# PREDICTING EXCLUSIVE BREASTFEEDING INTENTION AMONG ADOLESCENTS IN IBADAN NORTH LOCAL GOVERNMENT AREA, OYO STATE, NIGERIA

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BY

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## **CERTIFICATION**

I hereby certify this study was carried out by ODUKOYA, Oluwaponmile Ayobami under my supervision in the Department of Health Promotion, Faculty of Public Health, College of Medicine, University of Ibadan, Ibadan.

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## **DEDICATION**

This work is dedicated to Almighty God for his kindness bestowed on me throughout this programme.

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#### **ABSTRACT**

Breastfeeding is an internationally recognized and supported practice. It is the preferred method of infant feeding because it has numerous health benefits for a mother and her new-born. By adulthood, mothers' choice to breastfeed relay largely on knowledge and attitude which had been developed usually in adolescence. However, there is a paucity of information on the intention to exclusively breastfeed among adolescents. Hence, focusing on the pre-motherhood population is essential, so as to confer the benefits of exclusive breastfeeding.

A descriptive community-based cross-sectional study was done and four-stage sampling technique was used to select 271 respondents. A pre-tested interviewer administered questionnaire consisting of respondent's socio-demographic characteristics, knowledge, attitude and intentions of adolescent towards exclusive breastfeeding was used. The data was analysed using descriptive and inferential statistics with the aid of SPSS version 21 at  $p \le 0.05$ . A 26-point knowledge scale was used to assess level of knowledge and was categorised as poor (0-8), fair (9-17) and good (>18). A 13-point attitude scale was used to assess respondents' attitude, poor (0-6), and good (>7). A 10-point intention scale was used to assess respondents' intention, (0-5) as poor and (>6) as good.

The age of the respondents was 17.5±1.3 years; 89.7% were Yoruba, 97.0% single and 64.6% completed secondary school. Students made up 55.4%. Information about exclusive breastfeeding were obtained from relatives (61.6%), parents (53.9%), teachers (42.4%), mass media (39.9%) and hospital/clinic (33.2%). More than half (53.1%) of the respondents do not know the meaning of exclusive breastfeeding. Although 90.0% of the respondents agreed that breast milk is cheaper than infant formula, however, 48.3% were of the opinion that breast milk only was not sufficient for infants in the first 6 months of life. Also, only 32.8% disagreed that water should be introduced to infants before 6 months of life. Overall, good knowledge score was found among only 22.5%. With regards to attitude, just an average (50.2%) have positive attitude towards exclusively breastfeeding. Although 96.3% had the intention to breastfeed their child later in future, only 39.9% have the intention to breastfeed exclusively. Overall, good intention score was found among just 37.8%. There was significant relationship between intention and respondents' age, religion, educational attainment, both parents' educational attainment, level of knowledge and attitude. Logistic regression was used to assess association of knowledge, attitude and socio-demographic variables on intention to breastfeed. For inferential statistics using the logistic regression model, Wald statistic indicated that significant predictors of good intention to practise EBF were knowledge and attitude with the coefficient of p = < 0.001.

Breastfeeding knowledge and attitude were found to be relatively fair among majority of the respondents. However, it was noted that intention to breastfeeding was poor. The mass media that can reach a large audience is recommended to improve knowledge, attitude and intention through interventions that would pass across the right information to the target audience and other community members.

**Keywords:** Exclusive breastfeeding, predict, intention, adolescent

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# **GLOSSARY OF ABBREVIATIONS**

**ANSF:** Antenatal Survey Form

**BF:** Breastfeeding

**EBF:** Exclusive Breastfeeding

**FMOH:** Federal Ministry of Health

SIDS: Sudden-Infant Death Syndrome

**TPB:** Theory of Planned Behaviour

**UNICEF:** United Nations Children's Emergency Fund

WHO: World Health Organization

## **DEFINITIONS OF TERMS**

**Exclusive Breastfeeding:** Exclusive intake of breast milk by an infant from its mother or wet nurse or expressed milk with the addition of no other liquid or solid with the exception of drops or syrups consisting of vitamins, minerals supplements, or medicine and nothing else for the first six month (WHO/UNICEF, 2005).

#### **CHAPTER ONE**

## INTRODUCTION

## 1.0 Background to the Study

Healthy breast practices cover a range of behaviours. These are linked to health, wellness and of global importance. The knowledge and attitude of an adolescent towards breastfeeding is an important domain to champion the cause of breastfeeding as a child survival strategy. Understanding their views early, proffers prompt steps for intervention on the areas with deficiencies. Globally, under-five childhood deaths are fuelled by malnutrition. Over sixty percent of these deaths are as a result of insufficient diet within the first year of life (WHO, 2003). It is recommended that breastfeeding should continue for a minimum of two years from the child's birth and that safe, appropriate and adequate complementary foods be introduced from the age of six months (WHO, 2010). This is been intensified by many health organizations at the national and local level (Raissian and Su, 2018).

Breastfeeding is an internationally recognized and supported practice. It is the preferred method of infant feeding because it has numerous health benefits for a mother and her new-born (Giles, Connor, McClenahan, Mallett, Stewart-Knox, and Wright, 2007). Breastfeeding continues to be not only the simplest and healthiest but also the least expensive feeding method that provides all the infant needs. Many have ascribed that it is the most complete nutritional source for infants because breast milk contains the essential classes of foods (Okafor, Olatona, and Olufemi, 2014). Studies have confirmed that breastfeeding reduces the incidence of respiratory tract infections, non-specific gastroenteritis, otitis media, atopic dermatitis and childhood leukemia (Eidelman, Schanler, and Johnston, 2012). Some of the benefits of optimal breastfeeding also includes improving motor and mental development in babies and protecting them against metabolic conditions and respiratory conditions such as diabetes (type 1 and 2), and asthma, respectively. Other benefits of breastfeeding to the child are preventing against necrotising enterocolitis, Sudden Infant Death Syndrome (SIDS) and obesity (Stuebe, 2009).

In mothers, breastfeeding decreases post-partum bleeding. Gradually as the mother breastfeed, involution of the uterus is accelerated. Child spacing is also another crucial role breastfeeding plays as it brings about lactational amenorrhoea. Reduced risks of osteoporosis, hip fracture, breast cancer, ovarian cancer, and type 2 diabetes are maternal benefits of

breastfeeding which are all together invaluable at such least cost (Victora, Horta and Mola, 2015).

On this basis that adolescence is the last stage before the verge of stepping into motherhood in adulthood and breastfeeding is an invaluable entity, it is important to focus research on female adolescents. Baldwin and Amato (2012), states that the best age range to take action against ill-health is just before adulthood.

## 1.1 Statement of Problem

Exclusive breastfeeding (EBF) for the first 6 months and continued breastfeeding up to 11 months is the single most effective strategy to improve child survival in developing countries (Jones, Steketee, Black, Bhutta, and Morris, 2003). Nonetheless, analysis showed that suboptimal breastfeeding, especially non-EBF in the first six months results in about 1.4 million deaths and up to 10% of the disease burden occur in children younger than five years in low income and middle income countries (Black, Allen, Bhutta, Caulfield, de Onis, Ezzati, Mathers, and Rivera, 2008). WHO report states that only 39% of all infants under six months in developing countries and 25% specifically in Africa were exclusively breastfed for the first six months of life; infants amounting to 6% were never breastfed; infants and children who were breastfed at 6-11 months and 12-23 months were 86% and 68%, respectively (WHO, 2010).

