributions of their parents especially their mothers as their major sources of EBF and child care. A participant in the session in Abeokuta remarked that:

> My first source of information for anything about my child is my mother because she has more experience than me in taking care of babies. She had been telling me a lot since I told her about my pregnancy. She was even the one that encouraged me to register for ante-natal at the clinic before I started getting information from nurses here (at the clinic)

The extent to which nursing mothers would accept health care workers as important, trustworthy and credible sources of information in providing more useful medical information, as argued by Hesse et al 2005, than the Internet, friends and family, or mass media and other sources is then heavily dependent on tailor-ability or the degree to which a source makes it possible to acquire information is unique to one's situation and convenience or the relative ease of accessing and using a particular source to acquire health information based on the argument of Dutta-Bergman (2006a) cited by Rains (2007). Nursing mothers in this instance seem to see a more convenient health information sources that are tailor-made for their needs in their mothers and mothers-in-law before they start attending ante-natal sessions where they come in contact with health workers.

Results show the health workers are the most widely available sources of exclusive breastfeeding and other health information is consistent with the position of FMoH (2017) that they are active promoters of EBF. They hold health talks during ante-natal

and post-natal sessions with pregnant women and nursing mothers. Health workers also promote the appropriate infant feeding in one-on-one consultation sessions in health facilities and sometimes in community health outreach. Gupta et al (2004) advocated a multi-level approach to providing health care information to nursing mothers by starting with skilled support provided by health care workers as well as husbands and partners. It however does not end there. The mass media if effectively utilized, as we have seen in Bolivia and Colombia, can have an indirect influence on women and men's knowledge of early initiation of breastfeeding and exclusive breastfeeding through mediating effects of social networks.

Based on findings from the study, it could be concluded that high percentage of nursing mothers are knowledgeable but the level of knowledge is not as adequate as it should be about EBF. Exclusive breastfeeding practices are determined by a myriad of factors. Foss and Southwell (2006) believe that knowledge level of nursing mothers is one of the key factors that influence the decision to breastfeed, when to introduce complimentary feeding and when to stop breastfeeding. Knowledge can however not be separated from awareness. In spite of the fact that Okolie (2012) and Ajibade (2013) have suggested that the level of awareness of exclusive breastfeeding among nursing mothers in Nigeria is high, the awareness in not reflected in the level of knowledge of nursing mothers.

As evident from Table 4.17, nursing mothers who attended traditional birth attendant/faith-based health facilities claimed to be knowledgeable about some basic tenets of exclusive breastfeeding while nursing mothers who attended tertiary health facilities claimed that theydo not have such knowledge on exclusive breastfeeding. This calls to question the content and quality of messages delivered and the concentration of nursing mothers during health talks in public and private health facilities at primary secondary and tertiary level. Ruppel and Rains's (2012) position that tailor-ability and convenience are major characteristics in accepting health information is relevant here. FMoH's (2017) point that the participation of health workers in group meetings with demonstration exercises help to strengthen nursing mothers' conviction about correct infant feeding practices and the role that spouse and

family members can play in support of the nursing mother could therefore be faulted on the basis that such messages are not designed in ways that make them tailored towards nursing mothers' needs.

Data from FGD sessions support this position that awareness of EBF is high while knowledge is not very high. For instance, most of the nursing mothers that participated in the sessions showed a significant awareness level of EBF and also claimed that they are knowledgeable about the practice. However, in the course of discussion, Participant 3 in the Sagamu session said "this will be my first born and I was told to breastfeed the baby for 6 months before giving her water and even if we want to give them water we should add glucose in it. That's what I know but I've not gone through the main process to the end." Her submission shows an apparent lack of knowledge regarding some tenets of EBF as addition of water is one the major hindrances to the achievement of exclusive breastfeeding among most nursing mothers who have compromised the practice.

The Desk Officer's position is that

> health workers, as secondary care givers, try to also encourage them (nursing mothers) to have good positioning and attachment because those are factors that also assist EBF. Part of the message is that some traditions believes giving water, mere addition of water alone pushes off the EBF rate tremendously and what we do is try to convince them that the composition of the breast milk itself is over 80% of water. In other word, when you give your child breast milk you have sufficient water in it and we also try to convince them that the use of concoction, the local herbs is quite dangerous and detrimental to the health of the child, all of those they should avoid.

This shows that in public health facilities where health workers hold ante natal session with nursing mothers, knowledge of EBF among nursing mothers is still suspect. The situation in faith based and TBA health facilities is even more serious. As reflected in findings on knowledge level of nursing mothers in Table 4.15 and Table 4.15, health facilities where nursing mothers give birth play a significant role in their knowledge level regarding EBF. Although all respondents to the questionnaire were accessed in government health facilities, out of 574 respondents were considered 60 (10.5%) gave

birth at traditional birth attendants' place, whereas 158 (27.5%). Indeed a significant percentage of respondents gave birth and attended ante-natal programmes in private hospitals, faith-based and TBA facilities. They only came to government facilities in order to have access to immunization for their infants. These findings are in line with Alade et al's (2013) position that age, educational level, occupation and type of health facility were significantly associated with knowledge of EBF among nursing mothers.

A clear description of the knowledge level of respondents in the TBAs could be deduced from the submission of a participant at Dauda Eweje Maternity Home, Ilawo, Abeokuta, who said "if you ask us to be breastfeeding a child for 6 month, would the breastfeeding only be satisfying to that child and they also said when the child is born, they should not be given water. Is it possible for someone to eat and not take water?" This expression shows a degree of misunderstanding of the concept of exclusive breastfeeding as addition of water compromises EBF.

As we can aver from findings in the study, sources that nursing mothers get information on EBF accounted for a significant variance in their level of practices.These sources have different ways of influencing nursing mothers as pointed out earlier. Health workers are seen as authorities that have competence and capacity to give accurate information on EBF and child care generally. In many instances, failure to give accurate and correct information at this level reduces the knowledge level of nursing mothers significantly and affects eventual practice. There are doubts regarding the quality of information nursing mothers get from health facilities that are not government certified as there is little effort to consciously promote EBF in many of such facilities.

Undoubtedly nursing mothers face the strong pressure of sources that lack competence in EBF nursing, the strongest of those sources are their own mothers and their mothers-in-law who believe they are more knowledgeable in child care. FMoH (2017: 4) posit that "mothers might be accused of wanting to kill the baby if they do not give him or her water. It is a social norm to give water to babies. Babies are compared to adults: because adults suffer from thirst if not given water, so do babies." The addition

of water is even aggravated by the quality of drinking water available in households and NDHS (2013) reveals that as many as 50.5% of rural households in Nigeria have access to non-improved sources of drinking water.

Mothers and mothers-in-law are also largely responsible for pressure on nursing mothers to introduce complementary feeding early. In most cases, complementary feeding is introduced as early as three to four months of the baby's life. There is the issue that when nursing mothers are returning to work after maternity leave, they cannot give breastmilk only, even if a few of them do express it. Thus, the baby is left behind with the family, in most cases, mothers and mothers-in-law, and is given water and akamu (a thin gruel of corn flour) usually from three months FMoH (2017). A lot of times nursing mothers are trusting enough of their mothers and mothers-in-law's knowledge because as a participant in the FGD, Olatundun Mohammed puts, it, "parental advice cannot be thrown away because they cannot give information that will harm us but it is left to the mother to know what to do, so as not to end up in a bad situation.

