

**SOCIO-DEMOGRAPHIC FACTORS INFLUENCING
EXCLUSIVE BREASTFEEDING AMONG REPRODUCTIVE
WOMEN IN SOUTH WEST, NIGERIA.**

Mercy olajumoke, AYILARA

DSS/14/1805

**A RESEARCH PROJECT SUBMITTED TO THE DEPARTMENT OF
DEMOGRAPHY AND SOCIAL STATISTICS, FACULTY OF SOCIAL
SCIENCES, FEDERAL UNIVERSITY, OYE-EKITI**

**IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE
AWARD OF BACHELOR OF SCIENCE (B.Sc.) HONS IN
DEMOGRAPHY AND SOCIAL STATISTICS**

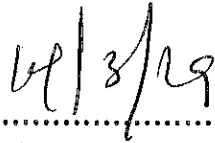
DECEMBER 2018

CERTIFICATION

This is to certify that AYILARA OLAJUMOKE MERCY of the Department of Demography and Social Statistics, Faculty of Social Sciences, carried out a Research on the topic **SOCIO-DEMOGRAPHIC FACTORS INFLUENCING EXCLUSIVE BREASTFEEDING AMONG REPRODUCTIVE WOMEN IN SOUTH WEST, NIGERIA** in partial fulfillment of the award of Bachelor of Science (B.Sc.) in Federal University Oye-Ekiti, Nigeria, under my supervision.



.....
MR. B.I. BABALOLA
PROJECT SUPERVISOR



.....
DATE



.....
DR. NTOIMO.LORRETTA .F.C
HEAD OF DEPARTMENT



.....
DATE

.....
EXTERNAL EXAMINER

.....
DATE

DEDICATION

This project is dedicated to the lord Jesus, the author and the finisher of my faith and to my loving parent Elder and Deaconess Olu Ayilara for giving me the opportunity to pursue my dreams.

ACKNOWLEDGEMENT

Except the lord build the house, they labors in vain those that build it!

My sincere appreciation first goes to my supervisor, Mr. Babalola .B. who not only supervised me, but also takes me as a daughter to be nurtured and to be put on the right path to success. I appreciate the readiness to listen to me even when he was too busy. Thank you sir! I say that God will continue to uplift you even more than where you could ever think of. A special gratitude also goes to the head of department of Demography and Social Statistics, Dr.(Mrs) Ntoimo.L.F.C , you have poured on me out of your wealth of knowledge , God will continue to uplift you ma, I love you so much you are indeed a mother. Then to all lecturers in the department of Demography and social statistics, who in one way or the other nurtured me in the field of demography and social statistics, I really appreciate. I appreciate Dr Odusina E. K., Mr Shittu S. B., Mr Babalola B. I. Mr. Abatan S. M., Miss Alex-Ojei C., and several other people outside the department whose names cannot be mentioned. Thanks for your selfless service in pouring on me from your abundant wealth of knowledge.

My sincere gratitude goes to my ever supporting parents Elder and Dns Ayilara, for there loving care on me since my childhood days up till this moment. I really appreciate them for their concern for my physical, emotional and spiritual growth. I love you so much and I pray that our God in his infinite mercy grant you good health and long life, May you live long to reap the fruits of your labor.

My sincere appreciation goes to my best friend, Osanyingbemi Oluwagbenga Augustine who have stayed with me and encouraged me since my first day in this institution, I pray that my God will uphold, protect and enrich you more, I can't thank you enough. And to my siblings Dapo and Omolola Ayilara, I thank you guys for loving and believing in me, I love you two. To my friends especially Abiodun Oluwaseun Dorcas, Olowolafe kikelomo blessing, Ajayi Oluwatosin, Oluwasaanu Gold Damilola, Owolola Kudus, Adegoke Adetola, Kehinde abimbola, Adegun Adenike grace, Oyedele motunrayo, Olorunsola Taiwo I love you all.

Lastly my profound gratitude goes to all BSF members for their word of encouragement and love. To space here will not be enough to mention everyone but I really appreciate you all and I will surely miss you all.

All glory, honor and appreciation goes to the lord God almighty who has known me before I was formed in my mother's womb and for the salvation of my soul. To him be all adoration and praise forever and ever. Amen

TABLE OF CONTENT

	Page
Title page.....	i
Certification.....	ii
Dedication.....	iii
Acknowledgment.....	iv
Table of content.....	v
Abstract.....	viii

CHAPTER ONE

INTRODUCTION	(1-9)
1.0 Background to the study.....	1
1.1 Statement of the research problem.....	3
1.2 purpose of the study.....	5
1.3 Objectives of the study.....	5
1.4 Research questions.....	5
1.5 Justification of the study.....	6
1.6 Significance of the study.....	7
1.7 Definition of operational term	8

CHAPTER TWO

LITERATURE REVIEW

2.0	Introduction.....	10
2.1	Breastfeeding.....	10
2.2	Exclusive breastfeeding.....	12
2.3	Breastfeeding and Exclusive breastfeeding practices.....	14
2.4	Socio Economic and socio demographic factors of Exclusive Breastfeeding.....	16
2.5	Women empowerment and child health	19
2.7	Benefit of Exclusive Breastfeeding	21
2.8	Theoretical orientation.....	22
2.8.1	Maslow theory of breastfeeding	22
2.8.2	Interactive theory of breastfeeding.....	23
2.9	Conceptual framework.....	24

CHAPTER THREE

RESEARCH METHODOLOGY

3.0	Introduction.....	25
3.1	Description of study area.....	25
3.2	Research design.....	27
3.3	Target Population.....	27
3.4	Quantitative Data source.....	27
3.5	Methods of data collection.....	28
3.6	Sample size.....	31

3.7	Method of data analysis.....	31
3.8	Measurement of Variables.....	32
3.9	Data Management and Variable Measurement.....	32
CHAPTER FOUR		35-44
PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA		
4.0	Introduction.....	35
4.1	Univariate analysis.....	37
4.2	Bivariate analysis.....	40
4.3	Multivariate analysis.....	42
4.4	Discussion of findings.....	42
CHAPTER FIVE		45-46
5.0	Introduction.....	45
5.1	Summary.....	45
5.2	Conclusion.....	46
5.3	Recommendations.....	46
References		48-52

Abstract

Breastfeeding is the optimal form of infant nutrition and has multiple health and economic benefits for women and children, especially those from low-income families (Raiser, Alexander, & O'campo, 1999). Although any amount of breast milk is beneficial, there is a dose response effect in which the benefit of breastfeeding are maximized with at least six months of exclusive breastfeeding (Raiser et al., 1999). Exclusive breastfeeding for the first six months of life is globally recognised as the most effective preventive intervention for ensuring child survival. This intervention alone can reduce childhood mortality by up to 13%, thus contributing significantly to attainment of the millennium development goal no 4 (WHO, 2013; Ladoke et al, 2014).

While breastfeeding initiations rates in the united states have increased over the past years by 3.6% (Bonet et al., 2013), women who considered low-income (Medicaid eligible) and participate in the women, infants, and children(WIC) program are almost 12% less likely to initiate breastfeeding than the general population , and less likely to continue for six months to a full year(Bonet et al., 2013). While all population experience barriers related to breastfeeding initiation, duration, and exclusivity, low-income populations may be affected by these barriers more so than other population due to socio economic restraints. Mothers who are low-income and mothers who participate in the WIC program, are likely to initiate breastfeeding and are at a higher risk of early weaning (CDC, 2014).

The main Objectives of this research is to explore the relationship between socio demographic factors and exclusive breastfeeding among women in south west Nigeria. There are various literatures that exist on exclusive breastfeeding written by various authors and in different languages and countries for various purposes. In the last two decades, child mortality has decreased considerably, but close to 7 million children less than five years of age still die each year, mainly from preventable causes. Of those, newborn deaths now represent nearly half of all child deaths under five years (WHO; 2015). The category of eligible respondents in this study focus currently on women aged 15-49 years in south-west, which was collected by the Nigeria Demographic Health Survey (NDHS) 2013. The data from the NDHS 2013 data set will be processed by using STATA 13.0 which is statistical software. Analysis for the quantitative data will be conducted at three levels; at first level, a univariate will be carried out, and at the second level, a bivariate level of analysis would be carried out and lastly a multivariate level of analysis would be carried out. Without any doubt that there is significant influence of maternal socio-demographic characteristics of women age 15-49 years on exclusive breast feeding, p-value less than 0.05 (Alemayehu *et al.*, 2009). Thus this study conclude that base on the facts from the result that some factors such age of women, ethnicity, child spacing on exclusive significant.

