Improving Exclusive breastfeeding practices among caregivers of children 0 to 24 months in Nigeria

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TITLE: Improving Exclusive breastfeeding practices among caregivers of children 0 to 24 months in Nigeria

A thesis submitted in partial fulfilment of the requirement for the degree of

Master of International Health

by

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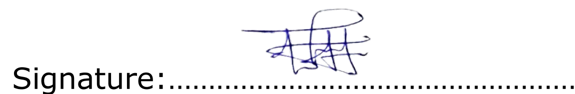
Declaration:
Where other people's work has been used (either from a printed source, internet or any other source) this has been carefully acknowledged and referenced in accordance with departmental requirements.

The thesis 'Improving Exclusive breastfeeding practices among caregivers of children 0 to 24 months in Nigeria' is my own work.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Abstract

Title: Improving Exclusive breastfeeding practices among caregivers of children 0 to 24 months in Nigeria

Problem: Nigeria has the highest number of stunted children in Africa, with 37% of children under 5 years stunted. Under 5 mortality rate in Nigeria in 2012, is 124/1000 and malnutrition is the underlying cause of 53% of these deaths. In 2013, only 17% of children were exclusively breastfed for 6 months.

Objective: This study analyzed the current practices of exclusive breastfeeding (EBF) by caregivers and factors influencing these practices. The results were used to make recommendations to improve the exclusive breast feeding practices in Nigeria.

Methodology: A literature review was conducted using quality published studies conducted in Nigeria. Google Scholar and databases such as PubMed, EPIC, were used for the search with the keywords, Exclusive breastfeeding and breastfeeding in Nigeria. Analysis of the study was done using the UNICEF conceptual framework for malnutrition.

Results/findings: Majority of the literature reviewed revealed low practice of EBF below the national rate across Nigeria without disparity in urban and rural areas. Major factors affecting EBF practice were educational attainment below secondary school level, low socioeconomic status and lack of access to health facilities services and negative perceptions about EBF

Conclusion: The study identified critical barriers perpetuating low EBF practice across Nigeria with direct and indirect effect on malnutrition. It therefore recommends that the Government needs to provide access to health services with strong linkages with the community systems to promote the ownership of EBF at the local level.

Keywords: Exclusive breastfeeding, Breastfeeding

Word Count: 250.

List of Abbreviations

ANC - Antenatal care

EBF - Exclusive breastfeeding

FMOH - Federal Ministry of Health

IYCF – Infant and Young Child Feeding

LGA – Local Government Authority

MUAC - Mid Upper Arm Circumference

PHC - Primary Health care

UNICEF - United Nations Children’s Fund

WHO - World Health Organization

Introduction

I am a medical doctor from Nigeria, with experience in both clinical practice and public health. My career part has mainly been in public health commencing with Health financing within a health maintenance organisation, before moving into health development programmes. I have experience in strategic planning, designing, managing, implementation and monitoring of public health programs especially in malaria control and community based projects. I have gained increasing levels of responsibility and experience within an International Nongovernmental Organisation (NGO) in this field and the quest to improve my expertise motivated me to undertake the master's Program in International Health.

In my most recent assignment, I worked as Program Manager for an International NGO in South Sudan on a project called the Integrated Community Case Management of childhood illnesses (ICCM). This project was a community centred intervention that was designed to provide access and case management of common diseases of malaria, diarrhoea, Pneumonia and malnutrition in children under 5 years, who hitherto would not have been able to get this kind of care because of the challenges with primary health care (PHC) services and the distances from the PHC centres, within a fragile state of South Sudan.

The project brought my attention to the problem of malnutrition in South Sudan and the cycle of problems we faced during project implementation. We experienced frequent cases of relapse of malnourished children following our intervention to improve their nutritional status from the RED reading (<115mm) on the Mid Upper Arm Circumference (MUAC) strip signifying Severe Acute Malnutrition to the Green reading (>125mm) on MUAC signifying normal nutritional status. In my desire to find a solution to this frequent cases of relapse, I discovered that prevention of the children from getting malnourished was the right approach and this could be done using the Infant and young children feeding (IYCF) strategy by ensuring Exclusive breast feeding of children from birth till they are 6 months and to continue with adequate nutritious food, as complementary feeding.

In addition, the United Nation's agency, United Nations Children Fund (UNICEF) has drawn the world's attention to the problem of famine and malnutrition that is ravaging some countries with Nigeria inclusive. The press release of February 2017 reads "Nearly 1.4 million children at imminent risk of death as famine looms in Nigeria, Somalia, South Sudan and Yemen" (UNICEF, 2017). This call to action shows that famine, which according to Merriam-Webster dictionary (2017) is the "Extreme scarcity of food", is not just a local problem but global and the situation in these countries had reached an unprecedented level necessitating the call.

Though the causes of famine may vary across these countries or the world, but the consequent which is malnutrition, remains the same.

In Nigeria, the problem of malnutrition cuts across the country, but the current conflict in the North Eastern part of Nigeria due to the Boko Haram insurgency has worsened the situation, through the widespread displacement and disruption of the people and their livelihood. Furthermore, this has caused food shortages and insecurity with the destruction of health infrastructure and worsening the access to health care services within the region. These burden is most felt by children who are the most vulnerable, unable to fend for themselves without their parents or a caregiver.

This is what informed my choice of the thesis topic 'Improving Exclusive Breastfeeding and Complementary Feeding Practices among Caregivers of Children 0-24 Months in Nigeria'. Generally, this topic aims at identifying the current gaps in the practice of exclusive breastfeeding and complementary feeding by caregivers and factors militating against the adoption, in view of the Infant and Young Child Feeding (IYCF) program as recommended by the Federal Ministry of Health and making recommendations for improving these practices, drawing lessons from successful programs.

Chapter 1

1.0 Background

Nigeria is a Sub Saharan Africa country, lying in the western part of Africa between latitudes 4º16' and 13º53' north and longitudes 2º40' and 14º41' east with a landmass of approximately 923,658 km^2 (NDHS 2013). It is bordered by 4 countries; Cameroon to the East, Chad to the North East, Niger to the North and Benin republic to the West with the Atlantic Ocean known as Gulf of Guinea, making the southern border. It is the most populous country in Africa with an estimated population of 183 million people in 2015 and an annual population growth rate of 2.28% (NBS 2015).

It has a diverse population characterised by different religious beliefs which include Christianity, Islam and the indigenous belief. There are over 250 ethnic groups in Nigeria, the predominant ones being the Hausa/Fulani, Yoruba and Igbo ethnic groups (FMOH 2014). The official language in Nigeria is English with Hausa, Yoruba and Igbo widely spoken, along with many other indigenous languages.

Geographically, Nigeria has a tropical climate and this is characterized by 2 main seasons which are the dry season and the rainy or wet season. This climatic pattern has created a characteristic form of vegetation with the coast and southern part having a mangrove swamp rainforest vegetation which continues northward as the guinea savannah in the central part of the country and terminates as the Sahel savannah in the North.

Economically, the 2014 rebasing of Nigeria’s economy witnessed the expansion of the country’s economy to a Gross Domestic Product (GDP) of US$ 546 billion making it the biggest economy in Africa at that time overtaking South Africa (World Bank 2017). However, due to the fall in global oil prices the economy which largely depends on oil revenue for its foreign exchange earnings has contracted to a Gross Domestic product of about US$ 486 billion and a GDP per capita of about US$ 2,600 in 2015 (World Bank 2017). Nigeria is classified as a lower middle income country by the World Bank.

Agriculture accounts for about 20.8% of the GDP in 2015 this has remained relatively stable over the last couple of years, dropping from a high of 37% in 2009 (World Bank, 2017). Despite Nigeria’s economic outlook a lot of Nigerians’ still live in poverty. About 53.4% of the population accounts for a Poverty headcount ratio at $1.90 a day (2011 PPP) (World Bank 2017). This poverty level is unevenly distributed across the country with the north of Nigeria being more affected than the south, and the rural areas more than the urban areas (FMOH 2014).

Nigeria is a federal republic and runs a federal system of government, made up of 36 states and a federal Capital Territory known as Abuja. Geopolitically, Nigeria is divided into 6 zones. Three zones are in the South which are the South West, South East and the South South zones, while the North also has 3 zones which are, North West, North East and the North central. See table 1 below showing the map of Nigeria with the 6 geopolitical zones and the states that make up the zones.