Alade et al's (2013) findings that practice of EBF was significantly more among respondents earning less than N50, 000.00 monthly, by the findings of this study, may lack merit. A large percentage of respondents (71.6%) in this study have income below N50, 000.00 and still do not practice EBF. Poor economic condition is clearly not a point on which EBF messages can be promoted. Significant differences however existed in the source of information by nursing mothers who gave birth at traditional birth attendants' place and those who gave birth at private hospital. Nursing mothers who gave birth at traditional birth attendants place are exposed to more sources of information on exclusive breastfeeding than those who gave birth in government health facilities

According to UNICEF (2017), a key reason that women do not breastfeed or stop breastfeeding early is the need to return to work away from their babies. Nearly 100 years ago, the International Labour Organization (ILO) established as one of its first conventions the Maternity Protection Convention, indicating that a woman should

have the right to paid maternity leave as well as breaks during the work day for nursing her baby. That is the practice in Ogun State where steps are even being taken to formalize building of crèche close to public work places to ensure compliance with the EBF in the six months period. As Mr. Desk Officer, SPHCB further confirms, "nursing mothers are even allowed to close by 1 pm after they have resumed from the three months maternity leave." With only a combined 37.6% of nursing mothers in this study working for government and in the organized private sector, there should be a higher rate of EBF if work related distractions were a major reason for refusal to practice EBF.

It is well known that significant number of patients do not follow prescribed medication regiment. Many patients still do not comply with medical recommendations and as Greenberg (2004) observes, there is the challenge for health workers not to take the need to convince participants lightly on recommended actions as many participants, in this case nursing mothers, despite being convinced my messages of EBF, would refuse to change. A key proposition in the Theory of Planned Behaviour, perceived behavioural control, explains this action by nursing mothers. Nursing mothers' refusal to continue EBF may be down to the volitional control they feel that they have over breastfeeding their babies in spite of associated benefits.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter presents the summary of findings, conclusion and recommendations and suggestions for further studies.

5.1 Summary

Exclusive breastfeeding practices are not just important determinants of nutritional status of children in terms of their health status, but also a unique way of enhancing nursing mother's health. Breastfeeding helps to provide children everywhere with the healthiest start to life and to afford nursing mother the easiest recovery from pains associated with child birth. However the level of adherence to exclusive breastfeeding is poor in Nigeria which has one of the poorest exclusive breastfeeding rates in Africa. This study therefore examines the level of knowledge, attitude to and practice of exclusive breastfeeding among nursing mothers in Ogun State in relation to sources that they get information from.

The study adopted the Elaboration Likelihood Model, a theory of attitude change, which attempts to provide a framework for understanding the basic processes involved in the effectiveness of persuasive communication. The ELM was specifically designed to explain and organize past conflicts in persuasion literature. The study also adopted the Theory of Planned, a model of attitude-behaviour relationship widely accepted as one expectancy-value model that has succeeded in predicting human behaviour to some degree.

The descriptive design was adopted for the study using survey, in-depth interview and Focus Group Discussion. The procedure for drawing out a representative sample for

the study was basically multi-stage. Ogun state was first clustered or stratified into three senatorial districts: Ogun East, Ogun Central and Ogun West. From each stratum two local governments were purposively selected. The first set of local government areas were selected based on the fact that it has state/federal owned major health facility within its boundaries. In that case, Sagamu Local Government Area, which hosts the State University Teaching Hospital (OOUTH) is chosen for Ogun East. In Ogun Central, Abeokuta South Local Government Area with the Federal Medical Centre and the State General Hospital is chosen. Ado Odo/Ota Local Government with another State General Hospital is chosen for Ogun West. The three LGAs were also chosen because they have large urban population. The second local governments in each stratum were selected purposively because they have rural population. Odogbolu, Odeda, and Yewa North Local Governments Areas were, on this basis, picked from Ogun East, Central and West respectively.30 health facilities were selected for the study across the 6 LGAs covering the 3 senatorial districts in the State. In each of the 6 LGAs, 5 health facilities were selected and in each of health facility, the number of respondents selected was based on the quota of nursing mothers registered for post-natal care in the facility.

Findings reveal that doctors, nurses and health workers are the most available sources of information to nursing. 57.5% of respondents very often have them as their sources of information. This is followed by radio with 50.3% and parents/parents in law with 30.8%. The least available source of information to nursing mothers is music with 4.4% of respondents acknowledging it as a source of information they have access to very often.

However, places where nursing mothers give birth seems to have significant bearing on the sources of information available to them as those who gave birth in TBAs centres identified more options as sources of information. There are also significant differences in sources of information of nursing mothers based on their own age and the age of the youngest babies they are nursing.The distribution of scores indicated that knowledge of nursing mothers about EBF is generally on the low side. This implies that greater number of nursing mothers have low knowledge about EBF as the distribution is positively skewed. Significant differences existed in the knowledge of

exclusive breastfeeding among nursing mothers by age of nursing mothers and the age of the babies they are nursing.

The distribution of scores indicated that the attitude of nursing mothers to EBF is generally on the high side. This implies that greater number of nursing mothers have high attitude to EBF as the distribution is negatively skewed.There is a significant influence of sources of information to the prediction of knowledge of exclusive breastfeeding practices by nursing mothers. Sources of information accounted for 13.9% of the variance in the knowledge of exclusive breastfeeding practices by nursing mothers and also accounted for 13.7% of the variance in the attitude towards exclusive breastfeeding by nursing mothers.The distribution of scores indicated that the practices of EBF among nursing mothers are generally on the low side. This implies that greater number of nursing mothers have low practices of EBF as the distribution is positively skewed. Results also show that significant differences existed in the knowledge of exclusive breastfeeding of nursing mothers by age of youngest child. Nursing mothers with youngest child between 0 to two months are significantly different from those with three to four. There is a significant influence of source of information to the prediction of exclusive breastfeeding practices by nursing mothers ($R = .372$; $R2 = .138$; $R2\ (adj) = .137$; $F(1,565) = 90.668$; $p < .05$). This implies that source of information accounted for 13.7% of the variance in the exclusive breastfeeding practices by nursing mothers. In effect, sources of information will influence the behaviour of nursing mothers to the practice of EBF in Ogun State.

5.2 Conclusion

Based on the findings above, the study concludes that doctors, nurses, birth attendants and other health workers are the most available and believable sources of information on EBF to nursing mothers in Ogun State.

Places where nursing mothers gave birth have significant influences on the sources of information that are available to them in relation to EBF. Sources of information of nursing mothers on EBF are significantly influenced by their own age and the age of the youngest babies they are nursing.Greater numbers of nursing mothers have low

knowledge about the core tenets of EBF including early initiation, correct positioning and the length of EBF without addition of supplements**.** Significant differences existed in the knowledge of exclusive breastfeeding among nursing mothers by age of nursing mothers and the age of the babies they are nursing.

A greater number of nursing mothers have high attitude to EBF as the distribution is negatively skewed. Significant differences existed in the attitude towards exclusive breastfeeding by age of nursing mothers.To a significant extent, sources of information influenced the prediction of knowledge of exclusive breastfeeding practices by nursing mothers. Sources of information accounted for 13.9% of the variance in the knowledge of exclusive breastfeeding practices by nursing mothers and also accounted for 13.7% of the variance in the attitude towards exclusive breastfeeding by nursing mothers.Greater numbers of nursing mothers have low practices of EBF and significant differences existed in the knowledge of exclusive breastfeeding of nursing mothers by age of youngest child. Nursing mothers with youngest child between 0 to two months are significantly different from in the practice of EBF compared to those with babies aged three to four months and above.There is significant influence of source of information to the prediction of exclusive breastfeeding practices by nursing mothers as sources of information accounted for a significant variance in the EBF practices.

5.3 Recommendations

(a). Sources of information on EBF should not be limited to the ones provided by health workers only as they have limited reach. Rather EBF programme planners should find more creative ways of incorporating mass media, especially television and radio regularly in the promotion of EBF among nursing mothers in spite of budget constraints. Promotional messages for EBF should have images and voices of nursing mothers and babies who have successfully practiced EBF and participation of health workers as well as religious and traditional leaders.