Additionally, teenage pregnancy is on the increase. Statistics from WHO reveal that low to middle income countries have 95% of births to mothers below 20 years of age and the highest rates occur in sub-Saharan Africa. As of 2010, World Bank indicators showed that teenage mothers make up 22.9% of women in Nigeria (Chiazor, Ozoya, Idowu, Udume and Osaide, 2017). The Federal Ministry of Health (FMOH) (FMOH, 2011) in her document "Saving Newborn lives Maternal and Child Health" reported that Nigeria has one of the lowest EBF rates in the African continent. The rates of EBF at six months in some centres in Nigeria are 26.9% in Bayelsa (Peterside, Kunle-Olowu, and Duru, 2013); 58.3% in Port-Harcourt (Otaigbe, Alikor, and Nkanginieme, 2005); 19% in Ile-Ife (Agunbiade and Ogunleye, 2012) and 21.2% in Enugu (Uchendu, Ikefuna, and Emodi, 2009).

Furthermore, recent findings suggest that the current choices of the youth have been reported to affect their future reproductive practice (Eyitope, 2014). The decision to breastfeed is influenced by the attitude of mothers towards breastfeeding plausibly formed as early as adolescence (Marteens, 2001). This is because, adolescents are in the age group which can

easily be influenced by peers, lifestyle, and sociocultural beliefs (Wing, 2012) and attitude which eventually influences practice toward breastfeeding is formed early in life and a strong predictor for actual initiation and duration of breastfeeding is attributed to prior intention to breastfeed (Shahla, Kathleen, and Ashley, 2010; Jiang, Li, Yang, Wen, Hunter, He, and Qianl., 2012).

Hence, tackling mothers' awareness and intention to breastfeed is essential to improve breastfeeding practice (Forster, McLachlan, and Lumley, 2006; Jiang et al., 2012). Various studies have investigated the breastfeeding intentions and attitude. For instance, study have been conducted among nursing students (Hila, 2006), first-time mothers (Lynn, Florence, Nazarius, Johansson, Edward, and Elisabeth, 2008), medical students (Anjum, Ashfaq, and Siddiqui, 2007), artisan (Akinremi, and Samuel, 2018) and youth corp members (Leshi, Samuel and Ajakaye, 2016).

Nonetheless, there is a gap of similar research capturing breastfeeding intention of adolescents in community-setting although, teenage pregnancy and teenage mother is on the increase. Hence, research of this nature is essential, as suboptimal breastfeeding practices are becoming widespread in Nigeria. To address this, the intention of optimum breastfeeding needs to be studied. The aim of this study is therefore to predict exclusive breastfeeding intentions breastfeeding among adolescents in Ibadan North Local Government Area.

# 1.2 Justification

Breastfeeding is regarded as the most cost-effective public health measure that significantly impacts infant morbidity and mortality in developing countries Molbak, Gottschau, Aaby, Hojlyng, Ingholt, and Da Silva, 1994: WHO, 2001). An estimated 13% reduction in infant mortality rate can be achieved through the practice of EBF (Jones et al., 2003). Initiating breastfeeding within the first hour of life could reduce the rate of neonatal mortality by up to 22% (Edmond, Zandoh, Quigley, Amenga-Etego, Owusu-Agyei, and Kirkwood, 2006). The many benefits of breastfeeding are invaluable. Notwithstanding, the rate of EBF is only 39% in developing countries (Cai, Wardlaw, and Brown, 2012).

The world now has the largest cohort of young people in history-1.8 billion of which 1.5 billion of these youths live in LMIC (Patton, Coffey, Cappa, Ferguson et al., 2012). Adolescence is a time when the influence of peers and parents, as well as the targeted marketing of unhealthy products and lifestyles, is significant. Assessing knowledge of

adolescent is important because it has been stated that adolescence is the last best chance to take up healthy behaviours (Baldwin and Amato, 2012).

Breastfeeding knowledge of adolescents has previously been associated with breastfeeding attitude and intention in other studies. Studies have likewise focused on young adults. Adolescent in community setting have however not been studied. This study aims at studying adolescents in the community setting. This will throw light on the level of knowledge and attitude towards breastfeeding. Hence, addressing this issue prior to motherhood especially in adolescence is deem important. It will go a long way in directing breastfeeding intervention.

## 1.3 Research Questions

The study answered the following questions:

- i. What is the knowledge of EBF among adolescents in Ibadan North Local Government Area of Oyo State?
- ii. What is the attitude towards EBF among adolescents in Ibadan North Local Government Area of Oyo State?
- iii. What is the EBF intention among adolescents in Ibadan North Local Government Area of Oyo State?

# 1.4 Hypotheses

HO<sub>1</sub>: There is no association between social demographic variables and intention to breastfeed exclusively.

**HO**<sub>2</sub>: There is no association between knowledge and intention to breastfeed exclusively.

**HO**<sub>3</sub>. There is no association between attitude and intention to breastfeed exclusively.

## 1.5 Objectives of the Study

## 1.5.1. General Objective

The general objective of the study is to investigate exclusive breastfeeding intentions among adolescents in Ibadan North Local Government Area of Oyo State, Nigeria.

# 1.5.2 Specific Objectives

The specific objectives of the study are to

1. Assess the knowledge of exclusive breastfeeding among adolescents in Ibadan North Local Government Area of Oyo State.

- 2. Determine the attitude towards exclusive breastfeeding among adolescents in Ibadan North Local Government Area of Oyo State.
- 3. Assess the intention to breastfeed exclusively among adolescents in Ibadan North Local Government Area of Oyo State.

# 1.6 Scope of Study

The scope of the study focused on adolescents between the ages of 15-19 years. The study seeks to predict the intention of this group of individuals on exclusive breastfeeding. This study focused on female adolescents. This showed the extent of knowledge this group of individuals have and what is required to initiate behavioural change.

#### **CHAPTER TWO**

## LITERATURE REVIEW

## 2.0 Introduction and conceptual clarification

Breastfeeding is a healthy breast practice. Exclusive breastfeeding (EBF) is defined as 'exclusive intake of breast milk by an infant from its mother or wet nurse or expressed milk with the addition of no other liquid or solid with the exception of drops or syrups consisting of vitamins, minerals supplements, or medicine and nothing else for the first six months (WHO/UNICEF, 2005). This human milk is the ideal nourishment for infants' survival, growth, and development. In many unhygienic conditions, breast milk substitutes such as formula feed, carry a high risk of infection and can cause death in infants. The benefits of breastfeeding cut across good health of the child, heightened survival and mother's wellbeing in both short and long term.

## 2.1 Healthy breast practices

Behaviour is what an individual do, or fails to do. Breastfeeding is one of the oldest practices known to mankind. Breastfeeding involves the production of milk from a female human mammary gland to feed a newborn, this process is also called lactation. In the process of pregnancy and delivery, oxytocin and prolactin hormones are associated with lactation(Gimpl and Fahrenholz, 2001).

Breastfeeding has numerous benefits for the newborn, mother and society at large. Breastfeeding benefits for the infant include protection against infection (Lowdon, 2008) such as ear infections- acute otitis media. It also promotes immunologic fortification (Greer, Sicherer, and Burks, 2008; Colombo, Costantini, Zazzeron, Faelli, Russo, and Ghisleni, D. 2007). Studies have similarly ascertained that breastfeed confer allergy protection (Lawrence and Lawrence, 2000; Galson, 2008) alongside psychological advantages (Johnston, 2006). Infants who are exclusively breastfed for 6 months and those with longer total breastfeeding time have a lower risk of infections, cancers, metabolic diseases such as obesity and diabetes in the future (Arenz, Rückerl, Koletzko, and von Kries, 2004; Stuebe, 2009).