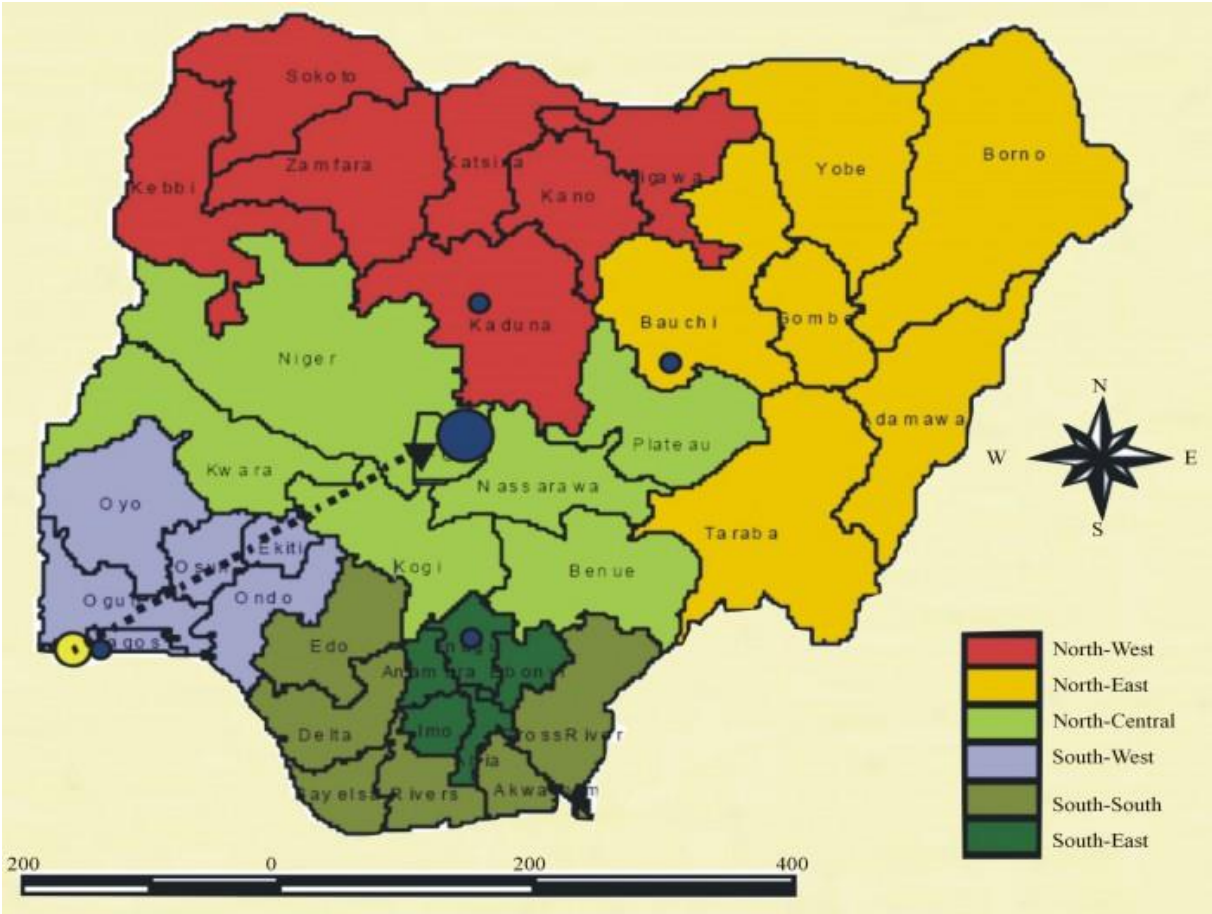

Figure 1. Map of Nigeria with the 6 geopolitical zones and states (source: The Trent 2016)

Nigeria operates a 3-tier system of Government which are the Federal Government, State Government and the Local Government Authority. In this vein it also runs a 3-tier system of health care delivery service across the country. The Federal Government provides tertiary health care services and this is the highest level of referral within the country, the state Government provides secondary level of health care, while the Local Government Authority (LGA) which is the lowest level of Government provides primary Health Care (PHC) services. See figure 2 below for more description of the health care delivery system in Nigeria.

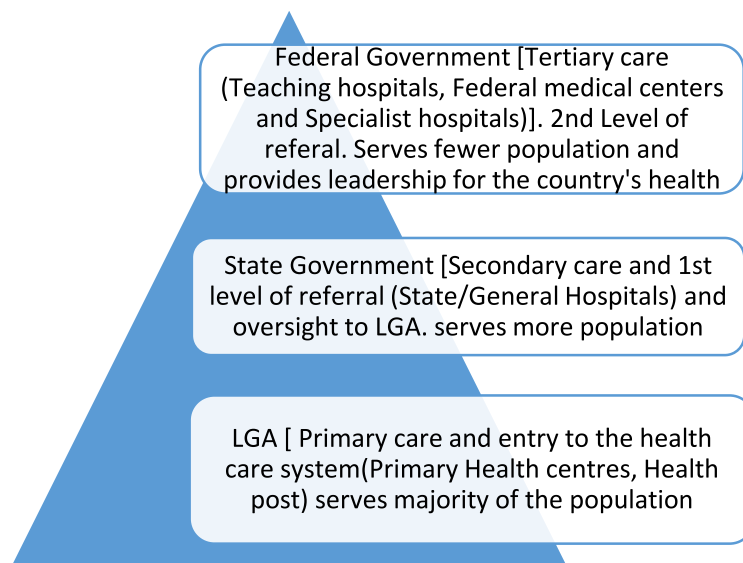

Figure 2. Pyramid showing the provision of health services by the three tiers of Government in Nigeria

Nigeria recently launched its National Policy on Health with a focus on "promoting the health of Nigerians to accelerate social economic development" (FMOH 2016). Communicable diseases still constitute the major cause of mortality in Nigeria as in other countries in Sub Saharan Africa, though there is a rising trend of non-communicable diseases. The National Policy on Heath which charts the policy direction for the country, also acknowledges the public health burden of Malnutrition and other nutritional disorders in Nigeria.

Malnutrition is said to underlie the cause of 53% of under 5 mortality in the country according to FMOH (2016). Table 1 below shows a declining trend in critical child health indicators in Nigeria. While child mortality has almost been halved within the last decade, not much has been achieved in neonatal mortality, which is a reflection of the state of health care service access and delivery in the country.

Table 1. Trends of critical health indicators in child mortality in Nigeria (Source: NDHS 2003, 2008 and 2013)

Indicators	**2003**	**2008**	**2013**
"Trends in child mortality(Per 1000 live births)"			
Neonatal mortality	48	40	37
Infant mortality	100	75	69
Post neonatal mortality	52	35	31
Child mortality	112	88	64
Under-five mortality	201	157	128
Trends in maternal mortality	About 1000/100,000 (WHO/UNICEF)	545/100,000	576/100,000

The life expectancy at birth (total) in Nigeria for 2015 is 53 years and this has gradually been increasing over the last decades, with that of females slightly higher than that for males (World Bank 2017).

Chapter 2

Problem statement, Justification, Objectives, Research Questions and Methodology

2.0 Problem statement and justification

Globally, malnutrition either directly or indirectly, is responsible for a third of deaths of children under 5 years (WHO 2017). Under nutrition accounts for 45% of child deaths, with 156 million and 40 million children stunted and wasted respectively, in 2015 (WHO 2016). Though this trends have seen significant reduction over the last two decade more still needs to be done to improve these indices.

Under nutrition of infants and young children less than 2 years old continues to be a major cause of concern globally, especially in most developing countries in the world. This is not just because of the importance nutrition plays in the physical growth and long term cognitive development of children at this critical phase in their lives, but also because it underscores their survival by lowering the morbidity, mortality and the risk of chronic diseases in adult life (WHO 2017).

This situation necessitated the development of the Global strategy for Infant and Young Child Feeding (IYCF) by the World Health Organisation (WHO) and United Nations children's fund (WHO 2002) to address it. This strategy promotes, supports and protects exclusive breastfeeding (EBF) for the 1st 6 months of life and introduction of complementary feeding (CF) while still continuing breastfeeding till the child is at least 2 years of age (WHO 2002). It includes the implementation of the following approaches

- Early initiation of breastfeeding within 1 hour of delivery
- Exclusive breastfeeding for the first 6 - months of life
- Introduction of nutritious complementary food usually solids from 6 months with the continuation of breastfeeding up to when the child is 2 years old among others. (WHO 2017).

These approaches ensures that children have access to optimal nutrition that will allow adequate growth and development for them to achieve their fullest potential in life.

The sustainable development goals (SDG) launched in 2015 to replace the Millennium development goals (MDG) that expired same year, has its 2nd goal focused on hunger and nutrition. Furthermore, the SDG has 56 indicators from 12 of its 17 global goals, which are highly relevant to nutrition indicators (IFPRI 2016).