(b). The State Nutrition Officer of the Ministry of Health and the Federal Ministry of Health should emphasize the need for alternate sources of information such as spouses, mothers and mothers-in-law to attend ante-natal session at least once with nursing mothers for adequate knowledge of EBF.

(c). There should be a continuous scaling up capacity of registered TBAs and private maternity centres in the form of posting nurses, midwives or health educators from government hospitals to such centres for health talk during ante-natal and post-natal sessions.

(d). Knowledge of exclusive breastfeeding should be emphasized more in different sources of information on EBF as it is obvious that there is high level of awareness but very limited knowledge of EBF among nursing mothers.

(e). Federal Ministry of Health, State Ministries of Health, UNICEF, WHO and other global support agencies should help improve funding for promotion of the key tenets of EBF such as early initiation of EBF, correct positioning while breastfeeding, breastfeeding on demand, appropriate nutrition for nursing mothers and correct duration of EBF.

(f). The State Ministry of Health and the Nutrition Office of the Primary Health Board should ensure regular demonstration on the values of EBF and the dangers of Inclusive Breastfeeding during health talk sessions at various government approved health facilities. This can help strengthen the conviction of nursing mothers to engage in EBF practice

5.4 Contributions of the Study to Knowledge

(a). This study has looked at the source receiver relationship by investigating the influence that sources of information have on nursing mothers knowledge, attitude and practices of EBF whereas previous studies have been entirely devoted to awareness level, knowledge and practices of EBF among nursing mothers.

(b). Previous studies have been conducted in communities or single health facility. This study used multiple health facilities across the state assessing nursing mothers' on designated days for babies immunization.

(c) This study has provided source materials that have updated knowledge and enriched literature in EBF information source and its influence on nursing mothers' practice of EBF.

REFERENCES

2006 Population and Housing Census.2010. National Population Commission, Abuja. Retrieved from www.population.gov.ng February 17, 2016.

Adewuyi, E.O and Adefemi, K. 2016. Breastfeeding in Nigeria: a systematic review. *International Journal of Community Medicine and Public Health.Vol 3: No 2.*

Agho, K.E.; Ezeh, O.K.; Ghimire, P.R.; Osuagwu, L.U.; Stevens, G.J. and Global maternal and child Health Research Collaboration GloMACH. 2019. Exclusive breastfeeding rates and associated factors in 13, Economic Community of West African States (ECOWAS) Countries. *Nutrients, 11(12): 1-18*

Aidam, B.A; Perez-Escamilla, R. and Lartey, A. 2005. Lactation counseling increases exclusive breastfeeding rates in Ghana. *The Journal of Nutrition. 135.2: 1691-1695.*

Ajibade, B.L; Okunade, J.O.; Makinde, O.Y; Amao, P.O and Adeyemo, M.O.A. 2013. Factors influencing the practice of exclusive breastfeeding in rural communities of Osun State, Nigeria. *European Journal of Business and Management. 5: 15*

Ajzen I. 2006.*Constructing a TpB questionnaire: Conceptual and methodological considerations.*

Ajzen, I. 2011. Theory of planned behaviour: Reactions and reflections. *Psychology and Health. 26 .9: 1113-1127*

Ajzen, I. 2012. Theory of planned behaviour. Eds P.A.M, Lange; A.W, Kruglanski and E.T, Higgins. *Handbook of theories of social psychology*. London: Sage; 1: 438-459

Akinremi, Z. O and Samuel, F.O. 2015. Knowledge and attitude of exclusive breastfeeding among hairdresser apprentices in Ibadan, Nigeria. *British Journal of Medicine & Medical Research 5(3): 376-385.*

Alade, O; Titiloye, M.A; Oshiname, F.O and Arulogun, O.S. 2013. Exclusive breastfeeding and related antecedents factors among lactating mothers in a rural community in southwest Nigeria. *International Journal of Nursing and Midwifery. 5. 7: 132-138.*

Allen, M. 1991. Meta-analysis comparing the persuasiveness of one-sided and two-sided messages. *Western Journal of Speech Communication. 55: 390-404.*

Babbie, E. 2007. *The practice of social research*. Belmont, C.A: Wadsworth/ Thomson Corporation.

Bandura, A. 1977. Self-efficacy: Towards a unifying theory of behavioural change. *Psychological Review. 84: 191-215.*

Bandura, A. 1986. *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, New Jersey: Prentice Hall.

Bandura, A. 1989. Social cognitive theory. *Annal of child development.* Greenwich: Jai Press Ltd; 6: 1-60.

Boateng, M.F. 2018. Knowledge, attitude and practice of exclusive breastfeeding among mothers in Techiman, Ghana. Unpublished Master's Thesis: Faculty of Health Sciences, University of Eastern Finland

Bovell-Benjamin, A.C; Benjamin, W; Ivey, M and Simeon, D.T. 2001. Breastfeeding knowledge and beliefs among adults in eastern Tobago. *Journal of Human Lactation*. 17(4):298-303. doi: 10.1177/089033440101700403.

Breastfeeding Week: Malnutrition behind half of all child deaths. *Daily Trust*. August 2, 2016.

Conner, M; Lawton, R; Parker, D; Chorlton, K; Manstead, A.S.R and Strandling, S. 2007. Application of the theory of planned behaviour to the prediction of objectively assessed breaking of posted speed limits. *The British Journal Psychology. 98: 429-453*

CS-SUN.(2015). *Policy Brief. Malnutrition among children and women in Nigeria. Let's win the war*. Civil Society Scaling-up Nutrition in Nigeria

Dukuzumuremy, J.P.C; Acheampong, K; Abesig, J and Luo, J. 2020. Knowledge, attitude and practice of exclusive breastfeeding among nursing mothers in East Africa: A systematic review. *International Breastfeeding Journal*. 15 (1):70

Dun-Dury, E.J and Laar, A.K. 2016. Exclusive breastfeeding among city-dwelling professional working mothers in Ghana. *International Breastfeeding Journal*. 11(1): 23.

Egbuonu, I; Ezechukwu, C. and Chukwuka, J.O.2004. Level of Awareness of the baby friendly initiative among home economics teachers in Nigeria. *Journal of Tropical Pediatrics. 5. 6: 331-333.*

Elegbe, O. 2017. "An Assessment of Media Contribution to Behaviour Change and HIV Prevention in Nigeria." Eds N. Okorie; B.R. Ojebuyi and A. Salawu. *Impacts of the media on African socio-economic development.* IGI Global

Eskilsson, H. and Jansson, A. 2007.*Cognitions and beliefs influencing the use of bed nets for malaria prevention in Zanzibar.*Unpublished Masters Thesis. PsykologikalInstitutionen, StockholmsUniversitet.

Federal Ministry of Health. 2010a. *National Strategic Health Development Plan (NSHDP) 2010 – 2015.* Federal Ministry of Health, Abuja, Nigeria.

Federal Ministry of Health. 2010b. *Strengthening national health system 2009: A country experience.* Federal Ministry of Health, Abuja, Nigeria.

Federal Ministry of Health. 2017. *National Social and Behavioural Change Communication Strategy (SBCC) for Infant and Young Child Feeding (IYCF) in Nigeria 2016-2020*. Federal Ministry of Health, Abuja, Nigeria.

Frymier, A.B and Nadler, M.K. 2017. *Persuasion: Integrating Theory, Research, and Practice 3rd Edition.* Dubuque: Kendall Hunt Publishing Company.