Furthermore, breastfeeding has also been found to provide long-term benefits for the mother. Beneficial hormones are released into the mother's body and the maternal bond can be strengthened during breastfeeding (CDC, 2012). Frequent and exclusive breastfeeding can

delay the return of fertility through lactational amenorrhoea. Breastfeeding has also been found to provide long-term benefits for the mother including empowerment (Galson, 2008; Mohrbacher and Stock, 2003). It helps to bring about decrease in diabetes (Gunderson, 2007), osteoporosis, ovarian cancer, and breast cancer (Hernandez and Callahan, 2008; ACOG, 2007; Hurst, 2007; Riordan, 2005; Mohrbacher and Stock, 2003). It also provides a decrease in blood pressure on a long-term basis (Jonas, Nissen, RansjA-Arvidson, Wiklund, Henriksson, and Uvnas-Moberg, 2008) and protective infant spacing (King, 2007).

The society has benefits accrued when breastfeeding is taken up. These include cost savings to business due to decrease absenteeism and lower employee turnover rates (Tuttle and Slavit, 2009). The duration of breastfeeding determines the benefits derived. So, the longer a woman and infant breastfeed, the better it is for all (Raisler, Alexander, and O'Campo, 1999).

Also, there are multiple organizations that agree breastfeeding has these intensive benefits. Breastfeeding is promoted by world organizations, such as WHO (World Health Organization, 2001), World Alliance for Breastfeeding Action (World Alliance for Breastfeeding Action, 2009), the International Paediatric Association (International Cicatrice Association, 2009), UNICEF (WHO/UNICEF, 1990), and the International Lactation Consultant Association (2005). The American Public Health Association (APHA) views the lack of breastfeeding as a fundamental public health issue.

## History of breastfeeding

In the early 1600s, breastfeeding rates were at the highest of any time in the history of the United States (Darby-Carlberg, 2010). Puritan reformers were the most outspoken advocates for maternal breastfeeding. They emphasized the maternal rather than the sensual nature of women, condemning those who chose not to nurse their own infant as "vain . . . and sinful in nature" (Thulier, 2009). Breastfeeding rates in the U.S. decreased under the influence of the Age of Enlightenment and as European cultural choices, which did not support breastfeeding. This is becoming widespread as well in many African countries due to the adoption of western life. In the early 1800s, when both physicians and U.S. culture supported breastfeeding there was a rise in breastfeeding rates. However, this quickly changed with the introduction of "formulas."

By 1850s, infant "formulas" became "the most perfect substitute for mother's milk" (Riordan and Wambach, 2010). These "formulas" created a new category of physicians, the paediatrician, each developing his/her own mixing formula for infant feeding and at the same

time creating a monetary reason to encourage women to bottle feed. Unfortunately, these formulas were often made with spoiled and contaminated cow's milk (Wolf, 2003). These products led to extremely high infant mortality with more than 18% of all infants dying before their first birthday. More than half of these deaths were caused by diarrhoea from tainted milk (Wolf, 2003). Nonetheless but slowly, there has been an increase in available public breastfeeding information and improved professional education and support.

In Nigeria, the practice of breastfeeding remains below the globally recommended standard although, awareness has been implemented by different governments and non-governmental organizations on benefits of EBF (Adeyinka, Ajibola, Oyesoji, and Adedeji, 2008). The recent data has it that the percentage of infants exclusively breastfed to the age of six months was 17% in 2003 reduced to 13.1% in 2008 and returned to 17% in 2013, indicating fluctuation. On the other hand, the proportion of children less than six months who received complementary foods increased from 18% to 35% in 2008 and dropped to 23% in 2013 (NPC and ICF Macro, 2014). In addition, the 2013 NDHS results showed that only one out of three children were breastfed within one hour of birth. Seventy-four percent of children were breastfed within one day of birth. Specific background characteristics make the prevalence of early initiation of breastfeeding (within one hour) vary such as the area of residence- 40% in urban areas and 29% in rural areas (Alade, Titiloye, Oshiname and Arulogun, 2013).

On the other hand, Ogbo, Agho and Page (2015), found the rate of breastfeeding initiation within the first hour of delivery to be equally low (38%) in Nigeria. These low rates of breastfeeding practice contribute to the high burden of neonatal and infant mortality in the country. This is because evidence connecting appropriate breastfeeding to preventing infections can be linked to inappropriate breastfeeding practices and child morbidity and mortality.

## 2.2 Knowledge of breastfeeding

Facts improve knowledge and adequate knowledge is prerequisite for behavioural change. The decision to breastfeed is influenced by the knowledge of prospective mothers. The third-year secondary school students' knowledge of breastfeeding and intention to breastfeed their children was studied in Croatia. From two secondary schools in Bjelovar 154 students 101and 43, female and male respectively were recruited using a questionnaire with 23 questions regarding knowledge and intention to breastfeed. Results from the study indicated that approximately half of the respondents had the opinion that both partners should decide on

breastfeeding. Breastfeeding exclusively for 6 months, which is a recommendation by health organization, was recognized by 70.1% of the students. However, only 29.22% of the students correctly answered the question on the initiation of formula together with the mother's milk. These showed that secondary school students' knowledge of breastfeeding was insufficient, and not only should schools, families, social communities but also, other sources of information share the responsibility to improve their knowledge (Catipovi'c, Bari'ci'c, Rokvi'c, and Grguri'c J, 2012).

In a study on breastfeeding knowledge, attitude and intention among female youth corp members of the National Youth Service Corps (NYSC) scheme in Ibadan, a cross-sectional study was conducted. A total of 457 out of a total of 1200 female 'corpers' were recruited based on their willingness to be involved in the study. A semi-structured and self-administered questionnaire was used to obtain information from the study participants from August to October 2014. The result showed about half (52.1%) knew breastfeeding should be initiated within one hour of birth. All together only 43.1% of the respondents had good breastfeeding knowledge (Leshi et al., 2016). The recommended intervention to improve knowledge of this population.

A study in Enugu South-East Nigeria adopted a cross-sectional descriptive survey design. The knowledge and intention to practice EBF and its associated factors during pregnancy in selected communities were assessed in the survey. Primiparous women attending their third-trimester antenatal care from selected health facilities popular in obstetric health services were recruited into the study. In all, 201 primiparous mothers in selected rural and urban communities in Enugu State were eligible. The questionnaire used comprised 19-item Antenatal Survey Form (ANSF), four close-ended items were used to measure participants' knowledge. The correct knowledge on EBF was based on these variables assessed: understanding that the newborn is to be given breast milk only-with the exception of medications- from birth (within an hour of birth); identify a minimum of 5 benefits of EBF; and if EBF should commence from birth up to 4-6 months of the infant's life (Ihudiebube-Splendor, Okafor, Anarado, Jisieike-Onuigbo, Chinweuba, Nwaneri, et al., 2019).

Inadequate knowledge of EBF was found from more than half (58.7%) of primiparous mothers. Correctly stating the meaning of exclusive breastfeeding, when it is initiated, and for how long was 63.7%. The benefit of EBF most known by the participants was that of protection against infection as well as childhood malnutrition 134 (66.7%). However, other benefits of breast milk containing the required amount of nutrients and water as just 98 (48.8%) while the benefit of protecting the baby against diarrhoea was 88 (43.8%); both below average. The study found that the source of information about EBF was principally through antenatal visits 106 (52.7%), conversing with midwives. Other sources of information from friends, media and doctors were 35.8%, 28.9%, and 25.4% respectively. In total, only 32 (15.9%), had adequate knowledge sources about EBF (Ihudiebube-Splendor et al., 2019).