CHAPTER ONE

INTRODUCTION

1.0 BACKGROUND TO THE STUDY

Breastfeeding is the optimal form of infant nutrition and has multiple health and economic benefits for women and children, especially those from low-income families (Raiser, Alexander, & O'campo, 1999). Although any amount of breast milk is beneficial, there is a dose response effect in which the benefit of breastfeeding are maximized with at least six months of exclusive breastfeeding (Raiser et al., 1999). Breastfeeding is acknowledged as the optimal way to feed infants for the first six months by National and many other health organisations (American Academy of Paediatrics [AAP], 2007; United Nations Children's Fund, 2006; World Health Organisation [WHO], 2008). Despite its countless benefits to children and mothers, the continuation rates of exclusive breastfeeding (EBF) are low in the United States (Centres for Diseases Control and Prevention [CDC], 2014c; Dudenhausen, 2014; Silfverdal, 2011). It is essential to understand how multiple factors affect breastfeeding practices in order to improve the duration of exclusive breastfeeding. "Exclusive breastfeeding is defined as no other food or drink except breast milk (which can be milk expressed by hand/pump or milk from a wet nurse) for the first six months of life. However, exclusivity does allow for the infant to receive oral rehydration solution (ORS) Vitamins, Minerals, and Medicines (WHO, 2008). Exclusive breastfeeding is the most effective form of infant feeding for the first six months of life. The United States Breastfeeding Committee (USBC) and Academy of Pediatrics (AAP) state that breastfeeding is the psychologically normal form of infant feeding (Labbok & Taylor, 2008). There are factors associated with sub optimal breastfeeding and complementary feeding practices have been identified in various settings, which are: maternal characteristics such as age, marital status, occupation and education level, antenatal and maternity health care; health education and media exposure; Socio economic status and area of residence and child health

characteristics including birth weight, method of delivery and birth order(Roig et al,2006). Globally, there is a declining trend of Exclusive breastfeeding. Reason for declining breastfeeding include lack of confidence on the part of mothers that the child is getting enough, increased workload especially on the urban woman which makes them to be separated from their babies for longer hours, decline in social support, discomfort on the part of the mother by breastfeeding in public or intense promotion of commercial milk formula. In Nigeria, Exclusive breastfeeding rates remain low as 17% percent (NDHS, 2013) and the challenges is how to scale it up to the level of the universe. The implication is that percent of children in Nigeria are being exposed daily to an increasing risk of diseases and have lowered immunity because they are being given other food other than breast milk before the ages of six month (Adisa,2007). In Nigeria, complementary foods are introduced as early as the first month with 10 percent of infants who are younger than two months of receiving some solid or semi solid food (NDHS,2009). Too early introduction of complementary foods are likely to displace the more nutritive breast milk in the child's diet. This coupled with unhygienic preparation and storage conditions predisposes the many infants to diarrheal, causing a negative impact on growth and development (NDHS,2006) Around the world today, people want to live a healthy lives, raise well-nourished children and provide them with opportunities in the future. Today, the increasing concern over maternal and child health has much emphasis on the multiple advantage of breastfeeding (Derek,2002). Therefore breastfeeding should be nurtured and encouraged by healthcare professionals and public health campaigns to create normality within society. Several organisations validate breast milk as the ideal source of nutrition for infants(American Academy of family physicians [AAFP],AAP,2007,United states Breastfeeding committee [USBC],2016;United states Department of health and human services[USDHHS],2009; World health Organisation[WHO],2008). Exclusive breastfeeding for the first six months of life is globally recognised as the most effective preventive intervention for ensuring child survival. This intervention

alone can reduce childhood mortality by up to 13%, thus contributing significantly to attainment of the millennium development goal no 4 (WHO,2013; Ladoke et al,2014).

1.1 STATEMENT OF PROBLEM

While breastfeeding is the optimal form of nutrition for infants, it can present many challenges to mothers, especially those of low income. While breastfeeding initiations rates in the united states have increased over the past years by 3.6% (Bonet et al., 2013), women who considered low-income (Medicaid eligible) and participate in the women, infants, and children(WIC) program are almost 12% less likely to initiate breastfeeding than the general population , and less likely to continue for six months to a full year(Bonet et al., 2013). While all population experience barriers related to breastfeeding initiation, duration, and exclusivity, low-income populations may be affected by these barriers more so than other population due to socio economic restraints. Mothers who are low-income and mothers who participate in the WIC program, are likely to initiate breastfeeding and are at a higher risk of early weaning (CDC,2014). Breastfeeding rates among Medicaid and WIC population remained consistently lower,at 57% initiation compared to 74%in populations who have a higher income(CDC,2014). Low income mothers are less likely to breastfeed for any duration compared to mothers with higher incomes. Motherswho have a lower education level or are not married are also likely to breastfeed their infants compared to mothers who are married or are graduates(United States Breastfeeding Committee[USBC],2016).

Globally, according to DHS 2016, 21.9% of children are exclusively breastfed. Poor breastfeeding and complementary feeding practices have been widely documented in the developing countries. Only 39% of infants in developing countries and 25% in Africa are exclusively breastfed for the first six months of life. Additionally, 6% of infant in developing countries are never breastfed (Lauer, 2004). In Nigeria,

according to the National Demographic and health survey 2008-2009, of children under the age of six months are exclusively breastfed (CBS,2003). Mothers who deliver in a health facility in most cases receive breastfeeding counselling especially with the introduction of the Baby friendly initiative (BFHI) from 2007 aimed at promoting optimal feeding practices. The BFHI has been found to be effective in several settings in the developing world (Braun et al,2003). Since BFHI has been introduced, there has been potential improvement in the proportion of children exclusively breastfed from in 2008 to in 2013 (NDHS,2013). Despite this, the MDG 4 has not been attained yet. The low rate of Exclusive breastfeeding in Nigeria may, in part, be due to traditional beliefs, practices and rites, for example, in Yoruba and bini societies, EBF is considered dangerous to the health of the infant who is thought to require water to quench thirst or to stop hiccoughs. Furthermore, most women deliver outside health facilities across communities.

1.2 PURPOSE OF THE STUDY

The purpose of the study is to establish the socio demographic factors that are influencing exclusive breastfeeding practices of children for the first six months after birth in south west Nigeria.

1.3. OBJECTIVES OF THE STUDY

The main Objectives of this research is to explore the relationship between socio demographic factors and exclusive breastfeeding among women in south west Nigeria.

1. To identify the socio-demographic status and characteristics of women in south west Nigeria.
2. To test the association between maternal socio demographic characteristics and exclusive 8omen in southwest, Nigeria.

1.4 RESEARCH QUESTIONS

In order to respond to the objectives raised, the study sought to answer the following questions:

- What are the socio-demographic status and characteristics of women in south west, Nigeria?
- What is the association between maternal socio demographic and exclusive breastfeeding in south west, Nigeria?
- What are the effect of socio demographic characteristics on exclusive breastfeeding among women in southwest Nigeria?

1.5. JUSTIFICATION OF THE STUDY

Studies have been conducted on breastfeeding in different part of the world in respect to socio demographic and maternal characteristics, but up to now, no data have been reported on the levels of awareness of mothers towards breastfeeding and the practices in regards to the south western part of Nigeria. In fact in the country like Nigeria with many ethnic groups and different cultures, where there has been challenges with health sector and long civil war. It will be good to explore the different practices and level of knowledge of mothers on exclusive breastfeeding and factors affecting it. Such local information can be used to correct certain beliefs that adversely affect the practice which promote and support excluding breastfeeding. This can easily be done during breastfeeding campaigns and women group meetings. This study is being done therefore to access mothers knowledge and practices that support excluding breastfeeding, to compare them with other geo political zones in the country and to identify factors that affect breastfeeding and make suggestions on how to improve the practices and reduce breastfeeding obstacles. There is limited information in south west Nigeria on factors influencing exclusive breastfeeding on child health apart from the information of family planning, child mortality and HIV positive children. This study will examine the factors that affect exclusive breastfeeding in southwest Nigeria.

1.6 .SIGNIFICANCE OF THE STUDY

The benefit of exclusive breastfeeding encompasses more than simply mother and baby, and can be credited as the reason for positive and economic changes on a local and global level (Murtagh & Moulton,2011). Breastfeeding is an unparalleled way of providing ideal food for the healthy growth and development of infants; it is also essential part of the reproductive process with important implications for the maternal health (WHO,2008). Infants who are breastfed have a decreased risk of developing upper respiratory infections, otitis media, diarrheal illnesses, diabetes mellitus, allergies, asthma and sudden infant who are fed formula (AAP,2007). In the United Nation states an infant who is fed formula costs the health care system an additional \$331-475 during the first year of life, paralleled to an infant who is breastfed(Ball & Wright,1999). Bartick and Reinhold(2010) estimated that if 90% of ,mothers in the U.S. breastfed their babies exclusively for six months, it would save the U.S \$13 billion dollars a year and prevent 911 deaths annually.

The findings of this research will generate information on factors influencing exclusive breastfeeding of children from birth to six month of life. They will form a basis for training mothers and caregiver on the importance of adhering to breastfeeding recommendations. It will also be useful to the ministry of health and organizations concerned with infant and young child feeding in determining the type of interventions to design in order to improve maternal and child health in south west, Nigeria.

1.7 DEFINITION OF OPERATIONAL TERMS

1. Exclusive breastfeeding: Exclusive breastfeeding is defined as no other food or drink, not even water, except breast milk for six months of life; however, allows the infant to receive oral rehydration solutions (ORS drops and syrups(WHO,2001).

2. Full Breastfeeding: Full breastfeeding means that the infant's predominant source of nourishment has been breast milk. However the infant may have received liquids, ritual fluids and ORS, drops or syrups (Stanway, Penny, & Andrew(2007).
3. Initiation of breastfeeding: initiation of breastfeeding occurs when a mother breastfeeds an infant, either from the breast or with expressed breastmilk, but also describes the mother who breastfeeds one or two times before weaning the infant (Stanway et al.,2007).
4. Duration of breastfeeding: it indicates that the length of time that a mother maintains the breastfeeding relationship; this can be for only a few only a few days or as long as a few years (WHO, 2009)
5. Partial or Token breastfeeding defines a mother who provides a significant amount of formula to the infant daily and only breastfeeds occasionally(penny et al.,2007)
6. Complementary feeding: this refers to feeding of a child in relation to breast milk.(Webster dictionary).
7. Infant mortality: infant mortality refers to the death of the young children, typically those less than one year of age. It is measured by the infant mortality rate(IMR) which is the number of deaths of children under one year of age per 1000 live births.
8. Socio-demographic characteristics include the characteristics of a population. Generally characteristics such as age, gender, ethnicity, educational level, income, locations etc.(American hospital)

9. Maternal Characteristics: This refers to the educational level, parity, marital status, morbidity, mode and place of delivery.