Gagné, T; Ghenadenik, A.E; Abel, T and Frohlich, K.A. 2016. Social inequalities in health information seeking among young adults in Montreal. *Health Promotion International.*

Geist-Martin, P; Ray, E.B and Sharf, B.F.2003. *Communicating health: Personal, cultural and political complexities.* Belmont, C.A: Wadsworth.

Glanz, K and Rimer, B.K. 2005. *Theory at a glance: A guide to health promotion practice 2nd edition*. Washington D.C: U.S Department of Health and Human Services.

Glanz, K; Rimer, B.K and Lewis, F.M. 2002 .*Health behaviour and health education: Theory, research and practice 3rd edition*. San Francisco: Jossey-Bass.

Godin, G and Kok, G. 1996. The theory of planned behaviour: A review of its application to health related behaviours. *American Journal of Health Promotion. 11. 2: 82-98*

Green, C.P. 1989. *Media promotion of breastfeeding: A decade experience.* Washington: Nutritional Communication Project.

Greenlee, T and Suprenant, C. 1999. The trans-theoretical model of behavioural change: An empirical investigation. *Social Marketing Quarterly; 77. 3: 76-81.*

Greiner, T. 1998. "*History of breastfeeding."Nursing Mothers' Newsletter*.

Gupta, N; Katende, C and Bessinger, R. 2004. An evaluation of post-campaign knowledge and practices of exclusive breastfeeding in Uganda. *Journal of Health, Population and Nutrition. 22. 4: 429-439*

Higgins, J.P; Altman, D.G; Goetzsche, P.C; Juni, P; Moher,D; Oxman, A.D; Savovic and Sterne, J.A. 2011. *The Cochrane Collaboration's tool for assessing risk of bias in randomized trials.* Cambridge, U.K: MRC Biostatistics Unit, Institute of Public Health. Retrieved from www.ncbi.nlm.nih.gov/m/pumed/22008217. January 19th, 2017.

Horta, B.L; Loret de Mola, C and Victora, C.G. 2015. Long-term consequences of breastfeeding on cholesterol, obesity, systolic blood pressure and type 2 diabetes: a systematic review and meta-analysis. *Acta Paediatrica.*104: 30-37

Ibe, S.N.O.2017. Cultural practices on infant feeding and nursing mothers' adoption of Exclusive Breastfeeding practice in Imo State, Nigeria. MOJ Public Health

Inman, J. 2005. *Social cognitive theory: A synthesis.* Running Head Series.Department of Adult Education, Oregon State University.

Insel, P.M and Roth, T.W. 2004. *Core concepts in health.* Boston: McGraw Hill

IYCN/USAID. 2012. *Community interventions to promote optimal breastfeeding: Evidence on early initiation, any breastfeeding, exclusive breastfeeding, and continued breastfeeding.* IYCN/USAID

Kosslyn, S.M; Rosenberg, R.S and Lambert, T. 2014. *Psychology in context.* Auckland: Pearson Education New Zealand.

Laninhun, A. 2003. Communicating for development purposes: A gender perspective. Ed E.O Soola. *Communicating for development purposes*. Ibadan: Kraft Books Limited. 72-86

Lawoyin, T.O; Olawuyi, J.F and Onadeko, M.O. 2001. Factors associated with exclusive breastfeeding in Ibadan, Nigeria. *Journal of Human Lactation. 17.4: 321-325*

Lawrence, R and Lawrence R.M. 2011. *Breastfeeding: A guide for the medical profession 6th edition.* London: Elsevier Saunders.

Littlejohn, S.W. and Foss, K.A. 2005. *Theories of human communication*. Belmont, C.A: Wadsworth/Thomson.

McKee, N; Manoncourt, E, Chin, S.K. and Carnegie, R. 2002. Involving people, evolving behaviour: The UNICEF experience. Ed J. Servaes. *Approaches to Development Communication.* Paris: UNESCO, Chapter 12.

Milne, S; Sheeran, P; and Orbell, S. 2000. Prediction and intervention in health related protective behaviour: A meta-analytical review of protection motivation theory. *Journal of Applied Social Psychology. 30: 106-143.*

Mirkuzie, A.H; Sisay, M.M; Moland, K.M and Astrom, A.N. 2011. Applying the theory of planned behaviour to explain HIV testing in ante-natal settings in Addis Ababa. *BMC Health Services Research.* 11:196

Myers, D.G. 2017. *Social Psychology 11th Edition*. New York: McGraw Hill.

National Bureau of Statistics. 2018. Demographic Statistics Bulletin, 2017. Abuja, Nigeria: NBS

National Bureau of Statistics. 2015. *National Nutrition and Health Survey (NNHS): Report on the nutrition and health situation in Nigeria, 2015.* Abuja, Nigeria: NBS

National Population Commission. 2019. *Nigeria Demographic and Health Survey 2018*. Abuja, Nigeria: NPC, ICF International.

National Population Commission. 2014. *Nigeria Demographic and Health Survey 2013*. Abuja, Nigeria: NPC, ICF International

Nwagwu, N.E and Ajama, M. 2011. Women's health information needs and information source: a study of a rural oil palm business community in South Western Nigeria. *Annals of Library and Information Studies. Vol. 58, pp 270-281*

Obono, K. 2011. Media strategies of HIV/AIDS communication for behaviour change in South West Nigeria. *Africana* Vol. 5 No. 2

Ogbo, F.A; Agho, K; Ogeleka, P; Woolfenden, S; Page, A and Eastwood, J. 2017 Infant feeding practices and diarrhoea in sub-Saharan African countries with high diarrhoea mortality *PLoS ONE 12(2): e0171792*. https://doi.org/10.1371/journal.pone.0171792

Ogbo, F.A; Page, A; Idoko, J; Claudio, F and Agho, K.E. 2015. Trends in complementary feeding indicators in Nigeria, 2003–2013. *BMJ Open 2015;5:e008467*.doi: 10.1136/bmjopen-2015-008467

Ogun State Government. (2010). *Strategic Health Development Plan (2010-2015).* Abeokuta: Ogun State Ministry of Health.

Ojebode, A.2000. Radio for development: Types, format and content. Ed. E.O Soola. *Communicating for development purposes.* Ibadan: Kraft Books Limited.

Okolie, U. 2012. Problems encountered by breastfeeding mothers in their practice of exclusive breastfeeding in tertiary hospitals in Enugu State, South-east Nigeria. *International Journal of Nutrition and Metabolism. 4. 8: 107-113*

Owens-Ibie, N. 2000. "Communicating health issues in Nigeria: Challenges for immunisation activities." In L. Oso (ed) *Communication and development*: A reader. Abeokuta: Jedidiah Publishers. 229-239

Oyelana, O.; Kamanzi, J. and Ritcher, S. 2020. A critical look at exclusive breastfeeding in Africa: Through the lens of diffusion of innovation theory. *International Journal of Africa Nursing Sciences.* (14) 2021. 100267

Oyewo, O.O and Thanny, N. T. 2010. Exclusive breastfeeding in Lagos: An awareness study. *Mass Communicator: International Journal of Communication Studies*. New Delhi, India: Jagannath International Management School. 4. 2.

Petty, R.E., Brinol, P; and Priester, J.R. 2009. Mass media attitude change: implications of elaboration likelihood model of persuasion. Eds. I J. Brunt and M.B Oliver. *Media effects: Advances in theory and research (3rd edition).* 125-164. New York: Routledge.

Petty, R. E.and Cacioppo, J. T. 1986a. *Communication and persuasion: Central and peripheral routes to attitude change.* New York: Springer-Verlag

Petty, R. E. and Cacioppo, J. T. 1986b. The Elaboration Likelihood Model of persuasion. Ed. L. Berkowitz. *Advances in Experimental Psychology*. 19: 123-205. New York: Academic Press.