Knowledge towards EBF among mothers attending antenatal and immunization clinic in Ethiopia was assessed in a cross-sectional institution-based study. This study was conducted in Dabat Health Centre. Dabat is found in the north east of Gondar 814km far from Addis Ababa, the capital city of Ethiopia. Participants were all mothers utilizing antenatal care and immunization clinic in Dabat Health Centre during data collection. A total of 384 participants were recruited into the study. To assess knowledge about EBF, nine knowledge questions were used. These consisted of knowledge about EBF, the correct time to give breast milk to a child after birth, handling the first milk or colostrum, actual time to start complementary foods in addition to breast, foods and/or fluids suitable and recommended to give to a child under 6 months, if pre-lacteal feeding is required for an infant before starting breast milk, if infant is be fed breast milk alone without water and other liquid, if it enough for an infant during the first 6 months of life, and whether EBF for the first 6 months prevent diarrhoeal and respiratory diseases for the infant. One hundred seventy-four (45.3%) of the respondents had poor knowledge to give the first milk (colostrum) to the newborn. The study drew a conclusion that knowledge of study participant mothers who attend ANC and immunization clinic towards EBF is poor which is less than three-quarters (Alamirew et al., 2017).

In addition, Alamirew (2017), investigated the source of information. The study found 66.4% of participants to have information about EBF and their source of information was health institutions. Their findings were higher than the study conducted in Mizan Aman town, Southwestern Ethiopia, with 62.7 (Tadele and Habta, 2015). However, lower than the study conducted in Kigali, Rwanda, that was 74.4% (Bahemuka et al., 2013).

Giles et al. (2007), measured young people's attitudes to breastfeeding using the Theory of Planned Behaviour (TPB). The focus of the study was to design and pilot a questionnaire to measure young people's attitudes to breastfeeding using the TPB. This instrument was intended for subsequent use in a large-scale attitude survey, which in turn will inform the design of a breastfeeding intervention programme with adolescents. The study found the

knowledge of breastfeeding to be somewhat restricted. Despite many adolescents were aware that breast and bottle milk is not the same (76.9%), that breastfeeding can deepen the bonding process (77.7%) and that breast milk contains antibodies that protect a baby from infection (71.1%), the majority either answered incorrectly or did not know that bottle-fed babies are more susceptible to illness. The study found limited knowledge of the respondents in respect of breastfeeding; and that their findings corroborate previous research suggesting that knowledge is a key issue to be addressed in any education programme.

Furthermore, Raissian and Su (2018), systematically evaluated variables to serve as a proxy for positive maternal selection into breastfeeding. It was found that women with greater knowledge about prenatal nutritional recommendations and accessed more sources of information about prenatal and infant nutrition had more intentions. This knowledge is linked to intention and ultimate children of these women had fewer health problem.

## 2.3 Attitude towards breastfeeding

Leshi et al., (2016), assessed attitude alongside breastfeeding knowledge among female youth corp members of the National Youth Service Corps (NYSC) scheme in Ibadan using a cross-sectional study design. Recruited participants were a total of 457. The attitudinal statements had responses of strongly agree, agree, neutral, disagree and strongly agree. The 10 points statements entailed infant feeding practice, comparison of breast milk to infant food and public embarrassment of breastfeeding. It was recorded that 40% of the participants were of the opinion that breast milk is not sufficient for the infant in the first 6 months of life. Also, on average the participants agreed that water should be given to babies before 6 months when complementary feeding is recommended to commence. In addition, 3 out of every 10 respondents were of the view that there is a feeling of embarrassment when breastfeeding in the public. However, 77% were of the view that breastfeeding is inexpensive when compared to formula feed while and 74% disagreed that formula feeding is healthier than breastfeeding. In all, merely 53.8% had a positive attitude towards breastfeeding.

In another study in Ibadan however, all the participants (96.4%) had a positive attitude to breastfeeding. This was as well a cross-sectional study. The survey was carried out in Agbowo community of Ibadan, south-western Nigeria. It was among young female adults who are apprenticed to learn hairdressing. The study used semi-structured questionnaires which were interviewer administered to collect data on socio-demographic characteristics, knowledge of EBF and attitudes towards breastfeeding. A total of 116 participants who met

the criteria and consented to participate were recruited. The result from the study showed most attitudes to breastfeeding to be positive. Some positive ones were that breastfeeding increases mother-infant bonding with over 80%; breastfed babies are healthier than formula fed babies with over 60%; breast milk is cheaper than a formula with over 90%. However, the negative attitude was seen in most of the respondents. On the opinion that breastfeeding makes mothers' breasts sag. 31.0% and 31.9%, strongly agreed and agreed, respectively. Majority of the participant felt it would be embarrassing to breastfeed in public spaces such as banks and churches but would not feel embarrassed at home (Akinremi and Samuel, 2018).

An institutional based descriptive cross-sectional study was conducted from March 10–30, 2016 where all the attitude variables were computed and averaged. Scores below the mean were considered negative attitude and scores equal to or above the mean were considered positive attitude based on the Likert scale. In the study, 76% of the respondents have positive attitude towards EBF based on the attitudinal score, while 24% have negative attitude towards EBF (Alamirew et al., 2017). This finding is slightly higher than the study conducted in Rwanda, Kigali, where the attitudinal score was 71.1% (Bahemuka et al., 2013).

In Nevada, Darby-Carlberg (2010), conducted a cross-sectional and correlational study. The study was developed to determine the attitudes of young adults in Clark County, Nevada about breastfeeding. A convenience sampling technique was utilized and 190 young adults (male and female students between the ages of 18 and 24) were recruited from various classes at the University of Nevada, Las Vegas. The study found no difference between male subjects' and female subjects' attitude about breastfeeding hence, failed to reject the null hypothesis. This was due to the fact that the difference in overall attitudes about breastfeeding was not statistically significant ( $X^2 = .281$ ).

Ogunba and Agwo (2014), carried out a study among undergraduate students of Obafemi Awolowo University, Ile-Ife, Nigeria about breastfeeding. Data was gathered from 200 students. Attitude toward breastfeeding showed that most of the respondents 61.5%, will not breastfeed exclusively as they will combine infant formula with breast milk. On breastfeeding in public, one third (39.5%) responded not to it been an option for them in future and 7.0% would only do so if they do not have enough money for infant formula. Likewise, 54.0% agreed that babies should be given breast milk on request. Although, 87% agreed that it is not a waste of time to practice EBF. In all attitude toward EBF was negative (14.6%), neutral (77.4%) and positive (8.0%).

# 2.4 Intention to breastfeed

A study was carried out in 2019, regarding intention to breastfeed as good (if the intention is to start EBF immediately and to last  $\geq 6$  months) and poor if otherwise. The study assessed intention alongside knowledge to practice EBF and its associated factors during pregnancy among primiparous women in selected communities in Enugu State, Nigeria. A cross-sectional descriptive survey design was adopted. From selected health facilities within the state, 201 primiparous pregnant women attending their third-trimester antenatal care in both rural and urban communities were recruited. In the 19-item Antenatal Survey Form were items on the intention to practice EBF. The study saw that although 160 (79.6%) of the women had the intention to start practising EBF immediately after birth however, their overall intention to practice EBF was poor 115 (57.2%) (Ihudiebube-Splendor et al., 2019).

In addition, to ascertain predictors of intention, the Wald statistic in Logistic regression model indicated the coefficient of age, educational attainment, EBF knowledge and sources of information about EBF at (p=0.026), (p=0.046), (p=0.016) and (p=0.027) respectively to be significant predictors of good intention to practise EBF. With other predicator held at a constant, it was predicted that for a woman who would have good intention, specifically for age, the odds increased by 0.91 times (95% C.I, 0.84-0.99) for a 1-year increase in age. With regards educational attainment, the odds to have good intention increased by 6.44 times (95% C.I, 1.04-39.90), while a unit increase in knowledge and an additional knowledge source increased the odds of having good intention by 1.21 times (95% C.I, 1.04- 1.41) and 1.31 times (95% C.I, 1.03-1.670), respectively (Ihudiebube-Splendor et al., 2019).