10. Health: health is defined by Webster Dictionary as a state of bodily or mentally, well being, normal condition of mind or body in which all part and facilities perform their functions daily, easily satisfactory, soundly: freedom from disease, disorder, pain or weakness”

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

Chapter two entails review of relevant literature on exclusive breast feeding. A general overview of breastfeeding is given. The chapter then describes the global situation of breast feeding in general and narrows down to exclusive breast feeding. Further on, it describes the situation from a continental, Sub Sahara Africa, Nigeria and south west Nigeria perspective.

There are various literatures that exists on exclusive breastfeeding written by various authors and in different languages and countries for various purposes. In the last two decades, child mortality has decreased considerably, but close to 7 million children under five years of age still die each year, mainly from preventable causes. Of those, newborn deaths now represent nearly half of all child deaths under five years (WHO; 2015). Immediate breastfeeding: early and exclusive breastfeeding helps children to survive but it also support healthy brain development, improves cognitive performance and it is associated with better educational achievement at age five (WHO; 2015).

2.2 BREASTFEEDING

There is strong evidence that breastfeeding has excellent health benefit to mother, infant, community, and the nation(AAP,2005;WHO,2001). Breastfeeding is acknowledged as the optimal way to feed infants, and it provides health benefits to mother and infants. Many nation and international health organisations recommend exclusive breastfeeding for for atleast six months and continued breastfeeding for atleast the first year or aslongas desired by both mother and child (AAP,2005;United nations Children's Fund,2006;WHO,2003). The literature shows breastfeeding is the perfect source of nutrition for infants and children.

Both the health and the psychological benefits are well documented in the research. Breastfed babies have fewer respiratory infections, fewer gastrointestinal upset such as diarrheal, fewer ear infections, and fewer allergies (Cadwell & Turner-Maffei, 2014). They also tend to have fewer dental cares, improved immune systems, and are less likely to have juvenile diabetes. Breastfeeding also improves cognitive development in infants. Oddy(2005) found an association in his research between breastfeeding for six months or longer and a reduction in mental health problems throughout childhood and adolescent years. Breast milk is species specific, therefore making it compatible with the human infant's nutritional needs. Breast milk is easy to digest and contains every element necessary for health, growth, and development (Bowes, 2002). Although the health benefits of breastfeeding are well documented and initiation rates have increased over the past 20 years, most mothers wean before the recommended six-month postpartum because perceived difficulties with breastfeeding rather than due to maternal choice. Women least likely to breastfeed are those who are young, have a low income, belong to an ethnic minority, are unsupported, and are employed full-time, decided to breastfeed during or late in pregnancy, have negative attitudes towards breastfeeding and have low confidence in their ability to breastfeed. Support from mother's partner or a non professional greatly increases the likelihood of positive breastfeeding behaviours(dennis, 2002). Women who enjoyed support from family and friends are likely to breastfeed longer (Wambach & Cohen,2009). Presence of mother in-law in the home increased breastfeeding self efficacy and have an association for continuing breastfeeding (Ku & show, 2010). Social support by women's partner may promote, and extend breastfeeding(Lamontage, Hamelin, & St. Pierre,2008; e meedya, Fahy,& Kable,2010 Scott, Landers, Hughes,& Binns,2001; Tan,2011;Brown,Raynor,& Lee,2011).

Grandmothers are influential in infant feeding choices and positively influence breastfeeding, especially if they are aware of recommended practices (Kerr, Dakishoni, Shumba, Msachi, & Chirwa, 2008; Grassley & Eschit,2008).

2.3 EXCLUSIVE BREASTFEEDING

Exclusive breastfeeding is defined as feeding infants only breast milk be it directly from breast or expressed, with no addition of any liquid or solids apart from drops or syrups consisting of vitamins, mineral supplements or medicine or nothing else. Several studies have shown that exclusive breastfeeding for the first six months of life plays a great role in preventing morbidity and mortality. However, in the united states, a large portion of infants are not exclusively breastfed according to the infant feeding recommendations, and infants that come from low income families are even more likely not receive exclusive breastfeeding(WHO,2001). Exclusive breastfeeding has many health benefits suchas nutritional development, psychological, neurological, social, environmental, and immunological benefit for the infants, mother and the community (Wiener & Wiener, 2011). The ecological benefit of breastfeeding to society include decreased energy demands for the production of infant formula and less solid waste such as Formula cans and bottles(Ball & Bennett,2001). The world health organisation (WHO,2001) recommends exclusive breastfeeding for the first six months of life and continued breastfeeding up to two years of age or beyond. Promotion of exclusive breastfeeding is the single most cost- effective intervention to reduce infant mortality in developing countries. It is estimated that sub-optimal breastfeeding especially non-exclusive breastfeeding in the first six month of life, results in 1.4 million deaths and 10% diseases in under-fives. Non exclusive

breastfeeding also has a long term impact, including poor school performance, reduced productivity, and impaired intellectual and social development. It can also increase the risk of dying due to diarrheal and pneumonia among 0-5 month old infants (Tesafaye, Tefera, Mulusew, Kebede, & Amare, 2012). Motivation has long been considered as a key element to successful exclusive breastfeeding. Evidence showed that women who intend to combine breast and formula feeding actually breastfeed for shorter duration than those planning only to breast feed. Studies also reveals that identified major deficits relevant to breastfeeding in hospital policies and clinical practices, including a low priority given to support exclusive breastfeeding and education about it, inappropriate routines and provision of care, fragmented care, and inadequate hospital facilities for women who are breastfeeding. Additionally, breastfeeding is both Economical and environmental beneficial. A recent study of the national sample of women enrolled in WIC reported that 36% of women thought that breastfeeding would protect baby from diarrheal (National center for Biotechnical informations [NBS], 2016). UNICEF also demonstrates that there was no data on exclusive breastfeeding from 1995 to 2000 collected in the united states (UNICEF, 2016).

2.4 BREAST FEEDING AND EXCLUSIVE BREAST FEEDING PRACTICES

There is a universal consensus about the fundamental importance of breastfeeding for children's adequate growth and development and for their physical and mental health (WHO, 2002). Breastfeeding, particularly exclusive breastfeeding, and appropriate complementary feeding practices are universally accepted as essential elements for the satisfactory growth and development of infants as well as for prevention of childhood illness. This has culminated in a publication by the World Health Organization (WHO) recommending that infants up to 6 months of age should be exclusively breastfed (WHO, 1998). Benefits of

breastfeeding like a decrease in the incidence, severity of infectious diseases such as diarrhea, respiratory tract infections, otitis media and urinary tract infection; decreased incidence of types 1 and 2 diabetes mellitus, overweight, obesity and asthma were reported (Gartner LM, Morton J, Lawrence RA, et al, 2005). Too early introduction of breast milk substitutes and too late introduction of semi solid complementary feeds are common and are responsible for rapid increase in the prevalence of under nutrition between 6-24months (Ramachandra,2005).

Exclusive breastfeeding defined by World Health Organization (WHO) as practice of feeding only breast milk (including expressed breast milk) and allows the baby to receive vitamins, minerals or medicines and water, breast milk substitutes, other liquids and solid foods are excluded(WHO,2017). Some studies (Aidam et al, 2005) reveal factors, positively associated with exclusive breastfeeding, such as higher maternal educational level, gestational age greater than 37 weeks and mothers with previous experience of breastfeeding. There are also studies that relate factors leading to interruption of exclusive breastfeeding such as low family income, low maternal age, primiparity and mothers returning to work (Mascarenhas et al, 2006).

Several studies intended to define determinant variables in the success or failure of breastfeeding (Losch et al, 1995), which could ease the planning of promotional strategies. Nevertheless, it is always prudent to consider that, as an eating habit, breastfeeding is intrinsically related to social, cultural and traditional patterns of a given population. This fact justifies need for regional studies that allows more efficient action in regard to measures for intervention, based on knowledge of local reality (WHO,2002).

Based on WHO guiding principles for feeding breast fed and non breastfed children, the

IYCF practices indicators is comprised of all the following three components: continued breastfeeding or feeding with appropriate calcium rich foods if not breastfed; feeding (solid/semisolid food) a minimum number of times per day according to age and breastfeeding status and feeding a minimum number of food groups per day according to breastfeeding status. The promotion and support of optimal breastfeeding and complementary feeding practices (IYCF) is a global priority. WHO and UNICEF have for many years emphasized the importance of maintaining the practice of breastfeeding and reviving the practice where it is in decline.

The twenty seventh world assembly in 1974 noted the general decline in breastfeeding in many parts of the world and in May 1981, the world health assembly adopted the /international code of marketing of breast milk substitutes (WHO, 1981). This was to protect breastfeeding and to regulate the advertising and promotional techniques used to encourage artificial feeding. In Scientific evidence demonstrates lower infant mortality and morbidity rates, reduced prevalence of overweight among young children and reduced risk of breast and ovarian cancers among women (Jones and Steketee, 2003).

WHO recommends exclusive breastfeeding for six months since from that age breast milk is no longer sufficient to meet all the nutritional needs of the growing infant (WHO, 2002). The period from birth to two years of age is widely recognized as a critical window for the promotion of optimal growth, health and development.

In Nigeria and in much of sub saharan Africa, poor breast feeding and poor complementary feeding practice coupled with high rates of childhood illnesses are the principal causes of malnutrition during the first two years of life(ESARO,2007). Globally, exclusive breastfeeding of children less than six months of age has been increasing

annually (UNICEF, 2009). The current prevalence is 37 percent (UNICEF, 2011). Unicef has further documented this improvement in the developing world as 33 percent in 1995 and 37 percent in 2008. The exclusive breastfeeding indicator is the proportion of infants 0-6 months of age who are fed exclusively breast milk based on 24-hour recall. The national rate (both urban and rural) is 32.0 percent. The rate is yet to reach the WHO target of 90 percent.