Petty, R. E. and Cacioppo, J. T. 1984. Source factors and the Elaboration Likelihood Model of persuasion. *Advances in Consumer Research*. 1.1: 668-672.

Petty, R. E. and Cacioppo, J. T. 1981. *Attitudes and persuasion: Classic and contemporary approaches.* Dubuque, IA: W. C. Brown.

Petty, R.E; Rucker, D.D; Bizer, Y.K and Cacioppo, J.T. 2004. The Elaboration Likelihood Model of persuasion. Ed. J.S. Seiter and R.H. Gass. *Perspectives on persuasion, social influence and compliance gaining.* 65-87. Boston: Pearson.

Piotrow, P.T; Rimon II, J.G; Merritt, A.P and Saffitz, G. 2003.*Advancing health communication: The PCS experience in the field.*John Hopkins, Bloomberg School of Public Health and Population Communication Services.

Prochaska, J.O and DiClemente, C.C. 1983. "Stages and processes of self-changing of smoking: Towards an integrative model of change."*Journal of Consulting and Clinical Psychology.Vol.51, Issue 3, Pp390-395.*

Redmond, N; Heather, J. B; Clark, C.R;Lipsitz, Sand Hicks, L.S. 2010 "Sources of Health Information Related to Preventive Health Behaviors in a National Study*" American Journal of Preventive Medicine.Vol. 3, Issue 6, Pp 620–627.*Retrieved from https://doi.org/10.1016/j.amepre. July 5, 2017.

Rima D. Apple. Mothers and Medicine: A Social History of Infant Feeding, 1890–1950. University of Wisconsin Press, 1987

Ruppel, E.K and Rains, S.A. 2012. "Information Sources and the health information-seeking process: An application and extension of channel complementarity theory." *Communication Monograph. Vol.79, Issue 3, Pp 385-405*

Salkand, N.J. 2000. *Exploring research 4th edition.* New Jersey: Prentice Hall

Stokols, D. 1996. Translating social ecological theory into guidelines for community health promotion. *American Journal of Health Promotion. 10 (4):282-98. doi: 10.4278/0890-1171-10.4.282.*

Sweldens, S; Van Osselear, S.M.J and Janiszewki, C 2010. "Evaluative conditioning procedures and the resilienceof conditioned brand attitude." *Journal of Consumer Research, Vol. 37, Issue 3, Pp 473-489.*Retrieved from https://doi.org/ 10.1086/653656. January 19, 2017.

Taylor, S. 1999. *Health Psychology*. 4th Edition, McGraw-Hill, Chicago.

Tlou, E.R. 2009.*The application of the theories of reasoned action and planned behaviour to a workplace HIV/AIDS promotion programme*. Unpublished Ph.D Thesis.University of South Africa.

UNAIDS. 1999. *Sexual behavioural change for HIV: Where have theories taken us?* Geneva: UNAIDS.

UNDP. 2015. *Human development report 2015: Work for human development.* New York: UNDP

UNICEF. 2021. *The state of the world's children 2021: On my mind- promoting, protecting and caring for children's mental health*. New York: UNICEF

UNICEF. 2019. *Global breastfeeding scorecard: Increasing commitment to breastfeeding through funding and improved policies and programmes.* New York: UNICEF.

UNICEF. 2018. *Progress for every child in the SDG era*. New York: UNICEF

UNICEF. 2017a. *The State of the world children's 2018*. New York: UNICEF

UNICEF. 2017b. *Global breastfeeding scorecard: Tracking progress for breastfeeding policies and programmes.* New York: UNICEF.

UNICEF. 2016. *State of the world children: A fair chance for every child.* New York: UNICEF

UNICEF. 2014a. *State of the world's children 2015.* New York: UNICEF

UNICEF. 2012a. *Committing to child survival: A promise renewed*. New York: UNICEF.

UNICEF. 2012b. *Humanitarian action for children*. New York: UNICEF

UNICEF. 2006. *A report card on nutrition.* New York: UNICEF

UNICEF. 2005. *The child survival partnership*. New York: UNICEF

UNICEF/WHO. 2014. *Levels & trends in child mortality: Estimates developed by the UN inter-agency group for child mortality estimation.* New York: UNICEF

UNICEF/WHO. 2009. *Baby friendly hospital initiative: preliminary version for country implementation.*UNICEF/WHO.

UNESCO. 2001. *Communication for development roundtable report*. Manayau, Nicaragua: UNESCO/UNFPA.

United Nations. 2018. *Sustainable Development Goals Report, 2018*. New York, United Nations

Wakefield, M.A; Loken, B and Hornick, R.C (2010). "Uses of mass media in campaigns to change health behaviour." *Lancet Child Survival Series, 9:1261-1271*

Weinstein, N.D. 2000. "Perceived probability, perceived severity and health protective behaviour." *Health Psychology. 19: 65-74.*

Wood, J.T. 2004. *Communication theories in action*. Belmont, C.A: Wadsworth

World Health Organisation. 2007. *The optimal duration of exclusive breastfeeding: A systematic review.* Geneva: World Health Organisation.

Wright, K.B; Sparks, L and O'Hair. 2009. *Health communication in the 21st century*. Victoria, Australia: Blackwell Publishing.

APPENDIX I

INFLUENCE OF INFORMATION SOURCES ABOUT EXCLUSIVE BREASTFEEDING ON THE KNOWLEDGE, ATTITUDES AND PRACTICE OF NURSING MOTHERS IN OGUN STATE, NIGERIA.

Dear respondents,

This questionnaire is designed to assess the influence of information sources on your knowledge, attitude and practices of EBF. Your honest responses would be appreciated. The study intends to examine how sources of information on exclusive breastfeeding have influenced your attitude, knowledge and behavioural practices.

You are assured of utmost confidentiality in the handling of all responses

Thank you.

Thanny, Noeem Taiwo

SECTION 1: DEMOGRAPHIC DATA

Senatorial District (a) West (b) Central (c) East

Local Government Area _____

Name of health facility _____

Type of health facility (a) Tertiary (b) Secondary (c) Primary (d) Traditional Birth

Attendant/Faith-based (e) Others, specify _____

Please tick as appropriate

1. Where did you give birth?
    a. At a traditional birth attendant's place ☐
    b. At a private hospital ☐
    c. At a government hospital ☐
    d. At home ☐
2. How old is your youngest baby?
    a. 0 to two months ☐
    b. Three to four months ☐
    c. Five to six months ☐
    d. Above six months ☐
3. How old are you? (a) Below 15 [ ] (b) 15-24 years [ ] (c) 25-34 years [ ] (d) 35-44 years (e) 45 and above [ ]
4. Highest educational attainment. (a) Below primary school [ ] (b) Primary school certificate [ ] (c) WASCE /GCE/NABTEB/NECO/Trade Cert. [ ] (d) B.A., BSc./HND and above [ ]
5. Employment type (a) Government/ civil and public service [ ] (b) Private company employee [ ] (c) Self- employed [ ] (d) Unemployed [ ] (e)Others, please specify_____
6. Income level, please tick: (a) Below #50, 000 monthly [ ] (b) Between #50,000 and #99,999 [ ] (c) Between #100,000 and #149,999 [ ] (d) Between #150, 000 and #199,999 [ ] (e) #200,000 and above [ ]
7. Which of the following items do you have access to? (a) Television (terrestrial) [ ](b) Cable television [ ] (c) Radio set [ ] (d) Internet service [ ] (e) Newspaper [ ] (f) others (please specify) _____

SECTION 2: KNOWLEDGE OF RESPONDENTS ABOUT EBF

This is section aims to determine your knowledge about exclusive breastfeeding.

Please tick options applicable to you.