Raissian and Su (2018), systematically evaluated the role of an expectant mother's prenatal breastfeeding intentions, which reflect not only demographic characteristics, but also knowledge, attitudes, and social norms about infant feeding. Using 1008 of the Infant Feeding Practices Study (IFPS) II it was found that mothers who intended to breastfeed had infants with fewer ear infections and respiratory syncytial viruses and used fewer antibiotics in the first year of life compared to infants whose mothers did not intend to breastfeed. This was irrespective of whether they breastfed. This explains that intention has a lot to do with several practices which gear towards the same benefit. A mother who has the intention to breastfeed has the mindset of ensuring optimal health for the infant. However, when the opportunity to breastfeed is not attainable on the birth of the child, such a mother still embarks on activities to ensuring optimal health for the infant.

Furthermore, Sittlington et al. (2007), found out from their study in infant-feeding attitudes of expectant mothers in Northern Ireland that positive pre-pregnancy attitudes in mothers are linked to the intention and initiation of breastfeeding. This is because, the decision to breastfeed or to bottle-feed was most often made before pregnancy (Samir et al., 2000). Ogunba and Agwo (2014), revealed that most of the respondents will initiate breastfeeding between 0-6 hours of birth in their study among undergraduate students of Obafemi Awolowo University, Ile-Ife, Nigeria with 200 students as participants. Responses among these undergraduate students of duration of EBF varied from 3months, 6 months, 1 year and 2 years at (11.0%), (40.0%), (25.0%) and (14.0%) respectively. Although, participants intend to terminate breastfeeding at 3 months (5.0%), 6 months (16.5%), 1 year (50.5%) and 2 years (28.0%).

In a more recent study, several factors were significantly associated with breastfeeding practices. The study was conducted to determine the breastfeeding knowledge and practices of women who have children aged 0-2 years living in a Naval Barracks, using a descriptive cross-sectional method and recruiting 220 women. This study revealed the necessity to educate women and communities worldwide particularly in low-income countries about good breastfeeding practices (Akinyinka et al., 2016).

## 2.5 Theoretical framework

The theory for reasoned action was used in this study. This theory explains deliberate behaviour and how specific behaviours, such as breastfeeding, are affected by individual attitudes and social support. This theory suggests behaviour is determined by an individual's intention to perform the behaviour. Intention to perform the behaviour develops as a result of the person's personal attitude toward the chosen behaviour (breastfeeding), her belief in her ability to perform the behaviour and the perceived attitudes of society (normative belief) toward that chosen behaviour (Ajzen and Fishbein, 1980). Correct education is very necessary to help prospective mothers become empowered to feed their babies at the breast (Munoz-Silva et al., 2007). There is a need for women to get support from family members, friends, and society.

Furthermore, Bailey et al. (2008) document that positive maternal attitudes as well as increased maternal knowledge about breastfeeding, enhance both the initiation and duration of breastfeeding. Also, the decision to breastfeed and encourages longer duration has been stated by women to be promoted from explicit support they derive from their partners and

other family members (Bishop, Cousins, Casson, and Moore, 2008). Knowledge and attitudes among adolescent in community settings need to be improved because they do not have the opportunity to acquire vital information through the school curriculum. This will help to do away with myths from interaction with community members hence increase intention to breastfeed as well as the duration of breastfeeding.

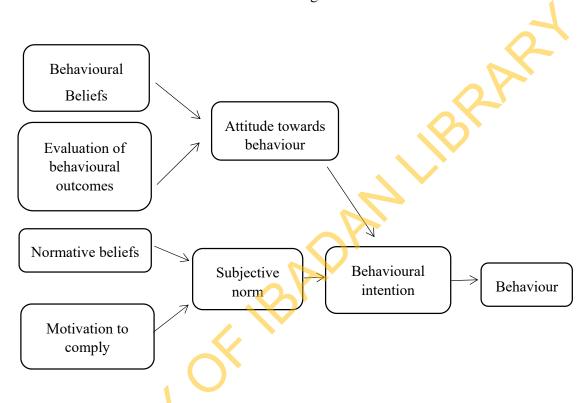


Fig 2.1- Theory of Reasoned Action as developed by Ajzen and Fishbein, 1980.

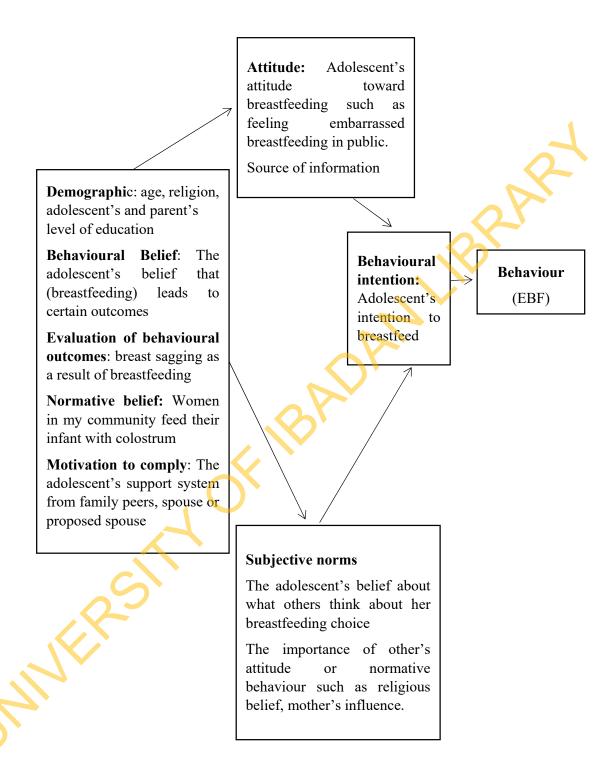


Fig 2.2- Theory of Reasoned Action as applied to the Study

#### **CHAPTER THREE**

## **METHODOLOGY**

## 3.0 Research design

A descriptive community-based cross-sectional design was employed. This design was chosen because data was collected at a point in time.

## 3.1 Study Area

The study was carried out among adolescents in Ibadan North Local Government Area. The local government has an area of  $27 \text{km}^2$  with a land mass of  $132,500 \text{km}^2$ . As at the 2006 census, it had a population of 306,795 people but experienced an increase of 3.2% which resulted to having a population of 347,998 by the 2010 census. It has a population density of 2,626 persons per square meter. It was carved out of the old Ibadan Municipal and has its administrative headquarters at Bodija. It consists of 12 wards and is governed by an elected Chairman and 12 councillors per, one per ward.

Ibadan North Local Government Area is bounded by Akinyele and Lagelu Local Government to the North, Egbeda Local Government to the East, Ibadan North West Local Government to the West and Ibadan North East Local Government to the South. It has a bustling academic and economic activities, with the presence of the first university in Nigeria. It has little or no farming activities but is a home for small, medium and large-scale industries. It has the highest concentration of virtually all different tribes and ethnic groups in the country (Osayomi and Orhiere, 2017).

## 3.2 Study Population

The study population consisted of adolescents aged 15 to 19 from six wards randomly selected from the 12 wards in Ibadan North Local Government Area.

# 3.3 Target Population

The target population for the study included adolescents in communities of Ibadan North Local Government Area selected using the multi-stage sampling techniques.

## 3.4 Inclusion criteria

All adolescents aged 15-19 who have not given birth nor breastfed before were included in the study.

## 3.5 Exclusion criteria

Adolescents aged 15-19 who were ill during the study were excluded.