Regionally, the burden of malnutrition is worse in Africa with about 37% of the population stunted, followed closely with South East Asia 32%. Though this trend has been declining over the last couple of decades, it still leaves about 9.3% of children in Africa wasted in 2015 (UNICEF, WHO, World Bank group 2016).

Nigeria has the highest number of stunted children in Africa and is number 2 globally with about 10 million stunted children according to the Federal Ministry of Health (2014). Thirty seven percent of children under 5 years are stunted with 19% of them severely stunted (NDHS 2013). The under 5 mortality rate in Nigeria in 2012, is 124/1000, with malnutrition said to be the underlying cause of 53% of these deaths (FMOH 2014). Figure 3 shows the trend of nutritional status of children from 2003 to 2013. While the cases of stunting reduced over the decade, cases of wasting and under nutrition surged within the same period.

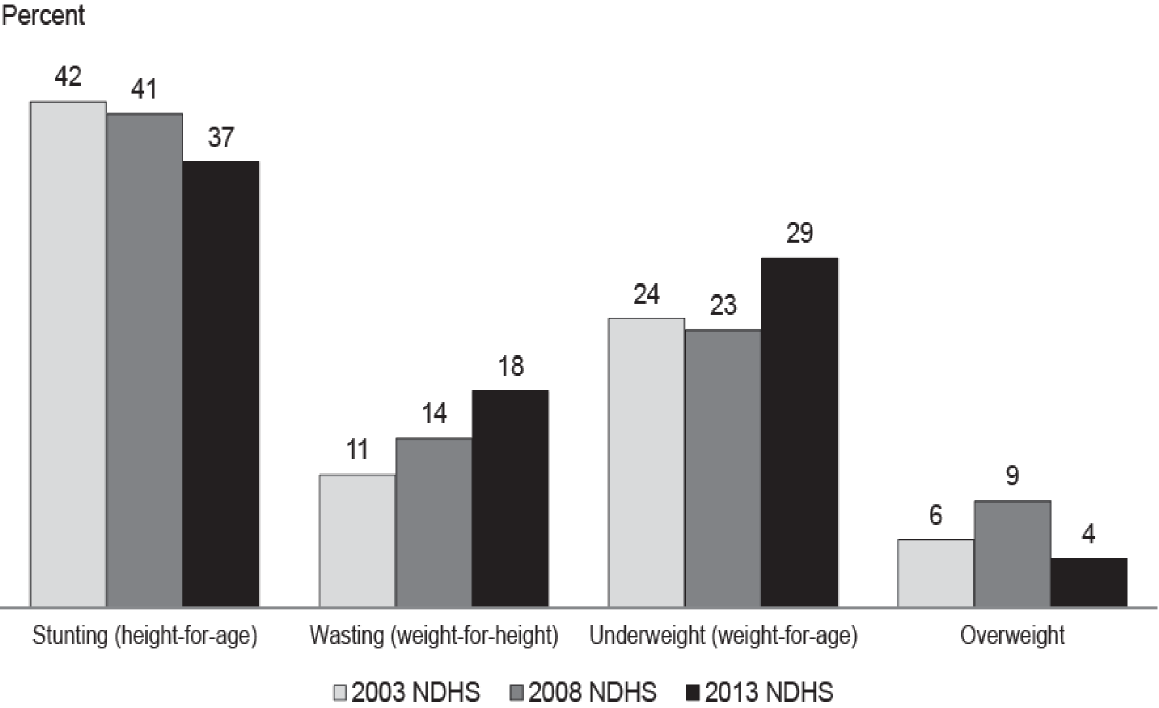

Figure 3: Trend in nutritional status of children under 5 years (2003 – 2013) in Nigeria (Source NDHS 2013)

Breastfeeding is observed to be a common practice in Nigeria, with 98% of children reported to have been breast fed at one point or the other in their lives (NDHS 2013). Yet in 2013, only about 17% of children were exclusively breastfed for 6 months (NDHS, 2013) compared to 45% globally (WHO 2017) as recommended by WHO. The trend of EBF in Nigeria has always been low from 17% in 2003 declining to 13% in 2008 and rising back to about 17% in 2013 (World bank 2017). This underscores the need to better understand current practice with the immediate- and underlying causes of malnutrition.

2.1 Research aim and Specific objectives

Overall, this study aims to analyse the current practices of exclusive breastfeeding by caregivers and identify factors affecting its adoption, following the Infant and Young Child Feeding (IYCF) recommendations by the Federal Ministry of Health. The results are used to make recommendations to improve the breast feeding practices in Nigeria. Specific objectives are:

1. To identify prevailing practices of exclusive breastfeeding practices among caregivers in Nigeria

2. To identify barriers and enablers of exclusive breastfeeding practices among caregivers in Nigeria

3. To identify programs aimed at improving exclusive breastfeeding practices among caregivers in Nigeria

4. To identify and suggest evidence based recommendations for policy formulation towards improving exclusive breastfeeding practices among caregivers in Nigeria

2.3 Research questions

- What are the current practices of exclusive breastfeeding by caregivers in Nigeria?

- What are the barriers and enablers to the practice of exclusive breastfeeding by caregivers in Nigeria?

- What are the programs currently being implemented to improve exclusive breastfeeding in Nigeria?

- What needs to be done to improve exclusive breastfeeding practices in Nigeria?

2.4 Methodology

This literature review searched for evidence in scientific papers, articles, reports and journals using Google and Google scholar. The following sources were explored in the course of this study: databases such as PubMed, EPIC, Cochrane Library, CINAHL and SCOPUS. In addition, organization sites such as those of the World Health Organisation, UNICEF and Federal Ministry of Health, Nigeria were searched. Keywords and combinations used for the search are: Exclusive Breastfeeding practice, infant feeding practices, nutritional programmes, childhood feeding practice, feeding programmes (Mesh); Nigeria (All fields).

The study focused on research conducted in Nigeria, with limited consideration given to studies conducted elsewhere (except for those with Nigeria in focus or within the context). The search included studies carried out and published from 2002 (cut off year) to 2017. This enabled me get more recent understanding and information of the situation following the development of the Infant and Young child feeding practice by WHO and UNICEF in 2002.

Qualitative and quantitative studies were reviewed without prejudice to any of them or the study designs used in the research. Only studies presented in English Language was considered. An additional inclusion criterion is the use of research work published in peer reviewed journals except for unpublished information sourced from credible organisational websites. This literature review provided answers to the research questions and only information relevant to these questions were included in the review.

The data was analysed using the UNICEF conceptual framework on malnutrition (UNICEF, 1990) see figure 4 below. The adoption of this framework for this study is based on its multi country acceptance and implementation over time. The framework takes a broad look at the causes of malnutrition at different levels with linkages to root causes. While the framework has been modified and reviewed by various authors, it remains the mainstay for identifying causes of malnutrition. It has also been used as framework to guide the design and implementation of strategies and interventions to address malnutrition globally.

In addition, the framework is used in Nigeria as basis for the development and implementation of the National Strategic plan of Action for Nutrition 2014 - 2019 (FMOH 2014), thereby making it very relevant for this study.