2.5 SOCIOECONOMIC FACTORS AND EXCLUSIVE BREASTFEEDING

On maternal education level, evidence of association between mother's level of education and the duration of breastfeeding varies (Pascale 2007). In a study by kimani, 2011 lower than secondary level of education was associated with earlier cessation of breastfeeding. While it is not very clear why this is the case, higher education may be associated with higher knowledge and practice of positive health behaviour. Higher HIV prevalence among those with less than secondary level of education at all in our setting (Ziraba et al, 2011) may be associated with early cessation of breastfeeding.

The socioeconomic status influences the mothers' choice to introduce formula milk. This was indicated in a study by Rajesh, 2011 in south Gujarat region of india. Mothers who worked away from home were more likely to introduce family milk and start complementary feeding before the infant attained six months. A mother returning to work was reported to have led to early complementary feeding (Mascarenhas et al, 2006). Mothers also cited challenges to exclusive breastfeeding to include return to work after maternity leave, forcing them to introduce complementary feeds before the children are six month of age (Ochola et al, 2008) and caregivers left with the child while the mother goes to work introducing these foods when they perceive that the babies are hungry, (kimani, 2011).

Urban settings present unique challenges with regards to exclusive breastfeeding and infant and young child feeding practise due to their physical and socio-economic characteristics. In these settings, basic government services including health care services are limited and this may be coupled with financial constraints and lead to proportion of women in these giving birth at home or at informal private health facilities(fotso et al 2010), this means that most of these women are systematically excluded from government initiatives such as those aimed at promoting optimal breastfeeding and infant feeding practice, based at health facilities such as BFHI which involves counselling of mothers on infant and young child feeding around the time of delivery. A potential intervention to counteract the systematic exclusion from basic government services may include home based counseling of mothers on infant and young child feeding by community based health workers and or supporting the (informal) private service providers for instance through training programs to offer services according to established government guidelines such as those on breastfeeding. The effectiveness of such intervention in health care delivery, including promotion of optimal infant feeding practice in resource constrained settings has been indicated(Haider et al,2001).

2.6. SOCIO-CULTURAL FACTORS AND EXCLUSIVE BREASTFEEDING

A range of factors have been reported to hinder exclusive breastfeeding: Study reports social norms of giving infants concoctions and customs such as giving water to every stranger entering the house including new born (de Paoli, 2001). Study from west Africa reported cultural practice of giving infants herbal mixture for their protection and also breast milk does not contain adequate nutrients for the growth of the young infant which make it

necessary to give infant extra food before the recommended age(Adejuyigbe,2008). Another study reports from family members and social pressure to introduce other liquids and to mixed feed to infant has been known to have a strong influence on infant feeding practices, particularly for young mothers(Petri et al, 2007). In Predictors of early introduction of complementary foods include the child's sex, the mother's marital status, her ethnicity and her level of education, the desirability of the pregnancy of the index child, the place of delivery and the slum setting. Boys are more likely to be introduced to complementary feeding early compared to girls. Anecdotal evidence indicates that boys are introduced to complementary foods early because breast milk alone does not meet their feeding demands (kimani,2011).

2.7 WOMEN'S EMPOWERMENT AND CHILD HEALTH

Constraints on women's physical mobility in many parts of the world further restrict their ability to make independent decisions. Women in countries such as India, Egypt, and Bangladesh are governed by social norms that restrict their physical mobility, referred to in the literature as female seclusion. This seclusion involves the veiling of head and face in some instances, as well as restrictions on unaccompanied travel to such places as shops, pharmacies, or hospitals, and limits on direct contact with unrelated males (Bruce, Lloyd, and Leonard, 1995). Thus, even in instances where women wish to make decisions regarding household consumption, expenditures, or health care, they may need help and agreement from other family members, particularly the husband or mother-in-law, in actually conducting these transactions.

It has often been argued that child health and investments in children are determined by intra-household resource allocation decisions, which are related to gender inequalities in the

household. In families in which women play an important role in decision making, the proportion of family resources devoted to children is greater than in families in which women play a less decisive role (Thomas, 1990; Duraisamy and Malathy, 1991; Bruce, Lloyd, and Leonard, 1995; Blumberg, 1991). This notion of “maternal altruism” assumes that power in the hands of women will lead to better child outcomes (Mason, 2001).

There are a number of ways by which women’s decision making power might come to be associated with improved child health outcomes.

1. Day-to-day health enhancing behavior: Many actions that lead to better health outcomes emerge from day-to-day health enhancing behaviors, such as better personal hygiene, regular access to preventive treatments such as timely vaccination, and devotion of time to slowly spoon-feeding toddlers instead of leaving them chewing on a biscuit or bread. Many of these actions occur unconsciously and are often related to fundamental rules that households live by, rather than conscious decisions regarding allocation of time and money. While many factors besides gender empowerment affect these behaviors—most notably household wealth and women’s participation in the labor market—in situations where women have control over time and money they may be able to make more efficient decisions leading to better health outcomes for children than when decisions are controlled by men who then delegate these tasks to women.

2. Intra-household resource allocation: At any given income level, households must choose where their resources will be spent. Even for poor households, some implicit trade-offs occur between quality of housing, food expenditure, health and education expenditure, purchase of large consumer durables, and personal consumption items such as tobacco and alcohol. Small scale qualitative studies document that households in which women have

more power devote a greater proportion of resources to child-centered expenditures (Caldwell, 2009) although there is little quantitative validation of differential spending patterns.

3. Access to emergency care: When children are seriously ill, all family members—men or women—may recognize the need to obtain medical care and will do so if they can afford it and if care is available. However, if the primary caregiver—frequently the mother—needs to consult with husbands and family elders, it is possible that the child will not receive immediate care.

2.8 BENEFITS OF EXCLUSIVE BREASTFEEDING

Azubuiké (2007) states that breast milk is beneficial for the baby because it contains just the right balance of nutrients, it is readily available, it provides antibodies that help to boost the baby immunity against infection, it is easily digested, enhances the development of brains, reduces the incidences of some chronic conditions that may occur late in life, like ulcerative colitis, crohn's diseases and aid proper development of both teeth and speech organ.

Additionally, All the nutrients that a baby requires to grow and develop are contained in a breast milk including water. So the baby needs the breast milk except if the baby is sick and then drugs are prescribed. You do not even need your gripe water and all the things you give babies. Breastfeeding lowers the baby's risk to allergies such as asthma and dermatitis such as eczema. Babies who are exclusively breastfed for first six months of their lives have lower risk of respiratory infection, urinary tract infection, ear infection(acute otitis media), fever bouts of diarrhoea and sudden infant syndrome. Sudden infant death is unexplainable death of children. They go to bed and the mother wakes up to find the child dead. Exclusive

breastfeeding facilitates proper jaw, dental and speech development and breastfed children have been shown to have less tooth decay.

Exclusive breastfeeding also protects the baby from chronic diseases such as obesity and diabetes mellitus. Research also shows that the breast milk contain anti-bodies and non-effective agent that are transferred to the baby. The benefit are not only pronounced in childhood but also in adulthood. It has been proven that children that are exclusively breastfed has higher IQ than those not breastfed. The longer you breastfeed the child, the less chances he suffers from depression and attention issues when he becomes an adult.

For the mothers, Penny (2001) believes that breastfeeding helps child spacing, saves time, help the mother return to her previous weight as the fat accumulated during pregnancy is used in milk production and it frequency delays the return of menstruation. It aids involution(the return of uterus to normal size), reduces postpartum bleeding and reduces the risk pre-menopausal breast cancer and ovarian cancer. It also promotes attachment and a close nurturing relationship between mother and baby. For the family and communities, (Azuibuike;2007) states that breastfeeding is less expensive and more convenient, it saves family and more convenient, it saves family and natural resources, it is safe for the environment that is no litters in terms of cans and other wastes.

2.9. THEORETICAL FRAMEWORK

Maslow's theory views human needs as being hierarchical order, with the most basic need at the base of the pyramid and the highest ones at the apex. Nwonu (2002) described it as a basic need which provides a theoretical framework that nurses can use in the assessment and planning phase of the nursing process in order to understand the relationship among human needs when care is provided

Maslow's hierarchy of basic needs provides a theoretical framework that mothers can use to understand the relationship among human needs when care is provided. Maslow further explained that it is only when the lower needs are met before the higher ones emerge but is only under normal circumstances it is the focal need that is gratified before any other need. If the sequence is impossible to climb to the highest, then human satisfaction becomes a stagnant.

1. Physiological needs

These needs are very important, mothers satisfies these needs by given breast milk to the child whenever the baby is in demand. Breast milk provides food for the baby in right quantity and quality for the growth and development of the child

2. Safety and security

This need arises during the process of feeding, both parties are happy and this shown by a smile seen on the baby's face and feeding is done in a conducive environment.

3. Need for love and belonging

Exclusive breastfeeding brings about satisfaction of this need because it initiates bonding between the mother and the child. By breastfeeding a baby, she feels loved and care for which in turn gives her a feeling of belonging.

4. Self Esteem

The need for self esteem arises when the above mentioned needs have been met. Breastfeeding enhances the growth of the child. Both in his intellectual; this brings about respect to the individual.

5. Self Actualization

The need for self actualization arises and it is met in the later part of life.