# 3.6 Sample Size Determination

The sample size for this study was estimated using Leslie Kish formula for a single proportion.

$$n = \frac{Z^2 pq}{d^2}$$

Where:

n= sample size

Z= standardized normal deviation which is a constant (1.96) at 95% confidence interval

P= 19.2%= 0.192 Previous study showed 19.2% in knowledge for breastfeeding among adolescent school girls in Ibadan, Nigeria (Walker, 1998).

$$Q=1-P=1-0.192=0.808$$

d=allowable error (5%) 0.05

Substitute numbers in formula:

$$n = \frac{(1.96)^2 \cdot 0.192(1 - 0.192)}{(0.05)^2}$$

$$n = 238.3$$

A non-response rate of 10% of  $238 = 238 \times 10\% = 23.8$ 

To address issues of incomplete response, 23.8 was added to the sample size calculated to make the sample size 262.1, approximately 262.

Therefore, the minimum sample size was 262. A total of 271 adolescents were recruited into the study.

# 3.7 Sampling Technique

A multi-stage (4-stage) sampling technique was used to select respondents for the study and this stated as follows:

**Stage 1:** At this stage, simple random sampling was used to select 6 wards from the 12 wards in the local government. (See table 3.1)

**Stage 2:** Out of the6 wards, 2 communities each were selected using a balloting method to select 12 communities. (See table 3.2)

**Stage 3:** The third stage involved selecting households with consenting adolescents who meet the inclusion criteria using purposive sampling in each community.

**Stage 4:** In the fourth stage, households where there are more than one eligible respondent, selection was done using balloting method.

Table 3.1: List of wards and communities in IbNLGA

Ward	Communities
1*	Beere**, Kannike, Agbadabudu, Oke-Are**, Ode-Oye
2	Odo-Oloo, Inalende, Oniyanrin, Oloro-Oke
3*	Adeoyo**, Oke-Aremo, Isale Alfa, Yemetu**,
4	Itutaba, Idiomo, Oje**, Kube**, Abenla, Aluwo, Oke-Aapon
5*	Bashorun, Ashi, Akingbola, Ikolaba, Oluwo, Idi- Ape, Agodi GRA, Gate
6	Sabo, Oke-Isu, Kudeti, Jemibewon
7*	Oke-Itunu**, Oremeji, Coca-cola, Ajibade**
8	Sango, Ijokodo, Elewure
9*	Mokola**, Alaafia, Dandaru, Ago-Tapa**, Veterinary, Premier Hotel
10	Bodija, Secretariat, Obasa, Sanusi
11	Samonda, Polytechnic, University of Ibadan
12*	Agbowo, Bodija Market, Ojurin, Barika, Isopatako, Lagos-Ibadan Express area

<sup>\*</sup>Selected wards

<sup>\*\*</sup> Selected communities

#### 3.8 Study Instrument

Quantitative method was used for data collection. This involved the use of an interviewer-administer questionnaire. The questionnaire was developed using information obtained from literature on the knowledge, attitude and intention to breastfeed. The instrument has four (4) sections. The first section was designed to elicit data on socio-demographics of the respondents. The second section assessed the knowledge of adolescent while the third section assessed attitude to breastfeed. Section four determined the intention to breastfeed.

#### 3.9 Validation of Instrument

In order to establish the validity of the instrument, the researcher ensured the validity of the instrument by reviewing relevant literature. The instrument was subjected to scrutiny by my supervisor to validate the instrument and corrections from the supervisor was taken to arrive at the final tool. All these were done before the actual administration of the questionnaire to the study participants.

#### 3.10 Reliability of Instrument

In establishing the reliability of the instrument, a pre-test was carried out. The pre-test entailed administering the constructed questionnaire to 10% of the total study population. This population was from another representative population. However, the filled questionnaire for the pre-test was not used in the final analysis of the work. The pre-test of this study was carried out among adolescent in Ibadan South West Local Government Area. This is because they share similar attributes to adolescent in Ibadan North Local Government Area. To ascertain the reliability of the questionnaire that has been pretested, the Cronbach Alpha measurement and reliability co-efficient measure was calculated on the pre-test questionnaire. Reliability co-efficient of 0.73 was used to adjudge the questionnaire as being reliable.

### 3.11 Procedure for Data Collection

The data collection was carried out by the researcher and three (3) research assistants. The research assistants were trained prior to the time of the data collection. The training was featured on providing an overview of the research topic, obtaining informed consent, issues relating to privacy and good interpersonal relationship. The criteria for selecting the research assistants were interest in the research, good communication skills, knowledge of research ethics, respect for persons, and availability

The questionnaire that was used for the study was serially numbered by the research assistants. Copies of the questionnaire were administered after obtaining informed consent through provision of adequate information about the study. The details of the research which were explained to the research participants. Participants who consent to be part of the study received the informed consent forms (attached to the questionnaire). After the copies of the questionnaire had been filled the researcher checked for completeness and errors before leaving the field.

# 3.12 Data Management and Analysis

The serial numbers were written on the copies of the questionnaire for easy entry and recall, aided in data management. In order to make analysis run smooth, a coding guide was developed along with the data collection tool. The researcher ensured that all copies of the questionnaire was reviewed to ensure accuracy and completeness. Also, data cleaning, recording and coding for analysis was done. With the aid of the developed coding guide, the data collected was carefully entered into the statistical software- Statistical Package for the Social Sciences (SPSS). The analysis in descriptive statistics such as mean, median and mode and inferential statistics such as Chi-square was computed. The Chi-square was used to judge the association of variables. The Wald statistic in logistics regression was used to indicate if the coefficient of certain variables were significant predictors of good intention to breastfeed. The results obtained from the Statistical Package for Social Science (SPSS version 20) analysis were summarized and presented in prose, tables and charts.

A 26- item question was used to measure the knowledge of adolescents on breastfeeding. Responses were classified as Yes and No. Each response is scored 1, making a total of 26. A score  $\leq 8$  was regarded as poor, 9-17 as fair and >18 as good . A 13-item question was used to measure the attitude of adolescents on breastfeeding. Each response is scored 1, making a total of 13. A score  $\leq 6$  was regarded as negative and score  $\geq 7$  was regarded as positive attitude. The intention of adolescents on breastfeeding was measured with a 10-item question. Responses were classified as agree and disagree. Each response is scored 1, making a total of 10. A score  $\leq 5$  was regarded as poor and score  $\geq 6$  was regarded as good. These scales were used so as to have a cross-tabulation. In any cross tabulation where a cell had a value less than 5, Fisher's exact test was used.

#### 3.13 Measurement of Outcome Variables

Overall intention to breastfeed was ascertained from analysis of the hypotheses. The direction of knowledge and attitude towards breastfeeding was ascertained. These involved determining the association between socio-demographics, knowledge, attitude and intention to breastfeed.

#### 3.14 Limitation of the Study

A limitation for this study was that some adolescents below 18 years required consent from their parents before giving assent. Appointments was booked with them for a time when their parents or guardian would be available.

#### 3.15 Ethical Consideration

Firstly, ethical approval was sought and obtained from the Oyo State Ministry of Health research ethics committee, with Ref No -AD 13/479/1434. Each questionnaire also had written informed consent attached. Identifiers such as names and other information in the research instrument-questionnaire, which can reveal the identity of research participants, were not be included so as to ensure confidentiality. The nature of the study, benefits and objectives was explained to the respondents. Respondents were assured of confidentiality and that the information given would be treated with the utmost confidentiality. Respondents were also told about the opportunity to withdraw their consent freely at any point during the study. After data collection, confidentiality of each participant was maximally maintained. The questionnaire was kept under lock and key. Information gathered from the respondents were entered in a single computer for analysis by the researcher.