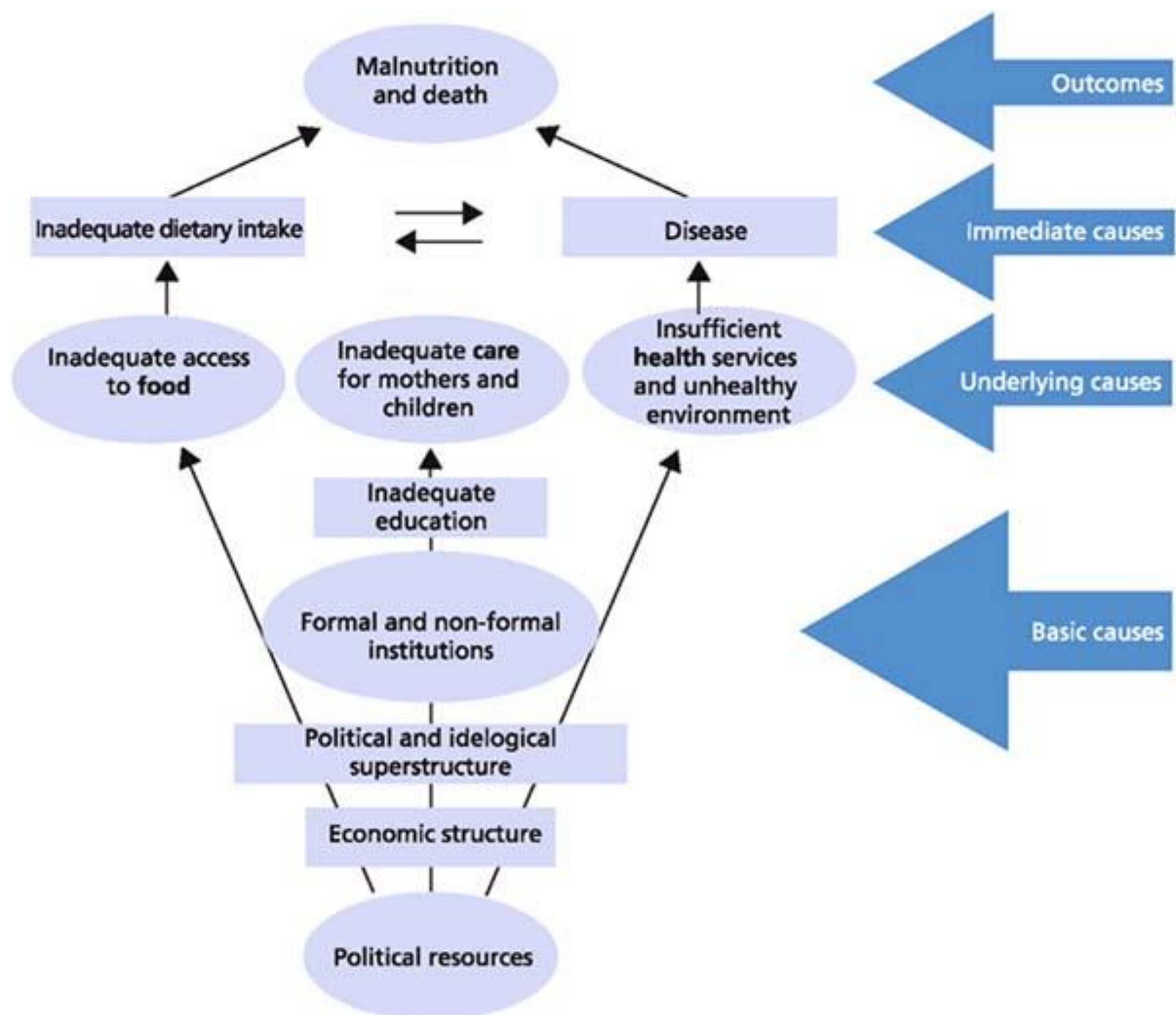

Figure 4: Conceptual framework for malnutrition redrawn by Mason John (Source: UNICEF 1990)

The framework (see figure 4 above) takes into account three broad levels of causes of malnutrition (basic, underlying and immediate causes) that determines a child's malnutrition status. The basic causes have a more general overview of causes occurring at the societal or country level including socio-political, economic and institutional factors that determine the context of the environment a child lives and grows. It also includes all the fundamentals or primordial issues that could affect the life of a child. These factors affects the population of people living within the geographical boundary at the country level or within a region or states in a country. It also include how resources and means of production are allocated within the society. Inappropriate administration of these factors result in the next level of causes which are the underlying causes which affects more specifically family units, villages or communities.

The underlying causes impacts on three essential areas which are: inadequate access to food, either due to lack of food or inability of families to purchase the food as a result of poor economic situation and poverty.

The second is insufficient health services and unhealthy environment which might be due to lack of access to health facilities, lack of medicine or trained personnel at the health facilities to provide primary health care services, which are needed by the vast majority of people. It could also be lack of access to appropriate lifesaving health education and promotion information and practices needed to improve uptake of proper sanitation and hygiene such as hand washing. Evidence has shown proper hand washing to be very effective in reducing the risk of diarrhoeal disease by 40%, and by 23% when adjusted for unblended studies (Freeman, et al. 2014). The third is the inadequate care for mothers and children, which could be due to lack of knowledge and awareness of proper and adequate feeding practices that mother might require before, during and after pregnancy. It also determines the practice of breastfeeding or exclusive breastfeeding and the type of food given as complementary food as perceived by the society based on the interplay of the basic and other underlying causes described earlier.

Exclusive breastfeeding of infants for the 1st 6 months of life is very economical to the mother and family, because it does not requiring funds to buy the breast milk. The breast milk offers very good nutrition (within the required categories and quantities) to children and also protects them from some common childhood diseases. The mother also shares from the benefits of EBF as it helps her in the resolution of her body after delivery, it also acts as a contraceptive method once the breastfeeding is done exclusively and consistently within 6 months.

The immediate causes of malnutrition are inadequate dietary intake and diseases. This literature review will focus on the component of the inadequate dietary intake, in this case the practice of EBF as a direct link to malnutrition. Ultimately, the underlying causes results into inadequate dietary intake by the child which could lead to diseases. Both or either of these situations ends with a malnourished child or child death. Inadequate dietary intake and disease tends to perpetuate themselves resulting in a cycle of diseases and inadequacy of dietary intake as illustrated in figure 5.

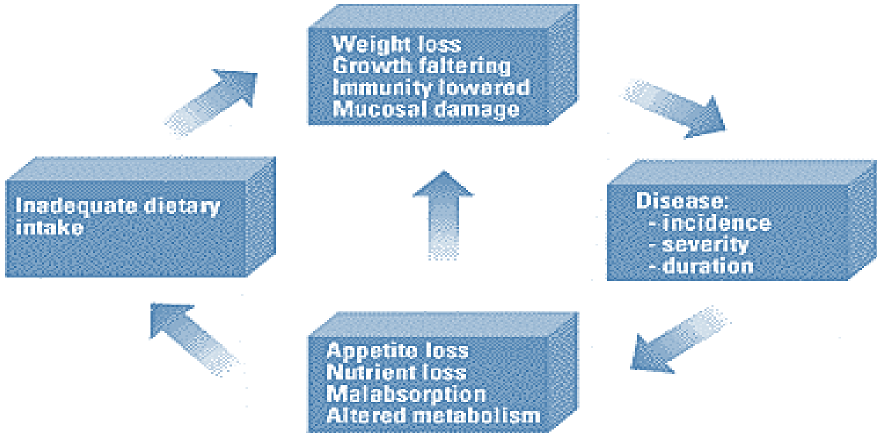

Figure 5: Cycle of inadequate intake and disease (Source: Tomkins and Watson, 1989)

Evidence are presented for each of the research questions with a brief description of the study, its findings and an unbiased argument of the review. Then conclusions are drawn, that addressed the research questions and provided recommendations.

2.5 Limitations of the study

The study focused on practices of exclusive breastfeeding pattern of feeding practiced by caregivers. The study did not consider complementary feeding and feeding practices in difficult circumstances such feeding in HIV infected children, premature or a sick new-born/child. Also, the study looked only at studies written in English language and in Nigeria, because evidence from other countries or parts of the world could be different and may not provide the context of a multi-ethnic, sociocultural and religious population of Nigeria. The study was limited by time, reviewing only studies done from 2002 to 2017. In addition, the study only reviewed literatures of studies that had 20 or more citations to ensure the study is of good quality, relevance and more acceptable within the research community.

Chapter 3

Study Results/ Findings

3.0 Prevailing practices of exclusive breastfeeding among caregivers in Nigeria

In a study conducted by Nwankwo and Brieger (2002) that sampled 411 women, to survey the breastfeeding practices and opinion of mothers of children aged 4 – 24 months in a rural community in Southwest Nigeria. They reported that all children were breastfed from birth up to age 24 months. During the first week of life, all the children in the study population received plain water, 72% received glucose water, 47% received herbal tea and by fourth month, 97% have taken herbs. Only 11% of the study population practise predominant breastfeeding (PBF) and not exclusive breastfeeding due to the early introduction of complementary meals and water as described above. Therefore, EBF as recommended was not practiced as described from the findings of this study (Nwankwo and Brieger 2002).

Onayade et al. (2004) carried out a comparative prospective study among 345 mother-infant pairs in Ile Ife, an urban centre in south western Nigeria. About 76.5% did exclusive breastfeeding for their children for up to age 6 months, 13.1% commenced their children on complementary feeding between the ages of 4 - 6 months while 10.4% completed breastfeeding for their children before the age of 4 months (Onyade et al. 2004). Though this study didn't provide evidence on the percentage of children that were breastfeed, however, it showed a high rate of EBF practice among the studied mothers.

Salami (2006) in a study involving randomly selected 600 mothers of children age 4 to 24 months, in an urban area of Edo State, South South Nigeria reported that 82% of mothers in the study population breastfeed their children. While complementary feeding was introduced early, with 66% supplementing breastfeeding with corn gruel and glucose water, 14% used herbal brew. Only 20% of total study population actually practiced the recommended exclusive breastfeeding for the first 6 months of life. (Salami, 2006).

Ogbona and Daboer (2007) in a cross sectional study to determine knowledge and practice of nursing mothers on exclusive breastfeeding in an urban area in North central part of Nigeria reported that about 82% (at n=470) defined correctly what exclusive breastfeeding means. Sixty-seven percent practiced exclusive breastfeeding as at time of study (Ogbona and Daboer 2007).