2.9.2 INTERACTIVE THEORY OF BREASTFEEDING

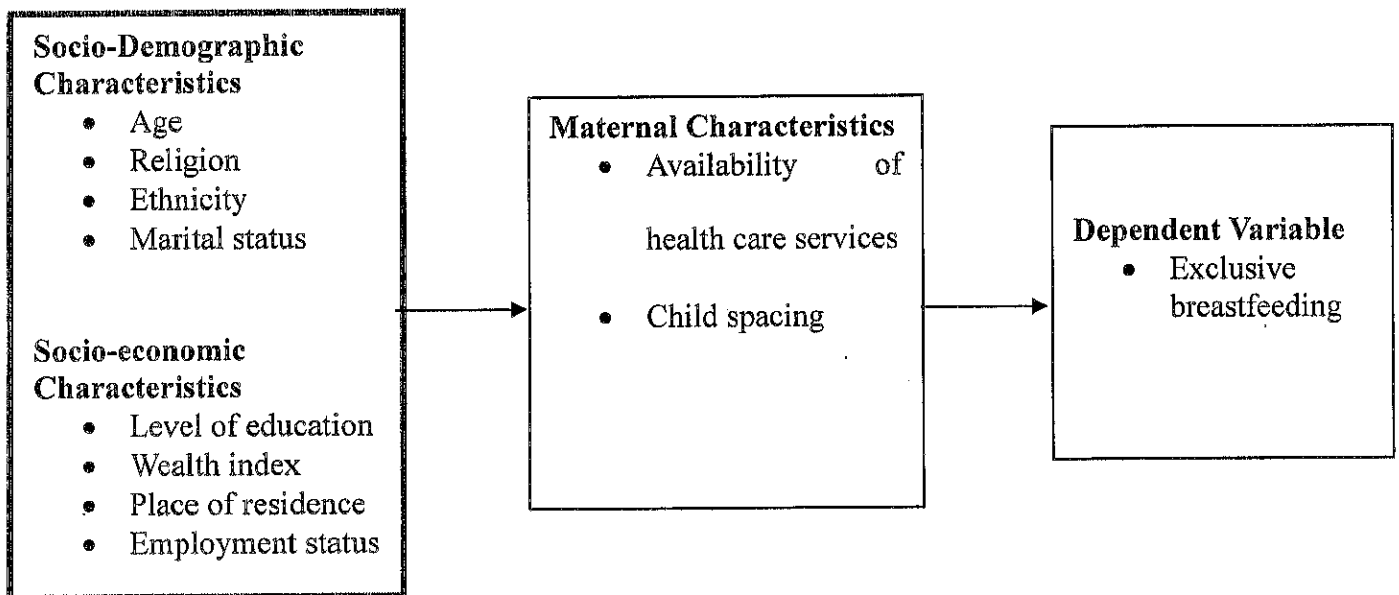
King's conceptual system is used to develop the interactive theory of breastfeeding. King's conceptual system was selected, which is open and interrelated and composed of three interactive systems which include: personal, interpersonal and social. The concept of a personal system includes seven aspect which are: perception, self body image, growth, development, time and space. An interact in the system and it includes the concept of interaction, communication, transaction, role and stress. A social system is formed by the combination of interpersonal systems with the following relevant concepts: Organization, authority, power, status and decision-making.

2.10 CONCEPTUAL FRAMEWORK

Many health care Organizations have used kurt lewin's theory to understand human behaviour as it relates to the changes and patterns of resistance of change. Lewin's model encompasses three distinct phases known as unfreezing, moving and freezing, or refreezing(Bozak,2003). The purpose of the model is to isolate factors that can impede change from happening. Forces that oppose change are often called restraining or 'static forces, and forces that promote or drive change are referred to as driving forces. When health care organizations and professionals fully understand what behaviour drive or oppose change, it is then they can work to strengthen the positive driving forces and change successfully occur (Bozak,2003).

The conceptual framework illustrates the association between exclusive breastfeeding and social economic factors and maternal characteristics as factors that influence it practice. The practice or non practice of exclusive breastfeeding is furthered influence by breastfeeding

policies such as WHO's policies on infant and young feeding and the strategies adopted at the national level to promote its implementation. However, those adhering to the exclusive breastfeeding recommendation may practice mixed feeding; giving the child other food alongside the breast milk or may practice replacement feeding especially in the context of HIV/AIDS whereby the child is never breastfed but rather is given formular milk or other type of breast milk substance.



SOURCE: AUTHOR'S CONSTRUCT 2018

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 INTRODUCTION

This section of the research entails the methodological approach towards the research topic that had been the most vital part of a research which takes a look at the study location, research design, data sources, method of collection and sample size.

3.2 DESCRIPTION OF THE STUDY LOCATION

The South-West region is one of the geo-political zones in Nigeria that consists of six states which include: Lagos state, Ogun state, Ekiti state, Osun state, Oyo state, Ondo state. The main ethnic group in this region of the country is the Yoruba. However, the six states are majorly Yoruba speaking states and all have Yoruba origins so they can be referred to as the Yoruba's. The South-West region shares borders with the Borgu (called the Baruba and Borgawa) in the North-West, the Nupe (called the Tapa) and Ebira in the North, and the Edo, the Esan and the pAfemai to the South-East.

The Yoruba kingdom of Oyo in the South-west was found about 1400 CE and from the 17th to 19th centuries, it attained a high level of political organization and extended as far as Republic of Togo. The kingdom of Benin had developed an efficient army, an elaborate ceremonial court and artisans whose works in ivory wood bronze and brass in the South central part of the present day Nigeria are prized throughout the world today. European traders established coastal ports for the increasing traffic in the slaves destined for the Americas in the 17th through 19th centuries. Commodity trade especially palm oil and timber, replaced by slave trade in the 19th century, most especially under anti-slavery actions by the British Navy. The Fulani leader, Usman-Dan Fodio promulgated Islam

and brought most areas in the North under loose administrative control of an empire centered in Sokoto in the early 19th Century.

In the Yoruba land, Monarchies were the common forms of government, but they were not the only approach to government and social organization. The numerous Ijebu city states to the west of Oyo and the Egba communities, found in the forest below Oyo's savanna region were notable exceptions. These independent polities often elected an Oba, though real political legislative and judicial powers resided with the Ogboni a council of notable elders. The belief of divine king was so important to the Yoruba's, however that stayed with them in its various forms from their antiquity to the contemporary era.

Furthermore, the geographic location of the South-West fits into the classified double wet season region with the twice yearly passage of the sun. It has distinct dry season from April-July and dry season in July as well as wet season from September through October. Also, the climatic condition and the humid air, and the richness of the soil in the South-west region produce vegetations with thick forest.

3.3 RESEARCH DESIGN

The study utilizes secondary data from the 2013 Nigeria Demographic and Health Survey (NDHS) datasets for Nigeria. Based on the fact that the data is collected at a point time which made the data to be cross-sectional data set in nature. Therefore the study is being view as cross-sectional study.

3.4 TARGET POPULATION

The category of eligible respondents in this study focus currently on women aged 15-49 years in south-west, which was collected by the Nigeria Demographic Health Survey (NDHS) 2013.

3.5 QUANTITATIVE DATA SOURCE

The study utilize secondary data from the Nigeria Demographic and health survey data sets 2013 (NDHS 2013) for Nigeria. Demographic and health surveys are an international series of nationally representative surveys conducted in middle and lower income countries. The NDHS 2013 showed the survey of 38,948 women age 15-49 and 17,359 men age 15-59. The 2013 NDHS is a national sample survey designed to provide up-to-date information on background characteristics of the respondents, specifically collected information on fertility levels, marriage, fertility preference, awareness and use of family planning methods, child feeding practices, nutritional status of women and children, adult and childhood mortality, awareness and attitudes regarding HIV/AIDS, female genital mutilation, and domestic violence. The target groups were women and men age 15-49 in randomly selected households across Nigeria. Information about children age 0-5 years was also collected, including weight and height. In addition to presenting national estimates, the report provides estimates of key indicators for both the rural and urban areas in Nigeria, the six geo-political zones, the 36 states and the Federal Capital Territory (FCT). The funding for the survey came from the United states Agency for International Development (USAID) and the President's Emergency Funding for AIDS Relief (PEPFAR). Funding for the household listing and additional fieldwork support was provided by the United National Population Fund (UNFPA). ICF Macro, an ICF International company, provides technical assistance through every phase of the survey through the worldwide MEASURE DHS programme

The NDHS data sets are been collected at a point in time which make it to be a cross-sectional survey i.e. not a longitudinal survey. The data sets were collected at the level of individual households.

3.6 METHODS OF DATA COLLECTION

Administratively, Nigeria is divided into states. Each state is subdivided into local government areas (LGAs), and each LGA is divided into localities. In addition to these administrative units, during the last 2006 Population Census, each locality was subdivided into convenient areas called census enumeration areas (EAs). Nigeria has 36 states, plus FCT-Abuja. At the time of survey implementation, the list of EAs did not have census information for households and the population because the census frame is under segmentation revision. Therefore, no household or population information was available at the EA level. The need for sampling planning and selection of such information on urban/rural was quite important; therefore, each EA was approximately classified as urban or rural. The available cartographic material demarcated for each EA was useful in the EA location and its identification; hence the sample frame for this survey is the list of EAs used in the last census population.

In the current preliminary census frame, the EAs are grouped by states, by LGAs within a state, and by localities within an LGA. In addition, during the 2006 Population Census, each locality was subdivided into convenient areas called census enumeration areas (EAs). The primary sampling unit (PSU), referred to as a cluster for the 2013 NDHS, is defined on the basis of EAs from the 2006 EA census frame. The 2013 NDHS sample was selected using a stratified two-stage cluster design consisting of 904 clusters, with 372 in urban areas and 532 in rural areas. A representative sample of 40,680 households was selected for the 2013 NDHS survey, with a minimum target of 943 completed interviews per state. In each state, the number of households was distributed proportionately among its urban and rural areas. A complete listing of households and a mapping exercise were carried out for each cluster from December 2012 to January 2013, with the resulting lists of households serving as the sampling frame for the selection of households in the second stage.

All regular households were listed. The NPC listing enumerators were trained to use Global Positioning System (GPS) receivers to take the coordinates of the 2013 NDHS sample clusters.