S/ N	Knowledge of EBF	Strongly agreed	Agreed	Neutral	Disagreed	Strongly disagree	No response
1.	EBF is giving breast milk alone in the first six months of a baby's life						
2.	With EBF, I am not supposed to give my baby any other food supplement for the first six months of life.						
3.	Breast milk without water is insufficient for the baby in thefirst 6 month during Breastfeeding						
4	When I exclusively breastfeed my baby, his chances of survival is far better						
5.	Exclusive Breastfeeding will help to protect my baby against infections such as diarrheoa, dysentery and respiratory infections						
6.	The only thing I need to give my baby in the first six months are breast milk and prescribed drugs.						
7.	Exclusive breastfeeding can help reduce my susceptibility to breast cancer						
8.	Not giving my baby water and other liquid supplement within the first six months of life will make my baby thirsty						

9	The breastmilk that I express for my baby can last at least 8 hours with refrigeration						

SECTION 3: SOURCES OF INFORMATION FROM WHICH NURSING MOTHERS RECEIVED EBF MESSAGES

This section aims at knowing the source of information from which you received exclusive breastfeeding messages. Please tick the appropriate option applicable to you (read all the options.)

S/N		Very often	Often	Sometimes	Not at all	No response
1.	Radio					
2.	Television					
3.	Newspaper/magazine					
4.	Handbill/pamphlets					
5.	Posters					
6.	Video film					
7.	Internet service					
8.	Drama presentations					
9.	Music					
10.	Interaction with friends					
11.	Doctors, nurses and other health workers					
12.	Advocacy groups					
13.	Parents and parents makers					
14.	Others specify					

SECTION 4: SOURCES OF INFORMATION THAT INFLUENCE RESPONDENTS' KNOWLEDGE OF EXCLUSIVE BREASTFEEDING

This section aims at knowing the sources of information that influences your knowledge of exclusive breastfeeding. Please tick the appropriate option applicable to you.

S/N	My knowledge of exclusive breastfeeding is influenced by information I received through	To a very large extent	To a large extent	Undecided	To a little extent	To a very little extent
1.	Radio					
2.	Television					
3.	Newspaper/magazine					
4.	Handbill/pamphlets					
5.	Posters					
6.	Video film					
7.	Internet service					
8.	Drama presentations					
9.	Music					
10.	Interaction with friends					
11.	Doctors, nurses and other health workers					
12.	Advocacy groups					
13.	Parents and parents in-law					
14.	Others specify					

SECTION 5: ATTITUDE OF RESPONDENTS TOWARDS EXCLUSIVE BREASTFEEDING.

This section aims at knowing your attitude towards exclusive breastfeeding as an infant feeding option. Please tick the appropriate option applicable to you.

S/N	Attitude to Exclusive Breastfeeding.	Strongly agreed	Agreed	Neutral	Disagreed	Strongly disagree	No response
1.	I believe breastmilk alone in the first six months of life will never satisfy my baby						
2	Babies that are on breastmilk alone in the first six months of life cannot be as strong as the ones that are given supplements						
3.	Having to feed my baby with breastmilk alone will affect the closeness and fondness my husband and I have for each other						
4	Exclusive breastfeeding will affect my health because it will not allow me to sleep well at night						
5.	Practicing exclusive breastfeeding in the first six months of my baby's life will affect my work or business						
6	Every mother should be free to choose either to practice exclusive breastfeeding or introduce food supplement for her baby						
7.	Practicing exclusive breastfeeding would make me feel like I cannot afford baby food.						
8	Practicing exclusive breastfeeding would make me look less attractive to my husband						
9	Practicing EBF for six months would make me loose the firmness of my breast.						
10	Feeding my baby only breast milk for six months would make me lose weight a lot.						
11	EBF is not very important once you can afford to buy good baby food and supplements.						

SECTION 6: SOURCES OF INFORMATION THAT INFLUENCE RESPONDENTS' ATTITUDES TO EBF

This section aims at knowing the sources of information that influences your attitude about exclusive breastfeeding. Please tick the appropriate option applicable to you.

S/N	My attitude to exclusive breastfeeding is influenced by information I received through.	To a very large extent	To a large extent	Undecided	To a little extent	To a very little extent
1.	Radio					
2.	Television					
3.	Newspaper/magazine					
4.	Handbill/pamphlets					
5.	Posters					
6.	Video film					
7.	Internet service					
8.	Drama presentations					
9.	Music					
10.	Interaction with friends					
11.	Doctors, nurses and other health workers					
12.	Advocacy groups					
13.	Parents and parents in-law					
14.	Others specify					

SECTION 7: EXCLUSIVE BREASTFEEDING PRACTICES

This section aims at knowing your exclusive breastfeeding practices. Please tick the appropriate option applicable to you.

S/N	EBF practices among nursing mothers	Always	Sometimes	Not at all
1.	I gave my baby breastmilk alone only in his/her first 2 months of life			
2	I gave my baby breastmilk alone only in his/her first 3 months of life			
3	I gave my baby breastmilk alone only in his/her first 6 months			
4.	I fed my baby with breastmilk only since he/she was born			
5.	I stopped/will stop giving my baby breastmilk once I resume work after my maternity leave.			
6	I initiated breastfeeding for my baby within the first hour of birth.			
7.	I gave my baby breastmilk more than 6 times a day in spite of my work schedule.			
8.	I try to express my breastmilk for my baby to take when I am not at home			
9	I ensured that my baby was fed with the thick yellow breast milk (colostrum) that first came out of my breast			

SECTION 8: SOURCES OF INFORMATION THAT INFLUENCE RESPONDENTS EBF PRACTICES

S/N	My practice of exclusive breastfeeding is influenced by information I received through	Very often	Often	Sometimes	Not at all	No response
1.	Radio					
2.	Television					
3.	Newspaper/magazine					
4.	Handbill/pamphlets					
5.	Posters					
6.	Video film					
7.	Internet service					
8.	Drama presentations					
9.	Music					
10.	Interaction with friends					
11.	Doctors, nurses and other health workers					
12.	Advocacy groups					
13.t	Parents and parents in-law					
14.	Others specify					

1. Apart from breast milk, what other foods or liquids does/did your baby take in the first six months of life?

   a. Water ☐
   b. Baby milk ☐
   c. Agbo (medicinal herbs) ☐
   d. Washings from Quranic inscriptions ☐
   e. Normal food eaten by the family ☐
   f. Nothing ☐

2. When did you introduce this/ these (No 1. above)?

a. When Baby was less than one month old ☐
b. When Baby was between one to two months ☐
c. When Baby was between three to four months ☐
d. When Baby was between five to six months ☐
e. When Baby was above six months ☐

APPENDIX II

ILE EKO UNIFASITI IBADAN

EKA IGBOHUNSAFEFE ATI LILO EDE

Ipa Ti Orisun Iroyin Ko Ninu Imo, Iha Kiko Ati bi Awon Iyalomo Se Samilo Fifun Omo Ikoko Ni Oyan Nikan L'osu Mefa Akoko Ni Ipinle Ogun.

Eyin Oludahun Wa,

Agbe awon ibere wonyi kale lati se agbeyewo ipa ti orisun iroyin ko nipa imo ti e ni, iha ti e ko si i ati bi e se se amulo fifun omo ikoko ni oyan nikan. Inu wa yoo dun bi e ba le ba wa dahun ibeere wonyi laifepoboyo.

A mu daa yin loju pe gbogbo ohun ti e ba so, wiwo lenu awo wo, oro asiri ni a o fi se.