A retrospective study conducted by Agho et al. (2011) using data for 658 children from the Nigeria Demographic and Health Survey (NDHS, 2003) revealed that exclusive breastfeeding rate among infants younger than six months of age was 16.4% with infants zero to one month of age 26.1%; 18.5% for infants two to three months of age and only about 7.1% of those infants still being exclusively breastfed at five months of age. The study reveals that rate of exclusive breastfeeding was 4.5 folds lower than the 90% recommended by WHO/UNICEF for children less than six months of age (Agho et al. 2011).

More findings from the study of Agho et.al (2011) also revealed that at birth, 49% of children are being breastfed and water given, 7% are being breastfed plus water based liquid or juice, 10% were breastfed plus other milk, while 6% were breastfed plus complementary foods. Between 80-90% of children less than five months of age have received complementary liquids and foods in form of herbs, herbal extract drink, pre-lacteal feeding with either water, glucose water or milk formula (Agho et al. 2011).

A cross-sectional descriptive study involving women of child bearing age in Kware town of Sokoto, Nigeria conducted by Oche, Umar and Ahmed (2011). It reveals that 31% of mothers in the study population had adequate knowledge of exclusive breastfeeding. Fifty-three percent initiated breastfeeding immediately after birth, only 31% went ahead to practice exclusive breastfeeding up to the recommended first 6 month of life. Among the 47% that did not initiate breastfeeding immediately after birth, complementary feeding was practiced using boiled water, honey, animal milk and wash-out from writings of the Quran on slates (Oche et al., 2011).

A random study by Agunbiade and Ogunleye (2012) among 200 breastfeeding mothers, nurses and grandmothers (key caregivers) in Southwest Nigeria, reveals that only 19% of nursing mothers in the study population practiced exclusive breastfeeding up to age 6 months. Forty-five percent of nursing mothers were able to initiate breastfeeding immediately after birth while 29% did so within two hours after birth (Agunbiade and Ogunleye 2012).

Onah et al. (2014) in a study conducted among 400 mother-infant pairs in an urban location in South east, Nigeria reported that awareness and knowledge of exclusive breastfeeding was high among the surveyed mothers but its practise decreases with increasing infant age which are 72%, 58% and 20% among children aged 1-2 months, 3-4 months and 5-6 months respectively. Of the surveyed mothers, 19.8% initiated breastfeeding within 30 minutes after birth, 12.3% initiated breastfeeding within one hour after birth while about 30% initiated breastfeeding between one to six hours and beyond after birth. In the study population, 10.8% could not remember when they initiated breastfeeding after birth of their

children. Water or water-based solutions (glucose water) and infant milk formula were the most common feeds used for complementary feeding in the study (Onah et al. 2014).

From the review of data collected from the 2008 Nigeria Demographic and Health Survey (NDHS), Ogbo et al. (2015) reported that 14% (at n=10,225) of infants age 0-5 months were exclusively breastfed, 48% were predominantly breastfed, breastfeeding was initiated within one hour of birth among 38% of the infants while 15% were bottle-fed.

3.1 Barriers and enablers of exclusive breastfeeding among caregivers in Nigeria

Nwankwo and Brieger (2002) reported that the barriers by mothers to exclusive breastfeeding in the population it studied was the perception of mothers that breast milk alone is not sufficient for their children, they considered exclusive breastfeeding to be too physically draining to them. They also emphasized that their economic status have not permitted them to eat well enough as they would have wished, thus making them less fit to meet the nutrition demand of giving their babies breast milk as the only source of food for the recommended first six month. In addition, wrong advice by health workers on the use of glucose water for new-borns was also noted as an important barrier identified in the study (Nwankwo and Brieger 2002).

Onayade et al. (2004) reported the reasons given for non-practice of EBF and early introduction of complementary feeding to children before 6 months of life in Ile Ife, Southwest Nigeria as the following; insufficient breast milk produced by mothers (50.6%), perceived thirst in baby (21%) and the practice of breastfeeding was inconvenient for the mother. Also level of education attainment was observed to be a significant factor in promoting the practice of EBF among the mothers surveyed, 83% of those that practiced EBF had secondary school education and higher qualifications (Onayade et al. 2004).

Salami (2006) in her study reported age of mother, education, marital status, income, family background, proximity to baby, cultural affiliation and spousal influence as major factors that influence breastfeeding practise among mothers and caregivers (Salami 2006). Though the study identified the influencers of the practice of breastfeeding, however it stopped short of analysing the direction of influence (enablers or barriers) of the variables identified.

Ogbona and Daboer, (2007) reveals that factors that enabled knowledge and practice of exclusive breastfeeding among the study population was observed to be increase in the age and higher educational status of the

breastfeeding mothers. It reported that inability to breastfeed in public places was a barrier observed in about 20% of the nursing mothers.

Agho et al (2011) from their critical review of the Nigeria Demographic Health Survey (NDHS), 2003 reported that factors that enabled and encouraged exclusive breastfeeding among women in Nigeria includes; maternal education above secondary school level, partners education also above secondary school level, a married marital status of the breastfeeding mother, primigravidity, age of baby being less than three months, place of delivery being a health facility, health workers being the birth assistance during delivery, antenatal visit of mothers greater than four times during pregnancy (Agho et.al 2011).

Other enablers of EBF are from Agho et al (2011) are, wealth index (higher income level) of the breastfeeding mother and the family she belongs, women empowered to make decision for herself and her baby, living in the North central or South west zones of Nigeria. Maternal working status contributed though not too significantly to practice of exclusive breastfeeding among mothers and caregivers from the survey analysis. Male children are also more exclusively breastfed than female babies (Agho et.al 2011).

Oche et al. (2011) reported that reasons why some mothers delay initiating breastfeeding immediately after delivery was because of perception among mothers and their attendant caregivers (traditional birth attendants, grandmothers and indigenous midwives) that colostrum was dirty and harmful to the baby, delay in flow of breast milk in the mother, mother or child illness, while some others had no reasons for the delay. The study revealed that most mothers weaned their babies from breastfeeding mostly between the ages of sixteen months to twenty-four months, while only a few did at less than six month, which was said to be due to the onset of another pregnancy. Factors such as level of mother’s education, age of mother and mother’s availability (unemployed full housewives) did not influence the practice of exclusive breastfeeding among the study population (Oche et al. 2011).

Agunbiade and Ogunleye (2012) reveals in a study among caregivers in Nigeria (mostly nursing mothers, grandmothers providing care for children between 4 months to 24 months and nurses/midwives living in the study population) on factors that influence a mother to breastfeed. These factors are perception among caregivers that breastfeeding is an expected social norm from a mother (99%), perception that it helps babies to grow well and healthy (66%), perception that it provides baby with natural immunity (56%), perception of it’s use as a contraceptive for child spacing (34%), perception that breastfeeding is easy and comfortable (10%) and perception that it helps the mothers body return to normal.

Factors that helped a woman choose to breastfeed her child/children include encouragement from the nursing mothers' mother (84%), encouragement from mother-in-law (43%); social pressure on mothers (67%), personal determination/experience of mothers (65%), husbands encouragement (51%), nurses and midwives help, support and encouragement (46%); media information (35%); neighbours encouragement (30%) and members of religion affiliation encouragement (27%) (Agunbiade and Ogunleye 2012).

The reasons for discontinuation of exclusive breastfeeding among mothers include baby not satisfied after breastfeeding (29%), maternal health problems (27%), fear of infant becoming addicted to breast (26%), pains in the breast (25%), mother-in-law pressure to complement breastfeeding (25%), insufficient lactation to satisfy breast fed child (24%)(Agunbiade and Ogunleye 2012).

Other findings from the study by Agunbiade and Ogunleye (2012) are need to return to work or earn an income (24%); lack of support from husband (23%); breastfeeding was too tiring (22%); neighbours pressure to wean baby (22%); baby refused breast milk (22%); mother losing weight (20%); due to another pregnancy (13%); baby not gaining enough weight (11%); mother not feeding herself well (11%) (Agunbiade and Ogunleye 2012).

Onah et al, (2014) in a study on factors that influence exclusive breastfeeding among mothers in the Southeast region of Nigeria revealed that reasons mother did not give breast milk as first feed include delay in start of lactation (flow of breast milk), mother not healthy enough to breastfeed, relatives feed baby without mothers notice and contrary advice from mother's relatives. Of the three types of breastfeeding practised among the study population, complementary breastfeeding ranked highest among the participant followed by exclusive breastfeeding and predominant breastfeeding. Advice from health workers ranked highest among the determinant of 'the feeding method mothers would practice' followed by advice from friends and relatives, media, cost value, time factor and convenience to mother (Onah et al 2014).