In the second stage of the selection process, an average of 45 households was selected from each cluster by equal probability systematic sampling. All women age 15-49 who were either permanent residents of the households in the 2013 NDHS sample or visitors present in the households on the night before the survey were eligible to be interviewed. In a subsample of half of the households, all men age 15-49 who were either permanent residents of the households in the 2013 NDHS sample or visitors present in the households on the night before the survey were eligible to be interviewed. In addition, a subsample of one eligible woman in each household was randomly selected to be asked additional questions on domestic violence.

Finally, all women 15-49 years were interviewed in each cluster, and in half of the selected households about 20 men were interviewed. Before the selection in a state, all EAs were stratified by urban and rural areas. The selection was performed using the following formula:

$$P_{li} = (a / A)$$

Where,

a: is the number of clusters to be selected in the given state

A: is the total number of clusters in the given state.

In each selected cluster, a complete household listing operation was carried out and Households were selected to achieve a fixed sample take per cluster. However, since the 2013 NDHS sample was unbalanced among residence area and state, a final weighing adjustment procedure to provide estimates at every other domain of study was required.

In a given state, if c is the fixed number of households selected out of the total households (L_i), found in the 2013 listing process; for the i th cluster, then the household probability in the

selected *ith* cluster can be expressed as:

$$P_{2i} = (c / L_i)$$

The final households overall probability in the *ith* cluster could be calculated as:

$$f_i = P_{1i} * P_{2i}$$

And the sampling design weight for the *ith* cluster is given as:

$$1/f_i = 1 / (P_{1i} * P_{2i})$$

3.7 SAMPLE SIZE

A total of 40,680 women of reproductive age (15-49) were interviewed in Nigeria with a minimum target of 943 completed interviews per state; the number of households was distributed proportionately among its urban and rural areas. The total number of female respondents for this analysis specifically is 5,874 respondents in south-west Nigeria.

3.8 METHODS OF DATA ANALYSIS

The data from the NDHS 2013 data set will be processed by using STATA 13.0 which is statistical software. Analysis for the quantitative data will be conducted at three levels; at first level, a univariate will be carried out, and at the second level, a bivariate level of analysis would be carried out and lastly a multivariate level of analysis would be carried out. The univariate level of analysis consist frequency tabulation of all socio-demographic variable and some socio-economic variables in question. The bivariate level consists of cross-tabulation between two variables and various test of bivariate level of analysis. It will be done using the chi-square (χ^2) test to show the association between exclusive breast feeding and the various maternal socio economic, cultural and demographics background characteristics. The multivariate level deals with analysis of three variables at a time which will identify the strength of association and examine the influence of

maternal and socio demographic factors on exclusive breastfeeding in the study area.

3.9 MEASUREMENT OF VARIABLES

The general binary logistic regression model used for the multivariate analysis is:

$$\log \left(\frac{p}{1-p} \right) = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \dots + \beta_n x_n$$

Where p = probability of exposure to exclusive breastfeeding

x_1 - x_n = predictor variables

$\beta_0, \beta_1 - \beta_n$ = regression coefficients

3.10 DATA MANAGEMENT AND VARIABLE MEASUREMENT

The table below shows the various level of data manipulation and measurement of selected variables for the purpose of analysis.

NAME OF VARIABLE	VARIABLE MEASUREMENT AND CODES	DATA RECORDED AND MANIPULATION
<p>Dependent Variable:</p> <ul style="list-style-type: none"> Exclusive breastfeeding 	<p>M5_1</p>	

<p>INDEPENDENT VARIABLE:</p> <p>Socio economic factors:</p> <ul style="list-style-type: none"> • Level of education 	<p>v106(Categorical)</p> <p>No education, primary, secondary, Higher.</p>	<p>The same categories</p>
<ul style="list-style-type: none"> • Wealth index 	<p>v190(categorical)</p> <p>Poorest, Poorer, Middle, richer, richest.</p>	<p>Poor</p> <p>Middle</p> <p>Rich</p>
<ul style="list-style-type: none"> • Place of residence 	<p>v025(Categorical)</p> <p>Urban</p> <p>Rural</p>	<p>The same categories</p>
<ul style="list-style-type: none"> • Employment status 	<p>v705 (categorical)</p> <p>not working, sales, professional/technical/managerial , agricultural, household and domestic service, manual, clerical (working)</p>	
<p>Socio Demographic factors:</p>	<p>v130(Categorical)</p> <p>Catholic, Other Christian, Islam,</p>	<p>Three main ethnic group:</p>

• Religion	Tradition, Others	Yoruba, Hausa, Igbo and other Minority ethnic groups
------------	-------------------	---

• Ethnicity	v131(categorical) Fulani, Hausa, Ibibio, Igala, Igbo, Ijaw/izon, Kanuri/beriberi, tiv, Yoruba, Others.	Three main ethnic group: Yoruba, Hausa, Igbo and other Minority ethnic groups
• Marital status	v501(categorical) never in union, married, separated, divorced, widowed, living with partner	Single, married, widowed, divorced/separated
• Child spacing	V604 (categorical)	<12 months 1 year 2 years 3 years 4 years 5 years

		6+ years
--	--	----------

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.0 INTRODUCTION

This chapter deals with presentation, analysis and interpretation of the data collected from secondary sources Nigeria Demographic and Health Survey (NDHS, 2013) to show the socio-demographic influence of exclusive breastfeeding among women in south-west Nigeria. For the purpose of analysis, this study makes use of descriptive analysis and inferential analysis.

The descriptive analysis describes the relevant aspects of the phenomena under consideration and provide detailed information about these variables such as; prevalence, socio-economic and demographic determinants and exclusive breastfeeding. However, in supportive of descriptive statistics, inferential analysis, pearson Chi-square test was used to ascertain relationship while logistic regression analysis was used in testing the study hypothesis.

4.1 Distribution of respondents by Socio-Demographic Characteristics.

To achieve the first objective of the research problem which is to identify the socio demographic status and characteristics of women in south west Nigeria, An analyses was to ascertain the first objective. And these are the following results using data collected from secondary sources Nigeria Demographic and Health Survey (NDHS, 2013)

Results in Table 4.1 below showed women socio-economic and demographic characteristics. It was reported that age 25-29 years was 37.8%, age 20-24 years by

25.3%, age 30-34 years by 23.4%, age 35-39 years by 8.5%, age 15-19 years by 3.6%, age 40-44 years and 45-49 years by 1.2% and 0.1% respectively. In conclusion to Age group, there are higher status and characteristics among women aged 25-29

Women were higher in urban area by 71.4% than those living in rural area by 28.7%.

There are higher percentage among women with secondary education which has 48.6%, followed by higher education (20.3%), primary (19.4%) and women with no formal education (11.7%).

A Yoruba woman was 67.3%, followed by Igbo (8.1%) and hausa (4.3%). Christian women was 60.9%, followed by Muslim women (38.3%) and traditional (0.9%).

Also, women that reported to be rich were 77.5%, poor and middle women were reported by 11.4% and 11.1% respectively. Employed women were 82.5% and not employed by 17.5%.

Married women was (97.2%), followed by single women (2.1%) and separated (0.7%).

Women that practice exclusively breastfeeding was 60.3% and those that reported to be no was 39.7%.

Those that did not attend antenatal care visit were 71.4% and those that visited were 28.6%. Women space their child birth mostly by 2 years interval, 3 years by 28.7%, 4 years by 11.4%, 1 years by 9% and the least were those that reported to space their child birth by less than 12 months and greater than 6 years above by 6% and 2.3% respectively.

Table 4.1: Distribution of respondents by Socio-Demographic Characteristics by Weighted Percentage.

Background Characteristics	Frequency	Percent (%)
Age		
15-19	29	3.6
20-24	201	25.3
25-29	301	37.8
30-34	186	23.4
35-39	68	8.5
40-44	9	1.2
45-49	1	0.1
Place of residence		
urban	567	71.4
Rural	228	28.7
Educational level		
No education	93	11.7
Primary	154	19.4
Secondary	386	48.6
Highest	162	20.3
Ethnicity		
Yoruba	535	67.3
Hausa	34	4.3
Igbo	65	8.1
Others	161	20.3
Religion		
Christian	480	60.9
Islam	302	38.3
Traditional	7	0.9
Wealth Index		
Poor	91	11.4
Middle	88	11.1
Rich	616	77.5
Occupation		
Not employed	139	17.5
Employed	655	82.5
Marital Status		
Single	17	2.1
Married	772	97.2
Separated	6	0.7
Exclusive Breast feeding		
No	316	39.7
Yes	479	60.3
Antenatal Care visit		

No	532	71.4
Yes	213	28.6
Child spacing		
<12 months	48	6.0
1 year	71	9.0
2 years	275	34.6
3 years	228	28.7
4 years	90	11.4
5 years	64	8.0
6+ years	18	2.3
Total	795	100.0

4.2.: Description of Respondents by Maternal, Socio-Demographic Characteristics and Exclusive breastfeeding.

In response to the second objective, an analyses Result from table 4.2 below revealed that there is significant association between determinant, socio-demographic characteristics and exclusive breastfeeding among women ($P < 0.05$). There is significant association between ethnicity and exclusive breastfeeding ($X^2 = 9.58$, $P = 0.0215$) whereby Yoruba women reported to give exclusive breastfeeding more for their children by 70.3%, followed by igbo (5.78%) and hausa (4.4%) compare to those that did not give exclusive breastfeeding to their children. There is strong significant association between child spacing and exclusive breastfeeding ($X^2 = 52.45$, $P = 0.0000$) whereby women that provide 2years spacing for children were 37.3% to give exclusive breastfeeding to children, 3 years spacing by 21.1%, I years spacing by 12.2%, 4 years spacing by 11%, lees than 12months spacing by 8.7% and the least were 5 years spacing and s6 years above by 7.2% and 2.6% respectively to those that did not give exclusive breastfeeding to their children.