Abala Kin-in-ni – T'oje Imo Agbegbe

Agbegbe idibo_

Ijoba Ibile_

Oruko ile iwosan_

Irufe ile iwosan (a) Ile iwosan Olukoni (b) Ile iwosan nla (c) Ile iwosan Alabode (d) Agbebi ni ilana ibile tabi ti elesin (e) Awon Miran(daruko)

E fala si idi eyi ti o baahun

Ako-babo:

1) Iru Ile Igbebi wo le bi omo si?

   a. Agbebi ni ilana ibile tabi ti elesin
   b Ile iwosan aladani
   c Ile iwosan ijoba
   d Ile

2) Osu melo ni omo owo yin to?

   a. Omo oojo si osu meji
   b. Osu keta si ikerin
   c. Osu karun si ikefa
   d. O ti ju osu mefa lo

   Ako( ). Abo( )

3) Ojo Ori: (a) Odun meedogun wa sile

(b) Meedogun-si- merinlelogun

(c) Meedogbon-si- merinlelogbon

(d) Marunlelogoji soke

4) Iwe Eri (imo iwe) (a) ko ka to mefa ja iwe eri

(b) Iwe mefa

(c) Iwe eri WAEC ---

(d) Oye akoko ni yunnifasiti ati ju bee lo ( )

5) Ise: (a) Osise ijoba. (b) osise ni ile ise aladaani (c) ise tara eni (d) ko rise
(e) ise miran (daruko)

6) Igbelewon bawo lowo se n wole to, fala si idi eyi ti o baa wu
(a) ko to egberun lona aadota naira losu
(b) Laarin egberun lona aadota naira si egberun lona ogorun o din egberun kan naira losu
(d) Egberun lona aadojo naira si egberun lona igba, o din egberun kan.
(e) Egberun lona igba naira soke ( )

7) Ewo ninu awon ohun elo wonyi ni e ni ni arowoto yin?

a) Ero amohunmaworan agbegbe ero.

b). Awo inu aworan alasanwo

c) Ero Redio

d) Ero agborokaye

e). Iwe iroyin

f). Awon imiiran (daruko)

Abala keji

Ohun ti a ni lokan ni abala yii ni lati mo imo yii nipa fifun omo ikoko ni oyan nikan.

E jowo e fa igi si eyi ti o ba tiyin mu

		Mofara fo kan si	Mo gba	Mi o ti pa okan mipo	Mo ko ja le	Mo ko jale patapata	Ko le si
1.	EBF ni ki a fun omo ni oyan no osu kinin to a bii						
2.	Pelu EBF n ko ni fun omo mi ni ounje miiran kun oyan						
3.	Omi oyan Lai si Omi gidi ko tofun omo no osu mefa akoko fifun omo loyan						
4.	Ti mo ba fun omo mi ni oyan nikan, a fun mi ni anfani lati ye						
5.	Fifun omo mi ni oyan nikan a daabo boo lowo kokoro Arun bii igbe gburu, igbe Arin ati aisan aya.						
6.	Ohun kan ti mo nilo lati fun omo mi ni osu mefa akoko ni oyan ati awon oogun to won ba ko fun mi						
7.	Fifun omo ikoko ni oyan nikanle di ona aisan jejere oyan fun mi.						
8.	Bi n ko ba fun omo mi ni omu ati awon ohun mimu Miran, a mu ki omo mi maa pongbe.						
9.	Omi oyan ti mo fun sile fun omo mi, Le lo to wakati mejo bi ero amunkan tutu bawa.						

Abala keta

Orisun iroyin to awon iyalomo ti n gbo irohin nipa fifun omo ni oyan nikan

Afojusun abala yii ni lati mo orisun iroyin nibi ti e ti gbo nipa fifun omo ni oyan nikan

Ejowo e fala si idi eyi ti o ba ba tiyin mu (eka awon orisii ona to wa)

		Funfun igba pupo	**Lemo – lemo**	**Ni eeka kan**	**Rara**	**Kolesi**
1.	Ero redio					
2.	Amohun maworan					
3.	Iwe iroyin/ Iwe atigbadegba					
4.	Iwe ikede					
5.	Iwe alemogiri					
6.	Aworan foran					
7.	Ero agborokaye					
8.	Ere ori itage					
9.	Orin					
10.	Laarin awon ore					
11.	Dokita, noosi ati awon osise ile iwosan					
12.	Awon ajo to n polongo					
13.	Awon obi ati alagbato					
14.	Awon yoku (daruko)					

Abala kerin

Orisun iroyin ti o Nipa Lori imo oludahun Nipa fifun omo Koko ni oyan nikan.

Afojusun abala yii ni lati mo orisun iroyin ti o Nipa Lori imo Nipa fifun omo ni oyan nikan.

E jowo e fala si idi eyi ti o ba tiyin mu.

		Funfun igba pupo	**Lemo – lemo**	**Ni eeka kan**	**Rara**	**Kolesi**
1.	Ero redio					
2.	Amohun maworan					
3.	Iwe iroyin/ Iwe atigbadegba					
4.	Iwe ikede					
5.	Iwe alemogiri					
6.	Aworan foran					

7.	Ero agborokaye					
8.	Ere ori itage					
9.	Orin					
10.	Laarin awon ore					
11.	Dokita, noosi ati awon osise ile iwosan					
12.	Awon ajo to n polongo					
13.	Awon obi ati alagbato					
14.	Awon yoku (daruko)					

Abala karun- un

IHA TI OLUDAHUN KO SI FIFUN OMO IKOKO NI OYAN NIKAN

Afojusun abala yii ni lati mo I have ti e ko si fifun omo ikoko ni oyan nikan gege bii ounje omode

E jowo e fala si eyi to o ba bas yin mu
I have ti o ko si fifun omo ni oyan nikan

		Funfun igba pupo	**Lemo – leme**	**Ni eeka kan**	**Rara**	**Kolesi**
1	Mo gbagbo pe oyan nikan ko le yo on mi					
2	Omo to o mu oyan nikan ko le lagbara to eyi to n je ounje miiran pelu					
3	Fun omo ni oyan nikan a page ife emi ati oko mi Lara					
4	Fifun omo ni oyan nikan a pa ilerami Lara Tori ko Ni jeki a sun loru					
5	Fifun omo ni oyan maa pa ise mi Lara					
6	Iyalomo kookan lo ye ki o ni anfani lati Yan boya oyan nikan lo fe fun omo tabi ofe find ounje Miran Kun					
7	Fifun omo ni oyan nikan a dabi eni Ori pe n ko Ni owo lati ra ounje omo					
8	Nil					
9	Fifun omo ni oyan nikan ko ni je ki n was oko mi mo					
10	Fifun omo ni oyan nikan fun osu mefa a je ki oyan mi di pelebe					
11	Fifun omo ni oyan nikan fun osu mefa a je ki n ru					
12	Oyan nikan ko se pataki bi o ba ti ni					

	owo lati ra ounje omo					

Abala Kefa

Orisun iroyin ti o Nipa Lori iha to oludahun ko si fifun omo ikoko loyan nikan

Ero abala yii ni lati mo orisun iroyin ti o Nipa Lori iha to e ko si fifun omo ni oyan nikan

Fala si idi eyi ti o ba e mu

		Ohun lo sokunfa re	**O ni Ipa lori re daadaa**	**Ko ti e ye mi**	**O ni Ipa die**	**O ni ipa gidigidi**
1	Ero redio					
2	Amohun mauran					
3	Iwe iroyin/ I we atigbadegba					
4	Iwe ikede					
5	Iwe alemogiri					
6	Aworan foran					
7	Ero agborokaye					
8	Ere Ori itage					
9	Orin					
10	Laarin awon ore					
11	Dokita, ibosi ati awon osise ile iwosan					
12	Awon ajo to n polongo					
13	Awon obi ati alagbato					
14	Awon yoku (daruko)					