Additional findings from Onah et al (2014) shows that factors that serve as barriers to the practise of exclusive breastfeeding among mothers of the study population include perception that the baby cries too much and thus not satisfied with only breast milk; perception that baby is not gaining weight as expected; pressure from family not to practice exclusive breastfeeding; work/business demand; perception that baby is thirsty and needs water; demands of exclusive breastfeeding is too much, feared baby will become addicted to breast milk and may refuse other feeds; felt water is essential to life and thus baby needed it alongside breast milk. Maternal education level; mode of delivery; baby's first feed after delivery; age of

baby were other factors that influenced exclusive breastfeeding among the study population (Onah et al 2014).

Ogbo et al. (2015) in their study reported some of the factors that acted as enablers of exclusive breastfeeding practice among mother of the study population to be educated mother above secondary school level. Others are older mothers above 35 years, mothers from middle income families and those others that attended greater than 4 antenatal care visits.

Table 2 below draws up a summary of the findings from the studies reviewed in the literatures presented.

Table 2: Analysis of results of literature reviewed using UNICEF conceptual framework

Study characteristics	Authors	Nwankwo and Brieger (2002)	Onayade et al. (2004)	Salami, (2006)	Ogbona and Daboer (2007)	Agho et al. (2011)	Oche et al.(2011)	Agunbiade and Ogunleye, (2012)	Onah et al. (2014)	Ogbo et al. (2015)
Study location	Geographical	South West	South West	South South	North Central	National	North West	South West	South East	National
	Urban/Rural	Rural	Urban	Urban	Urban	Both	Rural	Urban	Urban	Both
Study Sample		411	345	600	470	658	179	200	400	10,225
Current Practice of EBF		0%	76.50%	20%	67%	7.10%	31%	19%	20%	14%
Basic Causes	Inadequate Education	Higher education (above Secondary School education)								
		Enabler	Enabler	NA	Enabler	Enabler	NA	Enabler	Enabler	Enabler
	Formal and Non formal Institutions	Lack of conducive environment (work & societal) for breastfeeding, single motherhood and poor social support								
		NA	NA	NA	Barrier	Barrier	NA	Barrier	NA	NA
	Political and Ideological Superstructures	Negative perception about EBF and breastfeeding practice; Female children								
		Barrier	Barrier	NA	NA	Barrier	Barrier	Barrier	Barrier	NA
	Economic structure	Low socioecomonic status								
		Barrier	NA	NA	NA	Barrier	NA	NA	NA	Barrier
	Political Resources									
		NA	NA	NA	NA	NA	NA	NA	NA	NA

Underlying Cause	Inadequate access to food	Perception that babies are not satisfied after breastfeeding, baby crying								
		NA	NA	NA	NA	NA	NA	NA	Barrier	NA
	Inadequate care for mothers and children	Poor maternal health, Delayed flow of breast milk								
		NA	NA	NA	NA	NA	NA	Barrier	Barrier	NA
	Insufficient health services and unhealthy environment	Delivery outside the health facilities and lack of skilled assistance during birth								
		NA	NA	NA	Barrier	Barrier	NA	Barrier	Barrier	Barrier

3.2 Analysis of current Practice of EBF

Analysis of findings from the literature review shows the range of EBF practice of 0% to 76.5%. These varies depending on the study population, geographical locations and whether urban and rural setting of the studies, (see table 2 for more details). In addition, there is no pattern or trend of EBF practice both within the study population and location. About 6 (66%) of the studies reviewed falls around the National EBF rate of 17% (NDHS 2013), see figure 5 below.

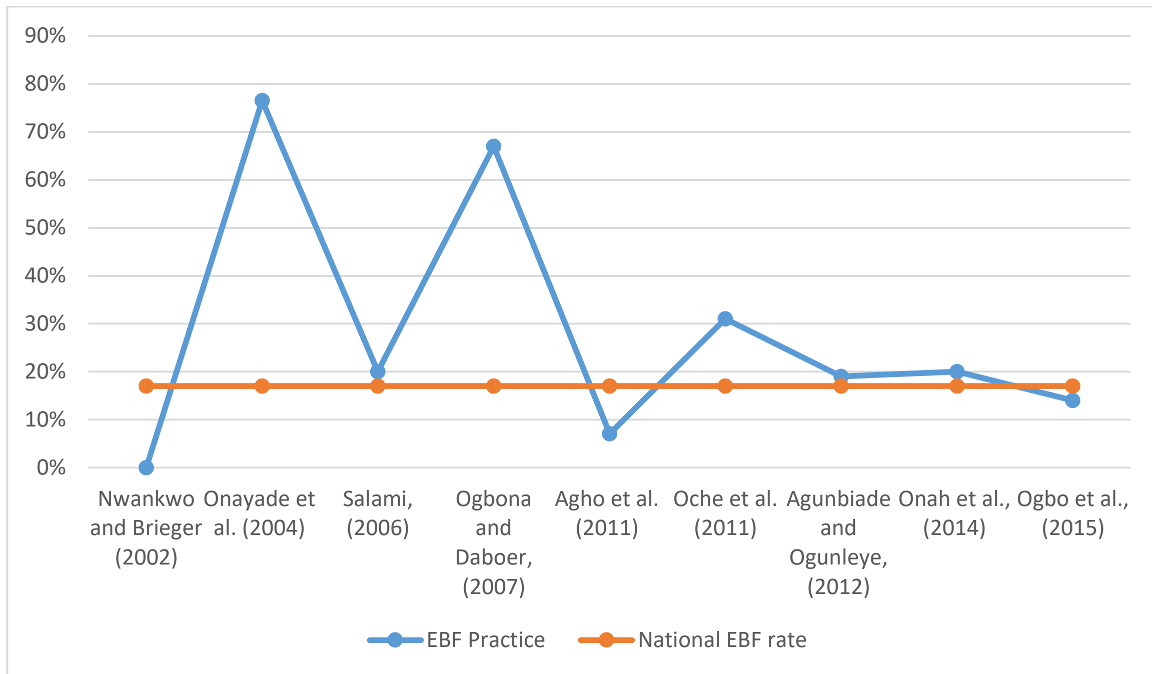

Figure 6: Pattern of EBF practice from literature review

3.3 Analysis of enablers and barrier on basic causes of EBF

3.3.1 Maternal education

Analysis of the basic causes, underlying and immediate causes from the UNICEF conceptual framework reveals that maternal education, with educational attainment at the secondary school level and greater than is the single most important factor enabling the practice of EBF in Nigeria. Most of the studies reviewed support this factor, which this lends credence to its importance in improving the practice of EBF.

3.3.2 Formal and non-formal institution

The formal or non-formal institutions which the studies reviewed which includes access and delivery at the health facilities that is cover by both the basic and underlying causes plays in a significant role in promoting EBF practice 55% (5/9) of reviewed literature presented in Table 2. In addition, other factors such as conducive environment for breastfeeding (at work

place or in the society), Single motherhood and social, community, family and peer support systems if available contributes to promoting EBF as revealed by the studies reviewed.

3.3.3 Political and ideological superstructures

The ideological structures which looks at caregivers perceptions has shown from the review to contribute to influencing the practice of EBF. Negative perceptions and societal culture which are contrary to the recommended early initiation of breastfeeding and EBF tends to act as a barrier to mothers EBF practice. In addition, sex of the child being female child tends to act as a barrier giving the emphasis the society puts on male children. This was shown in about 66% (6/9) of the studies reviewed. Addressing these factors would promote the adoption of the recommended practice of EBF.

3.4 Programmes aimed at improving exclusive breastfeeding among caregivers in Nigeria

Oche et al. (2011) reported that in Kware and Bodinga, Sokoto State, a pilot study that was done through the involvement of community volunteers, who are older women with strong influence on younger women in the community. The study showed that exclusive breastfeeding practice among nursing mothers greatly improved through this intervention. The community volunteers were trained on exclusive breastfeeding practise and were engaged to influence nursing mothers in the community to practice EBF (Oche et al. 2011).

The Social and Behavioural Foundation of Primary Health Care (SBFPHC), (2014) reported that the Nigeria government in response to the low prevalence of exclusive breastfeeding in Nigeria have established the Baby-Friendly Hospital Initiative (BFHI) in several States of the country. The BFHI have a mandate to implement National Agency for Food and Drug Administration Control (NAFDAC) marketing regulations that would ensure compliance by marketers. This is to ensure infant and young children supplemental foods and other designated products are not unduly promoted and encouraged above EBF. It does this through collaborating with advocacy groups including NGOs and civil society organisations to promote exclusive breastfeeding and proper complementary feeding practise among nursing mothers in Nigeria (SBFPHC 2014).