Table 4.2.: Distribution of Respondents by Maternal, Socio-Demographic Characteristics and Exclusive breastfeeding.

Background characteristics	Exclusive Breastfeeding		Statistics
	No	Yes	
Age			
15-19	5.1	2.7	X ² =8.23 Pr=0.3173
20-24	26.1	24.7	
25-29	38.5	37.3	
30-34	22.7	23.9	
35-39	7.4	9.3	
40-44	0.3	1.9	
45-49	0.0	0.2	
Place of residence			
urban	71.4	71.3	X ² =0.00 Pr=0.9738
Rural	28.6	28.7	
Educational level			
No education	1086	12.2	X ² =2.62 Pr=0.6118
Primary	17.6	20.6	
Secondary	48.9	48.5	
Highest	22.9	18.7	
Ethnicity			
Yoruba	62.6	70.3	X ² = 9.58 Pr=0.0215
Hausa	4.1	4.4	
Igbo	11.8	5.78	
Others	21.5	19.5	
Religion			
Christian	66.2	57.3	X ² =8.88 Pr=0.1211
Islam	33.8	41.3	
Traditional	0.0	1.4	
Wealth Index			
Poor	10.6	12.0	X ² =2.17 Pr=0.3600
Middle	9.3	12.3	
Rich	80.1	75.7	
Occupation			
Not employed	20.6	15.4	X ² =3.21 Pr= 0.1292
Employed	79.4	84.6	
Marital Status			
Single	3.3	1.4	X ² =3.22 Pr=0.2126
Married	96.1	97.9	
Separated	0.6	0.8	
Antenatal Care visit			
No	73.6	70.0	X ² = 0.99

Yes	26.5	30.0	Pr= 0.3819
Child spacing			
<12 months	1.9	8.7	
1 year	4.1	12.2	
2 years	30.6	37.3	
3 years	40.3	21.1	X ² =52.45
4 years	12.0	11.0	Pr= 0.0000
5 years	9.3	7.2	
6+ years	17.0	2.6	

4.3: Odds Ratio Based on Logistic Regression Analysis of Maternal, Socio-Demographic Characteristics and Exclusive Breastfeeding.

Table 4.3 below showed the result of logistic regression of the effect of maternal, socio-demographic characteristics on exclusive breastfeeding among women. Result from Model 1, reveals that women age 40-44 years were 13.26 more likely to give exclusive breastfeeding to child than women in age 15-19 years (RC).

Result from Model 2, reveals that women that space child's birth by 3 years were 89% less likely to give child exclusive breastfeeding to those women who space child's birth by less than 12months (RC). Women that space child's birth by 4 years were 82% less likely to give child exclusive breastfeeding to those women who space child's birth by less than 12months (RC). Women that space child's birth by 5 years were 84% less likely to give child exclusive breastfeeding to those women who space child's birth by less than 12months (RC). Also, women age 40-44 years were 24.61 more likely to give exclusive breastfeeding to child than women in age 15-19 years (RC). Igbo women were 57% less likely to give child exclusive breastfeeding to Yoruba women (RC). Similarly, to study carried out by Alemayehu *et al.* (2009) found that maternal socio-economic status

has effects on exclusive breastfeeding (Alemayehu *et al.*, 2009).

4. Odds Ratio Based on Logistic Regression Analysis of Maternal, Socio-Demographic Characteristics and Exclusive Breastfeeding.

Background Characteristics	Model 1		Model 2	
	Odd Ratio	Upper-Lower confidence interval	Odd Ratio	Upper-Lower confidence interval
Antenatal Care visit				
No			1.00	
Yes			1.15	(0.77-1.73)
Child Spacing				
<12 months			1.00	
1 year			0.88	(0.23-3.41)
2 years			0.32	(0.09-1.08)
3 years			0.11**	(0.03-0.39)
4 years			0.18*	(0.04-0.66)
5 years			0.16*	(0.04-0.64)
6+ years			0.35	(0.05-2.66)
Age				
15-19 (RC)	1.00		1.00	
20-24	1.77	(0.65-4.81)	1.63	(0.48-5.59)
25-29	1.85	(0.64-5.29)	1.91	(0.55-6.63)
30-34	1.71	(0.57-5.11)	1.79	(0.49-6.58)
35-39	2.55	(0.83-7.85)	1.85	(0.45-7.61)
40-44	13.26**	(1.91-91.99)	24.61*	(1.93-313.71)
45-49	1	(0-0)	1	(0-0)
Place of residence				
Urban (RC)	1.00		1.00	
Rural	0.74	(0.41-1.36)	0.72	(0.39-1.35)
Educational level				
No education (RC)	1.00		1.00	
Primary	1.12	(0.59-2.14)	1.18	(0.61-2.28)
Secondary	1.01	(0.51-2.08)	1.16	(0.55-2.45)
Highest	0.87	(0.43-1.76)	0.84	(0.39-1.78)
Ethnicity				
Yoruba (RC)	1.00		1.00	
Hausa	0.83	(0.37-1.83)	0.59	(0.14-2.44)
Igbo	0.51	(0.25-1.03)	0.43*	(0.20-0.94)
Others	0.91	(0.55-1.49)	0.78	(0.47-1.32)
Religion				

Christian (RC)	1.00		1.00	
Islam	1.23	(0.81-1.86)	1.22	(0.77-1.94)
Traditional	1	(0-0)	1	(0-0)
Wealth Index				
Poor (RC)	1.00		1.00	
Middle	0.96	(0.44-2.08)	1.28	(0.55-2.96)
Rich	0.62	(0.27-1.44)	0.75	(0.28-1.98)
Occupation				
Not employed (RC)	1.00		1.00	
Employed	1.23	(0.76-1.97)	1.1	(0.61-1.97)
Marital Status				
Single (RC)	1.00		1.00	
Married	1.88	(0.56-6.35)	1.71	(0.41-7.096)
Separated	2.03	(0.19-21.58)	3.46	(0.18-66.26)

RC means the reference categories *P<0.05 **p<0.01 ***p<0.001

HYPOTHESIS TESTING

H₀: There is no significant relationship between socio demographic characteristics and exclusive breastfeeding.

H₁: There is significant relationship between socio demographic characteristics and exclusive breastfeeding.

DECISION RULE

From the binary logistic regression, the relationship between adjusted socio demographic determinants and exclusive breastfeeding is statistically significant in (P< 0.05), from this, we can conclude that there is partial significant relationship between maternal socio-demographic characteristics among women (Age of women, Ethnicity and child spacing practice) and exclusive breastfeeding. Therefore we fail to accept the null hypothesis.

DISCUSSION OF THE STUDY

This section presents the discussion of the key findings with respect to the stated

objectives of the study based on empirical and theoretical literature.

Socio demographic characteristics and exclusive breastfeeding

Socio demographic characteristics were not significantly associated with exclusive breastfeeding. Findings of this study are consistent with those of a study carried out in India in which socio-demographic status was not associated with exclusive breastfeeding (Chudasama *et al.*, 2009) and in Kasarani informal settlement, Molo District, Kenya (Mututho, 2012). In contrast to the findings of the present study, a study by Ochola (2008) in Kibera, Kenya found a positive relationship between socioeconomic status based on ownership of television and exclusive breastfeeding similarly, in one study Venancio and Monteiro (2006) found that exclusive breastfeeding is positively associated with socio-economic status with exclusive breastfeeding being more prevalent among women with higher incomes while in another study, economic status was identified as one of the key factors influential in breastfeeding decision making (Henry *et al.*, 2010). In Ethiopia, women in the wealth index ranking middle and above were two times more likely to exclusively breastfeed than the reference category (P= 0.001) (Alemayehu *et al.*, 2009). Findings of this study support the hypothesis that socio-demographic factors have no association with exclusive breastfeeding practice.

Age of women and ethnicity were only socio-demographic factors associated with exclusive breast feeding. Viewing expressing of breast milk as a taboo denied the mothers the opportunity to express and leave breast milk for their infants as they left their homes to go to work. Another common belief was that mothers do not have adequate breast milk to sustain their infants for six months and also the belief that the child must take water to quench thirst and stop hiccups. It was also a common belief that when infants cry a lot

even after breastfeeding the child is either hungry or has stomach pains and once given something else they calm down with exclusive breastfeeding practice. Some mothers believed that breastfeeding would cause their breasts to sag or lose shape while others believed if they conceived while the child was still breastfeeding they had to stop breastfeeding.

Child spacing were investigated to establish their influence on exclusive breastfeeding. Married mothers reported higher exclusive breastfeeding rate than single mothers. In a study by Alemayehu et al. in Ethiopia in 2005 exclusive breastfeeding was associated significantly with, current marital status, and economical status (Alemayehu et al., 2009).

The following suggestions are made for further research

1. Based on the reported low prevalence of exclusive breastfeeding further research should be conducted to investigate the role of community participation in promoting sound infant feeding practices as socio-cultural influence on exclusive breastfeeding practice was reported in this study.
2. Similar research is necessary at private health facilities in order to compare the infant feeding practices with public facilities as this will enable assessment of outcomes of nutrition interventions in both set ups.

SUMMARY, CONCLUSION AND RECCOMENDATIONS**5.1 INTRODUCTION**

This chapter is devoted to the presentation of the summary of findings, conclusion and recommendations drawn from the analysis of the research study. The overall objective of this study is to explore the influence of maternal socio demographic characteristics and exclusive breastfeeding among women in south-west, Nigeria. The study was based on the sample size of 795 women of reproductive ages in the study area.

5.2 SUMMARY OF THE FINDINGS

With respect to socio-demographic characteristics of women who give child exclusive breastfeeding to those who did not give child exclusive breastfeeding. Results from table 4.1 showed women maternal socio demographic characteristics in south-west Nigeria.