1. Iha ti mo ko si fifun omo ni oyan nikan mi fe pelu ohun ti mo gbo lori

		Ohun lo sokunfa re	**O ni Ipa lori re daadaa**	**Ko ti e ye mi**	**O ni Ipa die**	**O ni ipa gidigidi**
1	Ero redio					
2	Amohun mauran					
3	Iwe iroyin/ I we atigbadegba					
4	Iwe ikede					
5	Iwe alemogiri					
6	Aworan foran					

7	Ero agborokaye					
8	Ere Ori itage					
9	Orin					
10	Laarin awon ore					
11	Dokita, ibosi ati awon osise ile iwosan					
12	Awon ajo to n polongo					
13	Awon obi ati alagbato					
14	Awon yoku (daruko)					

Abala keje

Annilo fifun omo ikoko ni oyan nikan

Ni abala yii a fe mo bi e se se annilo fifun omo ikoko ni oyan nikan. Fala si idi eyi ti o ba e mu

Fifun omo loyan laarin awon iyalomo

	Imo fo imo	**Gbogbo Igba**	**Eekokan**	**Rara**
1	Oyan nikan Ni mo fun omo mi laarin osu kinni si ikeji			
2	Oyan nikan Ni mo fun omo mi laarin osu kinin si iketa			
3	Oyan nikan Ni mo fun omo mi laarin osu kinni si IKefa			
4	nikan ni mo fun omo mi lati igba to mo to bii			
5	Mo da oyan duro tabi maa da oyan fifun omo mi duro to mo ba ti pada senu ise leyin isin Ni ibimo			
6	Laarin bi wakati meloo ti mo bi omo mini mo to fi oyan si lenu			
7	Mo maa n fun omo ni oyan ju igba mefa lojumo bi oti Wu ki ise mi po to			
8	Mo maa n fun oyan sile fun omo mi lati mu bi n ko ba sinile			

Abala kejo

Orisun iroyin ti o Nipa Lori bi oludahun se me annilo fifun omo ni oyan

	Fifun omo ni oyan nikan ti mo nilo nii see pelu ohun ti mo gbo lori re Ni	**Ohun lo sokunfa re**	**O ni Ipa lori re daadaa**	**Ko ti e ye mi**	**O ni Ipa die**	**O ni ipa gidigidi**
1	Ero redio					
2	Amohun mauran					
3	Iwe iroyin/ I we atigbadegba					
4	Iwe ikede					
5	Iwe alemogiri					
6	Aworan foran					
7	Ero agborokaye					
8	Ere Ori itage					
9	Orin					
10	Laarin awon ore					
11	Dokita, ibosi ati awon osise ile iwosan					
12	Awon ajo to n polongo					
13	Awon obi ATI alagbafo					
14	Awon yoku (daruko)					

1. Yato si oyan, awon nkan jije abi mimu miran wo le ti fun omo yin ki o to pe osu
   a. Omi
   b. Waara inu agolo fun omode
   c. Agbo
   d. Hontu kewu
   e. Ounje ti a nje nile
   f. Rara

2. Ni dede asiko wo ni e bere si fun omo yin ni awon nkan ti a salaye yi (number 1)

   a. Ki omo to pe osu kan
   b. Laarin osu kan si meji
   c. Laarin osu keta si ikerin
   d. Laarin osu karun si ikefa
   e. Leyin osu mefa

APPENDIX III

INTERVIEW GUIDE

1. What are the major sources of health information that you use in reaching out to women generally and nursing mothers specifically about exclusive breastfeeding?
2. Which of the sources do you think have been the most credible and believable to the target?
3. Which of the sources do you think influenced nursing mother's knowledge and practices the more than the others?
4. Do you use the same information channel for nursing mothers and women of child bearing age in rural areas as you use for urban areas?
5. What are the major messages that you try to emphasize for nursing mothers in terms of appropriate practice of exclusive breastfeeding?
6. How do you normally help to allay fears of nursing mothers who are worried that breast milk only would not be sufficient for their babies?
7. Do you also work with TBAs and faith based delivery centres to reach out to nursing mothers about the messages of exclusive breastfeeding?
8. From your own field experience what are the challenges that nursing mothers face in fully practising EBF and how can information sources help them through this challenges?
9. What other physical and non-physical facilities can help improve exclusive breastfeeding among nursing mothers in Ogun State?
10. Which LGAs have higher compliance rate and which ones are lagging behind in terms of EBF among nursing mothers?

APPENDIX IV

FOCUS GROUP DISCUSSION GUIDE

1. Please introduce yourself.
2. What are the major sources that you get health and child care information from?
3. Which of these sources do trust most in terms of credibility of information that you get?
4. What do you understand by exclusive breastfeeding?
5. What are the major risk you face when you give your baby only breast milk for the first six months of life?
6. What are the major benefits you can get from giving your baby only breast milk for the first six months?
7. Do you ever consider that giving your baby breast milk alone can affect your beauty or status?
8. Can anyone around successfully convince you to or not to breastfeed your baby for the first six months without supplements?
9. Do you think taking care of your baby including breastfeeding is entirely your decision?
10. What factors can affect the pattern of breastfeeding that you want for your baby?

APPENDIX V

DEPARTMENT OF COMMUNICATION & LANGUAGE ARTS

UNIVERSITY OF IBADAN, IBADAN, NIGERIA

E-mail: cla@mail.ui.edu.ng; ayo.ojebode@gmail.com
GSM: +234-805-6414-798; +234-803-5650-781
Head of Department: Professor A. Ojebode

08032492604
facebook.com/CLA.UINigeria

25 April, 2017

RECEIVED
DATE 28-04-2017
SIGN
OFFICE OF THE PERMANENT SECRETARY MINISTRY OF HEALTH OKE-MOSAN ABEOKUTA.

The Permanent Secretary
Ogun State Ministry of Health
Oke Mosan,
Abeokuta
Ogun State.

Dear Sir/Ma,

REQUEST FOR ETHICAL APPROVAL FOR A SURVEY ON EXECLUSIVE BREASTFEEDING BEHAVIOUR OF NURSING MOTHERS

The bearer, THANNY, Nceem Taiwo (SI. 107721) is a Ph.D candidate in the Department of Communication and Language Arts. He is at the data gathering stage of his study and therefore requires an ethical approval for a study on exclusive breastfeeding information sources among nursing mothers attending public hospitals in Ogun State.

His study is a survey and does not require any experiment on human subjects. He has also assured us of absolute confidentiality in the handling of information gathered. A sample of the instrument is attached.

Thank you.

Professor A. Ojebode
Head of Department

DEPT. OF COMMUNICATION & LANGUAGE ARTS
UNIVERSITY OF IBADAN NIGERIA
DATE

APPENDIX VI

MINISTRY OF HEALTH

DEPARTMENT OF PLANNING, RESEARCH & STATISTICS

ABEOKUTA, OGUN STATE, NIGERIA

Refs No. HPRS/381/232 Date 19/05/2019

RE: "A SURVEY ON EXCLUSIVE BREASTFEEDING BEHAVIOUR OF NURSING MOTHERS"

Notice of Research Exemption

This is to inform you that the activities described in the submitted protocol/documents have been reviewed by the State Health Research Ethics Committee, the activities described there-in meet the criteria for exemption and is therefore approved as exempt from SHREC oversight.

The State code for Health Research Ethics requires you to comply with all institutional guidelines, rules and regulations and with the tenets of the Code. The HREC reserves the right to conduct compliance visit to your research site without previous notification.

Please note that, you are expected to share with us the findings of your research work via rantioladeinde@yahoo.com and ogundprs@yahoo.com

Dr. Ranti Oladeinde BSc, MBBS, MPH, PGDHMGT, FMCPH, MNIM.
Director, Planning, Research and Statistics
Secretary, State Research Ethics Committee