Save the Children International (SCI), Nigeria is a non-governmental organization with focus on maternal, neonatal, child health and nutrition projects. It has proposed the use of media to sensitize the public on the importance of exclusive breastfeeding practice. The expected outcome of this intervention method is to increase exclusive breastfeeding practise in Nigeria to 50% by 2015 (SBFPHC 2014).

The Lagos State Government in a bid to supporting the promotion of EBF within it’s work place, have put in place a support system for nursing mothers in Lagos State government agencies. This involves making crèche available so that nursing mothers can have access to it (SBFPHC 2014). This would serve to encourage mothers to effectively carry out recommended breastfeeding practice within the workplace at the same time carry out their duties at work. Though this intervention is laudable, but it is yet to be replicated across the country and in private organizations (SBFPHC 2014).

Alive & Thrive, Nigeria (2016) a non-governmental organization that have proposed and is implementing strategic approaches that would improve the practise of exclusive breastfeeding and complementary feeding among nursing mothers and caregivers of children in Nigeria. The approaches include advocacy to raise awareness on the impact IYCF practices have on health and economic wellbeing especially among opinion leaders. Also, interpersonal communication and community mobilization which include face-to-face, one-on-one conversation activities between frontline workers/community volunteers with mothers/caregivers of children on exclusive breastfeeding practice and complementary feeding. This approach was able to raise EBF practice in Vietnam from 19% to 53% over a 4 year period when it was deployed there (FHI 360 2017).

In addition, mass communication is used to reinforce IYCF messages using film industry to promote and model recommended breastfeeding and complementary feeding behaviours among caregivers. This addresses the wrong social norms and myths and misconceptions about breastfeeding through this medium (Alive & Thrive, 2016).

Chapter 4

Discussion

The results of the literature review shows evidence of the current practices of EBF in Nigeria. In addition it highlights factors that influences these practice with analysis clearly presenting the results of the various studies. This will be further interpreted based on the UNICEF conceptual framework with judgements made from the analysis to enable me draw up a conclusion that would guide practical recommendations to improve practice.

4.0 Basic Causes

4.0.1 Inadequate education

The importance of education as a major influence of the practice of by caregivers and also as a basic cause of malnutrition has been well described in this literature review. Educational level of the caregivers and by extension the community has a direct bearing on the adequacy of the care for both mothers and their children and the adequacy of their dietary intake. Agho et.al (2011) in the review of the NDHS 2003 described maternal and spousal education above the secondary school level as a contributing factor to EBF. This was also revealed by the studies conducted by Ogbona and Daboer (2007) who opined that the higher the educational attainment of the mother the more it enables the practice of EBF.

In most of these studies the secondary school level of education is set as the cut off level, with higher than secondary school education influencing EBF while lower than secondary school education acting as a barrier to EBF. However, this findings contrasted with the study conducted by Oche et.al (2011) in the northern part of Nigeria whose study didn't find a significance influence of education to the practice of EBF among the study population.

Overall, lack or low level education which here is referred to less than secondary school education contributed to low practice of EBF. These could allow for Myths and misconceptions about EBF to propagate as seen in the work by Oche et.al (2011) where mothers perceived that colostrum was dirty. This practice would therefore cause a delay in the initiation of breastfeeding, low EBF rate and early introduction of complementary feed against the recommendation of the IYCF programme.

4.0.2 Formal and Non formal institutions

The formal institutions could be seen as the health facilities and Government ministries and agencies that are saddled with the responsibilities of

promoting Infant and Young child feeding and also maternal nutrition and health. The non-formal institutions could be seen as the social and community support system in any given population that includes the norms, custom and beliefs of the people and the community structures that support and enhance communal living and in this case EBF.

These institutions are expected to guide and support families and caregivers on how to nourish themselves before, during and after pregnancy and their children from delivery onwards, to ensure a healthy mother and child. They provide both preventive and curative care for malnutrition and support access to food and livelihood as a critical component of malnutrition prevention. The review of the literature has shown clearly the influence of delivery in the health facilities and assistance of the health worker in supporting the practice of early initiation of breastfeeding and EBF as revealed by Onah et.al (2014) in which advice from health workers ranked highest among the determinant of the feeding method mothers would practice. Agho et.al (2011) described place of delivery being a health facility; health workers being the birth assistance during delivery, antenatal visit greater than four times during pregnancy as critical factors that promote EBF practice.

While the inadequate or lack of these health and support structures and institutions would lead to barriers in the practices of EBF as recommended. These is worse in the rural areas were health facilities are more distant from where people reside and also with fewer health workers to provide support. In addition, the social and community support systems also plays a critical role in the practice of EBF. Agunbiade and Ogunleye, (2012) study reveals findings that nursing mothers' mother (84%); encouragement from mother-in-law (43%); social pressure on mothers (67%) and husbands encouragement (51%) were significant factors that promoted EBF among mothers. Although, this same community support could also hamper EBF if not well managed as described by Agunbiade and Ogunleye, (2012) where the mother-in-law pressure to complement breastfeeding (25%) acted as a barrier to EBF.

This is an important finding that presenting opportunity for intervention that would be designed to improve EBF to look beyond the caregiver/ mothers but to other influential persons within the extended family and community to accept EBF and hence assist in driving the practice by mothers.

4.0.3 Political and Ideological Superstructures

The political and ideological superstructures are the innate values, customs and culture of a geographical area or a population that underscores the way they perceive and practice behaviours. This culture has a way of influencing

the nutritional status of a population since it determines the type of food they see as palatable and nutritious to serve as a meal to eat. It also looks at how they view the combination of foods and also how they interpret the practice of EBF in view of its appropriateness within their culture.

Some of the studies reviewed shows how the culture shapes perception. In the study by Nwankwo and Brieger (2002), the mothers had a perception that breastfeeding their babies alone was insufficient to support them. This thus, encourages early introduction of complementary feeds which in most of the studies is said to be water, water with glucose and animal milk. Agunbiade and Ogunleye, (2012) also looks at how culture influence this practice from their study. The perception that breastfeeding is an expected social norm for mothers act as an enabling norm that promotes and contributes to increasing the rate of breastfeeding in Nigeria. Though, this has been responsible for the largely practiced breastfeeding which is accepted as shown from analysis, but it has not been able to encourage and promote the exclusivity of breastfeeding babies with other feeds.

Onah et al (2014) shows that caregivers have a perception that babies crying after breastfeeding means the baby is not satisfied with the breast milk and that the baby also needs to drink water since water is essential to life. Also that EBF will make the baby addicted to breast milk thus making it difficult to initiate complementary meals at 6 months. All this perceptions are part of the cultural norms of the society and tends to truncate EBF while encouraging them to commence early complementary feeding against the recommended 6 months.

4.0.4 Economic structure

The economic status of the population and the country is described as a basic cause of malnutrition because of the influence it has on the underlying causes of inadequate access to food, inadequate care for mothers and children and also access to healthcare services. In addition to directly affecting the child's dietary intake and diseases. Countries and populations in the high to medium income level or socioeconomic class respectively have better economic means to acquire the needed resources in terms of nutritious food and quality healthcare services that would give them and their children the required dietary intake of nutritious food to live productive lives.

In the case of the mother, good nutritional status could enable them live healthier, thus been able produce adequate breast milk to practice EBF. In addition, their children would have access to nutritious complementary food that would ensure good health and growth as recommended by the Infant and Young child feeding programme.

On the other hand, caregivers and mothers from poor families or in the low socio economic status with low purchasing power may not be able to afford quality meals for themselves and their children. This occurring before pregnancy leads them to a background malnourished state which tends to be worsened by pregnancy. Thus making them unable to have adequate breast milk production for EBF or create a perception in them that they are not nourished enough to provide EBF, as described by the study of Nwankwo and Brieger (2002). In addition, this could also compromise the introduction of nutritious complimentary feeds expected at 6 months. Thereby resulting in early introduction feeds as CF all this could predispose the child to disease and inadequate dietary intake causing malnutrition.

The economic status of families also has a significant role to play in the access to health care services for antenatal and delivery services. As revealed by Onah et.al (2014) advice from health workers ranked highest among the determinants of the feeding method practiced by mothers. Agho et.al (2011) in their study described place of delivery, being a health facility; health workers being the birth assistance during delivery, antenatal visit greater than four times during pregnancy as strong enablers to early initiation of breastfeeding and EBF.

This was also similar to the findings of Ogbo et.al (2015) who review of the NDHS reveals that mothers from middle income level of families, those more educated which is a product of income level and attendance to more than 4 Antenatal visits as strong enablers to the practice of EBF. All these factors have direct bearing to the income level.