Also, there is a significant association between the following maternal socio-demographic characteristics (Ethnicity and child spacing) and exclusive breastfeeding p-value less-than 0.05.

In the multivariate analysis result showed the influence of socio-demographic characteristics on exclusive breastfeeding. Result from Model 1, reveals that women age 40-44 years were 13.26 times more likely to give exclusive breastfeeding to child than women in age 15-19 years (RC).

Result from Model 2, reveals that women that space child's birth by 3 years were 89% less likely to give child exclusive breastfeeding to those women who space child's birth by less than 12months (RC). Women that space child's birth by 4 years were 82%

less likely to give child exclusive breastfeeding to those women who space child's birth by less than 12 months (RC). Women that space child's birth by 5 years were 84% less likely to give child exclusive breastfeeding to those women who space child's birth by less than 12 months (RC). Also, women age 40-44 years were 24.61 times more likely to give exclusive breastfeeding to child than women in age 15-19 years (RC). Igbo women were 57% less likely to give child exclusive breastfeeding to Yoruba women (RC).

5.3 CONCLUSION

Without any doubt that there is significant influence of maternal socio-demographic characteristics of women age 15-49 years on exclusive breast feeding, p-value less than 0.05 (Alemayehu *et al.*, 2009). Thus this study conclude that base on the facts from the result that some factors such age of women, ethnicity, child spacing on exclusive breastfeeding influenced exclusive breastfeeding weight where p-value less than five percent level of significant.

5.4 RECOMMENDATION

The findings suggest that there should more attention on exclusive breastfeeding practise of women considering these maternal socio-demographic factors associated with exclusive breastfeeding such as age of women, ethnicity, child spacing. The increase in exclusive breastfeeding among women will reduce the deficiency in nutritional status of child, will reduce the prevalence of neonatal death and enable the child immune system to resist disease at the early stage of life.

The following recommendations were made from this study;

1. Breastfeeding promotion messages by the health sector should focus on alleviating the misconceptions mothers have on exclusive breastfeeding such as the perception of

insufficient breast milk production and inappropriateness of expressing breast milk for infants to consume when mothers are away.

2. Mother to mother support groups are important for the success of exclusive breast feeding as they will offer a platform for mothers to share challenges of breastfeeding and also success stories to motivate them to exclusively breastfeed their infants for the first six months after birth.

3. More facility based research is necessary especially since infant feeding practices are unique for communities as evidenced by the various studies carried out by different researchers. This way, interventions will target the specific needs of the communities.

REFERENCE

- A. Zulkifli, W.K. Daw , A. Rahman Isa(2011). Breastfeeding and weaning Practice in Rural communities of Kelantan. *Malaysian Nutrition Journal* 2, 1996,148-154.
- A.R. Radzniwan ,N.M. Azimah , H. Zuhra & O. Khairani(2009). Breast Feeding Practice and Knowledge among Mothers Attending an Urban Malaysian Maternal and Child Health Clinic. *Medical & Health* 4(1).
- Abera K(2012) Infant and young child feeding practices among mothers living in Harar, Ethiopia. *Harar Bull Health Sci*.
- A-H, El-Gilany, S. Ebrahim .& H. Randa(2001). Exclusive Breastfeeding in Al-Hassa, Saudi Arabia. *Breastfeeding Medicine*.
- Assefa B, Boru B;(2012). Breastfeeding practice and associated factors among female nurses and midwives at North Gondar Zone, Northwest Ethiopia: a cross sectional institution based study.associated factors among HIV positive mothers in southern Ethiopia. *Am J Health Res*. □□
- Babakazo P, Donnen P, Akilimali,Mala-Ali NM, Okitolonda E(2012). Predictors of discontinuing exclusive breastfeeding before six months among mothers in Kinshasa:a prospective study.
- Begna Z, Kefale B, Geletaw A, Abdella A, Chinasho B, Alemayehu A, et al. Knowledge and practice of mothers towards exclusive breastfeeding and its associated factors in Notes. 2013
- Igwe et al(2002)Breastfeeding knowledge, attitude and practice among school teachers in Abha female educational district, southwestern Saudi Arabia.
- C.K. Siah & H(2002). Yadav. Breastfeeding Practices among Mothers in an Urban Polyclinic. *Medical Journal Malaysia* 188-193. K.L. Tan. Breastfeeding Practice in Klang District.*Malaysian. Journal of Public Health* 7(2), 2007, 10-14. □
- Eshetu K, Wakgari N. Attitude and practice towards exclusive breastfeeding and its
- F.Xu , C. Binns, S. Zheng, Y. Wang, Y. Zhao & A. Lee . Determinants of exclusive breastfeeding duration in Xinjiang, PR China. □*Asia Pacific Journal Clinical Nutrition* 16 (2), 2007,316-321.
- Faudzi.Breastfeeding in Malaysia: Results of the □Third National Health and Morbidity

- Survey (NHMS III) 2006. *Malaysian Nutritional Journal* 16(2), 2010, 195 – 206. □
- Google Scholar Central Statistical Agency [Ethiopia] and ICF International. Ethiopia demographic and health survey, 2011. Addis Ababa, Ethiopia and Calverton, Maryland,
- Google Scholar http://www.who.int/nutrition/topics/exclusive_breastfeeding/en/. 2014. [Accessed on January 2015].CARE.
- Greiner T. Exclusive breastfeeding measurement and indicators. *Int Breastfeed J.* 2014;9:18.PubMed Central □ □ View Article □ □ PubMed □ □ Google Scholar □ □
- H.Z. Lim & S.L. Mary Huang . Knowledge, attitude and practice of breastfeeding: a study among Chinese mothers who attended maternal and child health clinic in Dewan Bandaraya Kuala Lumpur. 21st Scientific Conference of the Nutrition Society of □Malaysia, 2006. □
- Infant and Young Child Feeding Practices: Collecting and Using Data: A Step-by-Step Guide: Cooperative for Assistance and Relief Everywhere, Inc. [CARE]; 2010.
- Int Breastfeed J.* 2015;10:19.PubMed Central □ □ View Article □ □ PubMed □ □ Google Scholar □ □
- K. Dearden, M. Altaye, I.D. Maza, M.D.Olive, M. Stone-Jimenez, L.A. Morrow & B.A. Burkhalter. Determinants of Optimal □Breast-Feeding in Peri- Urban Guatemala City, Guatemala. *Pan American Journal of Public Health* 12(3), 2002,185 -198.
- L.L. Foo, S.J.S. Quek, S.A. Ng, M.T. Lim, Y.M. Deurenberg. Breastfeeding Prevalence and Practices among Singaporean Chinese, □Malay and Indian Mothers. *Health Promotion International* 20(3), 2005, 229-237.
- Mbada CE, Olowookere AE, Faronbi JO, Oyinlola-Aromolaran FC, Faremi FA, Ogundele AO, et al. Knowledge, attitude and techniques of breastfeeding among Nigerian mothers from a semi-urban community.
- Mitiku M, Damte M, Kebede Z. Factors associated with exclusive breastfeeding practices in Debre Berhan District, Central Ethiopia: a cross sectional community based study. *Int Breastfeed J.* 2015;10:23.View Article □ □ Google Scholar □ □
- S. Fatimah, H. Jackie, A. Tahir, M.I. Yusof, H.N.Siti Sa'adiah, S. Latipah & A.H. Maimunah. Breastfeeding among Children below □Two Years Old. National Health and Morbidity Survey 1996, Public Health Institute, Ministry of Health Malaysia, 8,

1999. S. Fatimah, H.N. Siti Saadiah HN, A.Tahir, M.I. Hussain Imam & Y. Ahmad S.K. Kwa . Breastfeeding and the use of maternal health services in Sarawak. Malaysian Journal Report Health 11(1), 1993,8-19.
- Setegn T, Belachew T, Gerbaba M, Deribe K, Deribew A, Biadgilign S. Factors associated with exclusive breastfeeding practices among mothers in Goba district, south east Ethiopia: a cross-sectional study. *Int Breastfeed J.* 2012;7:17.PubMed Central [View Article](#) [PubMed](#) [Google Scholar](#)
- Sguassero Y. Optimal duration of exclusive breastfeeding. RHL commentary. In *The WHO Reproductive Health Library Geneva: World Health Organization; 2008.* [Google Scholar](#)
- Shifraw T, Worku A, Berhane Y. Factors associated with exclusive breastfeeding practices of urban women in Addis Ababa public health centers, Ethiopia: a cross sectional study. *Int Breastfeed J.* 2015;10:22.PubMed Central [View Article](#) [PubMed](#) [Google Scholar](#)
- Tamiru D, Mohammed S. Maternal knowledge of optimal breastfeeding practices and associated factors in rural communities of Arba minch Zuriya. *Int J Nutr Food Sci.* 2013;2(3):122–9.[View Article](#) [Google Scholar](#)
- The World Bank Report 2006. Healthy People 2010 on the internet: From <http://www.healthypeople.gov/documentlhtml/objectives/16-19.htm>. [Retrieved December 12 2008]
- UNICEF Supporting Mothers to Breastfeed will Improve Children's Chances of Survival, says UNICEF. New York, United States. The United Nation Children's Fund, 2008. USA: Central Statistical Agency and ICF International; 2012.[Google Scholar](#)
- WABA. World Breastfeeding Week; Exclusive Breastfeeding: Gold Standard Safe, Sound, Sustainable. World Alliance for [Breastfeeding Action](#), 2004.
- WHO . The optimal duration of exclusive breastfeeding: Report of an expert consultation. Geneva: Department of Nutrition for Health and Development, Department of Child and Adolescent Health and Development, World Health Organization, 2001, 1-10.
- WHO. Indicators for assessing infant and young child feeding practice part 3. WHO, Geneva; 2010.[Google Scholar](#). WHO. Early Initiation of Breastfeeding: WHO, Geneva; 2010.