### **CHAPTER FOUR**

### **RESULTS**

## 4.1 Respondents socio-demographic characteristics

Two hundred and seventy-one adolescents were interviewed for this study. Age of respondents ranged from the age of 15 years to 19 years with a mean age of 17.5±1.3 years. Majority (89.7%) of the respondents were of Yoruba ethnic background, followed by Igbo (7.4%) and Hausa (0.7%). Christianity is the most prominent religion practised by the respondents (58.3%). There were one hundred and seventy- five (64.6%) respondents who had secondary education, however, a small proportion of the respondents (1.1%) do not have any form of formal education. The respondents were predominantly students 150(55.4%) followed by those out-of-school 66(24.4%) (Table 4.1a). Singles made up 263(97%). Of those married, only one of the spouse (0.4%) had a bachelor's degree with 5(1.8%) being artisan. Fathers' and mothers' highest level of education were secondary 142(52.4%) and 151(55.7%) respectively (Table 4.1).

Table 4.1a: Respondents socio-demographic characteristics (N=271)

Socio-demographic characteristics	Frequency	Percent(%)
Age(years)		
15	18	6.6
16	63	23.2
17	42	15.5
18	68	25.1
19	80	29.5
Mean age	17.5±1.3	<b>(</b> ),
Ethnicity		
Yoruba	243	89.7
Igbo	20	7.4
Hausa	2	0.7
Others*	6	2.2
Religion		
Christianity	158	58.3
Islam	113	41.7
Highest Educational Attainment		
No Formal Education	3	1.1
Primary School	5	1.8
Junior Secondary School	65	24
Senior Secondary School	175	64.6
Tertiary	23	8.5
Occupation		
Student	150	55.4
Out-of-School	66	24.4
Apprentice	51	18.8
Others**	4	1.5

Others \* (Edo, Kogi),

Others \*\* (Casual worker, sales girl, full housewife)

Table 4.1b: Respondents significant-others socio-demographic characteristics

Table 4.1b. Respondents significant-others socio-demographic characteristics				
Socio-demographic characteristics	Frequency	Percent(%)		
Marital Status				
Single	263	97.0		
Married	8	3.0		
<b>Spouse Education</b>				
Primary	1	12.5		
Secondary	6	75		
Bachelor's Degree	1	12.5		
<b>Spouse Occupation</b>				
Artisan	5	62.5		
Business	2	25		
Others***		12.5		
Fathers Highest Educational Attainment				
No formal education	1	0.4		
Primary	16	5.9		
Secondary	142	52.4		
OND/Colleges of Edu	28	10.3		
Bachelor's Degree	44	16.2		
Postgraduate	18	6.6		
Others****	22	8.1		
Mothers' Highest Educational Attainment				
No formal education	2	0.7		
Primary	30	11.1		
Secondary	151	55.7		
OND/Colleges of Edu	29	10.7		
Bachelor's Degree	38	14.0		
Postgraduate	16	5.9		
Others****	5	1.8		

Others \*\*\* (Okada rider), others \*\*\*\* (No idea)

### 4.2 Respondents knowledge of breastfeeding

Majority (43.9%) of respondents agreed to having seen, heard or read about breastfeeding daily, followed by (35.1%) occasionally, weekly (18.1%) and (3%) responded not at all (Figure 4.2). Responses given for not hearing or seeing anything about breastfeeding were that no one specifically told them (14.0%) and that their religion is against it (3.3%).

The major source of information of breastfeeding is relatives (61.6%), followed by parents(53.9%), teachers in school (42.4%), mass media (39.9%) and hospital (33.2%) (Table 4.2a).

The major factors influencing these sources of information are seeing it practically, being available in the respondent's house, and from a trusted source with (71.6%), (50.6%) and (45.0%) respectively (Table 4.2b).

Of the 271 respondents, only (46.5%) responded correctly to initiating breastfeeding within an hour of delivery. Similarly, just a small proportion of the respondents (29.5%) responded to completely weaning a child after 24 months (Table 4.2e).

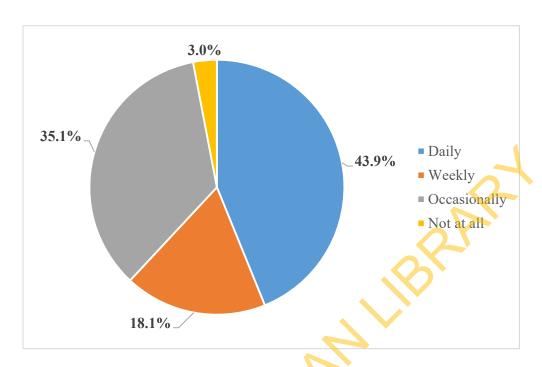


Figure 4.2: Frequency of information on breastfeeding among respondents

Table 4.2a: Respondents source of information (N=271)

Respondents sources of information	Frequency	Percent(%)
Parents	146	53.9
Relatives	167	61.6
Teachers in school	115	42.4
Mass Media	10	39.9
Hospital/Clinics	90	33.2
Friends	68	25.1
Social Workers	34	12.5
Books/Pamphlets	62	22.9
Folklore/Traditional Music	20	7.4
Drama/Debates	49	18.1
MIVERSITA		

Table 4.2b: Factors influencing source of information (N=271)

It is available in my house 137(50.6) 128(47.2) 6(2.2)  It is a trusted source 122(45.0) 119(43.9) 30(11.1)  It is confidential (i.e. private) 27(10.0) 205(75.6) 39(14.4)  I can see it practically 194(71.6) 71(26.2) 6(2.2)  It is detailed 65(24.0) 173(63.8) 33(12.2)  It is culturally known to me 75(27.7) 184(67.9) 12(4.4)  It is cheap 25(9.2) 218(80.4) 28(10.3)	Factors informatio	influencing source n	of	Yes(%)	No (%)	Don't Know (%)
It is confidential (i.e. private) 27(10.0) 205(75.6) 39(14.4)  I can see it practically 194(71.6) 71(26.2) 6(2.2)  It is detailed 65(24.0) 173(63.8) 33(12.2)  It is culturally known to me 75(27.7) 184(67.9) 12(4.4)  It is cheap 25(9.2) 218(80.4) 28(10.3)	It is availab	le in my house		137(50.6)	128(47.2)	6(2.2)
I can see it practically 194(71.6) 71(26.2) 6(2.2)  It is detailed 65(24.0) 173(63.8) 33(12.2)  It is culturally known to me 75(27.7) 184(67.9) 12(4.4)  It is cheap 25(9.2) 218(80.4) 28(10.3)	It is a truste	ed source		122(45.0)	119(43.9)	30(11.1)
It is detailed 65(24.0) 173(63.8) 33(12.2)  It is culturally known to me 75(27.7) 184(67.9) 12(4.4)  It is cheap 25(9.2) 218(80.4) 28(10.3)	It is confide	ential (i.e. private)		27(10.0)	205(75.6)	39(14.4)
It is culturally known to me 75(27.7) 184(67.9) 12(4.4)  It is cheap 25(9.2) 218(80.4) 28(10.3)	I can see it	practically		194(71.6)	71(26.2)	6(2.2)
It is cheap 25(9.2) 218(80.4) 28(10.3)	It is detaile	d		65(24.0)	173(63.8)	33(12.2)
	It is cultura	lly known to me		75(27.7)	184(67.9)	12(4.4)
NERSITY OF IBA	It is cheap			25(9.2)	218(80.4)	28(10.3)
		SIT				

The level of awareness of breastfeeding is high among respondents with (94.5%) of the respondents claiming "yes" to "being aware of breastfeeding". However only (46.9%) of the respondents claimed "yes" to "does exclusive breastfeeding mean giving a new born only breast milk". Similarly, when asked whether babies who are bottle-fed are more prone to illnesses than babies who are breastfed, only (43.2%) responded "yes". Nonetheless, responses on breastfeeding facilitating bonding between mother and baby was higher with (88.9%) of respondents claiming "yes". Knowledge about breastfeeding preventing a woman from returning to her pre-pregnancy weight was low with only (32.5%) claiming "no". However, respondents (88.9%) correctly answered "no" to "breastfeeding can be described as unhygienic causing germs to spread". Although, most of the respondents 69.7% knew breastfeeding is beneficial to mothers, only 30.3% and 16.2% correctly responded that breastfeeding mums have lesser risk of breast and ovarian cancer respectively. Most of the respondents 71.6%, 63.1% and 59.0% responded "yes" to "does breast milk contain antibodies which strengthens infant's immune system", "is Exclusive breastfeeding recommended for the first 6 months of a baby's life" and "does breast milk provide all the nutrients a baby needs" respectively. Respondent's knowledge was low when asked "breastfed babies do not have better mental development than babies fed on bottled milk" with (35.8%) claiming "yes". Only (51.7%) responded "yes" to feeding infants with breast milk alone in the first six months of life (Table 4.2c).