4.0.5 Political resources

The political resources looks at the type of governance structure in a country and how the means of production are distributed. Looking at who gets what, when and how. This has a lot of bearing on the fundamental income level or gross domestic product of the country, region, state or community. It determines the socioeconomic status of the population which in turn influences educational attainment, access to health care services and food.

Though evidence has shown that political stability in a country has a major role to play in determining the nutritional status. From the declaration of UNICEF (UNICEF 2017), It becomes obvious that majority of the countries it mentioned with critical level of malnutrition are in one state of violent crisis or the other. However, the case may not also be linked to instability because poverty occurring in stable countries contributes to a background condition of under nutrition as seen in Nigeria. This is because food, though may be available in the market, but the people might not be able to afford

it because of the low purchasing power. Another critical factor which is cross cutting and has been discussed above is access to healthcare services.

4.1 Underlying Causes

Having discussed the basic cause that that are linked to malnutrition. We will go to the next level of causes, which are the underlying causes that the direct or indirect consequence of the basic causes.

4.1.1 Inadequate access to food

This could be looked at in 2 ways which are: Lack of food and food products within the country or community. This usually, occurs due to famine or prolonged conflicts that impedes cultivation of food and peoples livelihood.

The second could be that the food is available but the means to purchasing (financial resources) is not available. Usually, this 2 situations are not exclusive and one could lead to the other. During periods of lack of food, could lead to an increase in the cost of available food items due to inadequate supply.

However, findings from our literature does not reflect a situation of violent crisis or famine situation. This maybe because we do not have very recent research conducted in the wake of the crisis within the Northeast zone. So the inadequate access therefore is more related to the inability of families to purchase food. This is due to high level of poverty as illustrated earlier, that 53% of the population leave on less than US$1.90 a day (World Bank, 2017).

In addition, findings from the literatures have linked low socioeconomic status as a barrier to EBF as seen by the works of Nwankwo and Brieger (2002), Agho et.al (2011) and Ogbo et.al (2015). The literature review also went further to link maternal poverty to inability to feed well and as such resulting in the perception by mothers that they cannot practice EBF because of their existing malnourished state.

4.1.2 Inadequate care for mother and children

The mother and the children in any society represent an important segment of the society because they determine and sustain the future generation and also tends to keep and imbibe the culture and values of that society. A lot of the factors that influence this underlying causes has to do with cultural and social norm of the environment and the influence of decision making powers that women have. Also, their economic empowerment to be able to take care of themselves and their children and take decisions that bother on how they live their lives according to Agho et al (2011).

This review showed the direct effect of inadequate care for mothers and children on EBF through poor maternal health and insufficient lactation to satisfy breast fed which compromises EBF as stated by Agunbiade and Ogunleye, (2012). In addition the influence of the extended family system can also act as a barrier to the practice of EBF such as pressure from mother in-law for complementary feeding to be introduced early (Agunbiade and Ogunleye 2012)) than recommended thereby, prematurely terminating EBF.

4.1.3 Insufficient health services and unhealthy environment

The inadequacy of access to quality health services which is a result of the insufficiency of health facilities or the inability to pay for these services are critical factors. This review have demonstrated it influences the practice of EBF and has been described also under the formal institutions.

The studies by Ogbona and Daboer (2007), Agho et al. (2011), Agunbiade and Ogunleye (2012), Onah et al. (2014) and Ogbo et al. (2015) reveals the direct linkage of delivery in health facilities, assistance by health workers and receiving of information/advise from health workers as being critical to early initiation of breastfeeding and the practice of EBF.

4.2 Immediate Causes

4.2.1 Inadequate dietary intake

The immediate causes of malnutrition are the causes that are directly associated with malnutrition. These causes are the direct results or combination of the various causes that has been described above. These consequence leads to the child inability to take adequate intake of meals through breastfeeding and also practice EBF from birth to 6 months.

4.2.2 Disease

Disease are a direct consequent of inadequate intake of food and also dietary intake. It is also a consequent of improper hygiene practices. Diarrhoea is a common disease condition that is associated with early introduction of complementary feeds and if the preparation is not done under good hygiene conditions.

Chapter 5

Conclusion and Recommendation

5.0 Conclusion

In conclusion, the study has been able to address the research objectives by reviewing relevant literatures as presented above to address the research questions.

The current practices of breastfeeding by caregivers in Nigeria has shown widespread acceptance and practice of breastfeeding as a social norm and a practice expected by mothers across the country. However, the review has shown that despite this acceptance, low levels of Exclusive Breastfeeding is prevalent across the country with the lowest coverage in the nationally represented samples. Also, this low EBF practice does not follow any pattern between urban and rural area and geographical locations. While this practice runs contrary to the recommendation of WHO (WHO 2002) as part of the Infant and Young child feeding strategy.

The low practice of EBF in Nigeria have resulted despite the WHO and Nigerian national policy to practice exclusive breastfeeding for 6 months and continuation of breastfeeding up to 2 years. Women in Nigeria were found to introduce complementary feeding much earlier than 6 months, has been a significant factor to the practice of EBF.

This literature study has identified both enablers for and barriers to promoting the practices of EBF in Nigeria. Looking at both the enablers of and the barriers to EBF, we can draw a conclusion that quite a number of factors acting together have been driving the low EBF practice in Nigeria. A lot of this factors fall under the weaknesses within the Government systems which include the following: Inability of the Government through its health systems to provide access to basic health services especially antenatal care to pregnant women thereby denying them adequate and proper health promotion and support services that is needed throughout the course of pregnancy and can correct sustains EBF.

Inadequate access to primary and secondary education which ought to be compulsory, as a backbone to having a more informed population, with the ability to make informed decisions and contribute to development. The third is the inadequate access to means of production and economic livelihood that empowers people financially to live above poverty and be more productive to themselves, their families and communities. These factors are fundamental and it is their weakness that creates an unconducive environment for EBF practice to thrive in Nigeria.

The informal systems and structures at the community and society level have their beliefs, cultures, social norms and perceptions which tends to

promote and sustain certain behaviours, though in line with their culture but are not in support of EBF practices. This undesirable behaviours build on the other factors discussed above to contribute significantly to the low levels of EBF practices across Nigeria. Once this is addressed at these levels, it would reshape the way people perceive and practice does deleterious behaviours and in turn EBF rate would improve. This would then be reflected at the family and individual levels within the community.

5.1 Recommendations

I therefore recommend the following approaches and interventions based on the findings of the literature review conducted that would support the improvement of EBF in Nigeria.

Governmental level

1. The need to reintroduce the Baby Friendly health Initiative with the Health facilities and health workers serving as the focal point of the program. This program will serves as an entry point for many without access to the health system, through community outreaches. The health workers would be well trained on the recommended practice of EBF with the broader IYCF and also with the necessary communication skills and information to counter the negative perceptions and myths driving the low practice of EBF.
2. There should be more encouragement by the Government to encourage school enrolment especially for girls with incentives to support this approach, in line with the sustainable development goals of education and girl's empowerment. This would be leverage on the increasing school enrolment programme of the Government and ensure that girls are adequately reached.
3. The provision of incentives that tends to encourage EBF practice by mothers. This programme would be integrated with the existing conditional cash transfer that provides incentives for antenatal care visits and delivery at the health facilities and would go further to encourage EBF. This incentives will empower mothers and caregivers and also support their livelihood

Community level

1. Involvement of community leaders and opinion leaders to act as EBF champions at the local Government and community level in other to get communal support, participation, acceptance and ownership of the programme and practice. This would create an open and supportive environment for mothers to breastfeed their babies and also to change negative perceptions and misconceptions

2. Engagement of community volunteers who will act as support to pregnant women and nursing mothers to identify and refer to for ANC during pregnancy. It would also encourage the practice of EBF by mothers in the community, through the provision of health promotion messages to address myths and misconceptions.
3. The introduction and Setting up of community support group for EBF to involve all breastfeeding mothers to act as a community level informal support and advocacy system that helps promote the practice of EBF and IYCF and also creates avenue for breastfeeding mothers to share their experiences and support the creation of safe breastfeeding place in the markets and social places.

Family

1. Encouragement of breastfeeding mothers spouses, their mother's and mother in-laws and other close influential relatives to participate in some antenatal visits to get more understanding of the benefits of EBF and the also get their buy-in and support for the practice at the home and family level.

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Appendix 1: Template for analysis of Literature using UNICEF Conceptual framework (1990)

Study characteristics	Authors									
Study location										
Study Sample										
Current Practice of EBF										
Basic Causes	Inadequate Education									
	Formal and Non formal Institutions									
	Political and Ideological Superstructures									
	Economic structure									
	Political Resources									
Underlying Cause	Inadequate access to food									
	Inadequate care for mothers and children									
	Insufficient health services and unhealthy environment									