In addition, correct responses from respondents on "should infants be fed liquid foods like infant formula/cereal gruel in the first six months of life", "should infants be fed herbal teas in the first six months of life" and "should infants be fed with colostrum- pre-lacteal liquid" are (49.4%) (59.4%) and (48%) respectively. Most of the respondents could not correctly respond to "colostrum should not be given to the baby" with (29.2%) claiming "yes". When asked "Is complete covering of the nipples and its surroundings by the mouth of the infants one of the appropriate positioning for breastfeeding", only (30.6%) responded correctly, claiming "yes" (Table 4.2c). Also, responses on whether "breastfeeding does not protect baby against diarrhoea, infection, childhood malnutrition and sudden death" were (40.6%), (42.8%), (40.6%) and (25.8%) respectively. Response from respondents on "breast milk does not contain right amount of nutrients and water" is slightly above average with (53.5%) claiming "yes" (Table 4.2d).

Table 4.2c: Respondents knowledge of breastfeeding (N=271)

Variables	Yes (%) N	lo (%) Don't	Know (%)
Awareness of breastfeeding	156(94.5)*	112(4.4)	3(1.1)
EBF mean giving a new born only breast milk	127(46.9)*	110(40.6)	34(12.5)
Bottle-fed babies are more prone to illnesses that babies who are breastfed	n 117(43.2)*	94(34.7)	60(22.1)
Breastfeeding facilitate bonding between mothe and baby	r 241(88.9)*	15(5.5)	15(5.5)
Breastfeeding prevents a woman from returning to her pre-pregnancy weight	73(26.9)	88(32.5)*	110(40.6)
Breastfeeding can be described as unhygienic causing germs to spread	c 15(5.5)	241(88.9)*	15(5.5)
Breastfeeding is beneficial to mothers	189(69.7)*	26(9.6)	56(20.7)
Breastfeeding mums have lesser risk of breas cancer	st 82(30.3)*	52(19.2)	137(50.6)
Breastfeeding mums have lesser risk of ovarian	n 44(16.2)*	61(22.5)	166(61.3)
Breast milk contain antibodies which strengthen infant's immune system	s 194(71.6)*	15(5.5)	62(22.9)
Exclusive breastfeeding is recommended for the first 6 months of a baby's life	e 171(63.1)*	57.7(21.0)	43(15.9)
Breast milk provide all the nutrients a baby needs	160(59.0)*	79(29.2)	32(11.8)
Breastfed babies do not have better menta development than babies formula fed	1 97(35.8)*	117(43.2)	57(21.0)
Infants are to be fed with breast milk alone in the first six months of life	e 140(51.7)*	111(41.0)	20(7.4)

<sup>\*</sup>Correct responses

Table 4.2d: Respondents knowledge of breastfeeding (N=271)

Variables	Yes (%)	No (%) Don	't know(%)
Infants are to be fed liquid foods like infant	121(44.6)	134(49.4)*	16(5.9)
formula/cereal gruel in the first 6 months of life			
Infants are to be fed herbal teas in the first six months	75 (27.7)	161(59.4)*	35(12.9)
of life			2
Infants are to be fed with colostrum pre-lacteal liquid	130(48.0)*	* 43 (15.9)	98 (38.2)
Colostrum should not be given to the baby	79 (29.2)*	99 (36.5)	93 (34.3)
Complete covering of the nipples and its	83(30.6)*	113(41.7)	75(27.7)
surroundings by the mouth of the infants one of the		<b>V</b>	
appropriate positioning for breastfeeding	P		
Breast milk does not contain right amount of nutrients	145(53.5)*	* 58(21.4)	68(25.1)
and water			

<sup>\*</sup>Correct responses

Table 4.2e: Knowledge variable on breastfeeding (N=271)

Knowledge variables	Frequency	Percent(%)
Breastfeeding should be initiated within an hour of		
birth		1
Yes	126*	46.5
No	145	53.5
Complete weaning of a child should be before 24 months	R	
Yes	191	70.5
No	80*	29.5

The desired source of information are hospital (69%) and parents (63.1%) (Table 4.2f). The major communication devices are television (93.7%) and radio (84.1%) (Figure 4.3). Overall, the knowledge score of most respondent was found to be fair 50.2%. Only 22.5% of respondents have good knowledge of breastfeeding and 27.3% of respondents had poor

level of knowledge of breastfeeding (Table 4.2g).

Table 4.2f: Respondents desired source of information (N=271)

Desired source of information	Frequency	(%)
Hospital/Clinics	187	69.0
Parents	171	63.1
Relatives	102	37.6
Mass Media	78	28.8
Teachers in school	72	26.2
Books/Pamphlets	56	20.7
Drama/Debates	48	17.7
Social Workers	35	12.9
Friends	27	10.0
Folklore/Traditional Music	28	10.3

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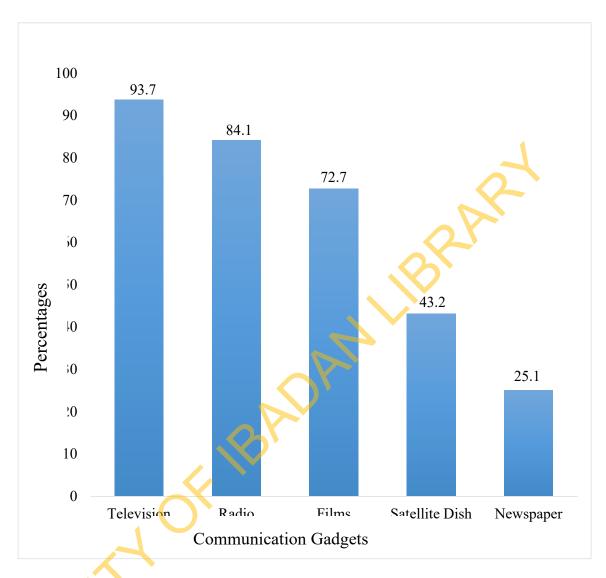


Figure 4.3: Communication devices respondents have at home

Table 4.2g: Overall knowledge score (N=271)

Knowledge score	Frequency	Percent(%)
Poor (0 -8)	74	27.3
Fair (9- 17)	136	50.2
Good (18-26)	61	22.5
Total	271	100

# 4.3 Respondents attitude towards breastfeeding

In assessing attitude towards breastfeeding, it was found that almost half (44.6%) of respondents selected "agree" to the statement "breastfeeding will make my breasts sag". Of the respondents, (64.2%) selected "disagree" to the statement that "formula feeding my baby will be more convenient than breast feeding". Although (57.2%) selected "agree" to the statement "water should be given to my baby before six months of life". However, only (33.2%) selected "agree" to the statement "breastfeeding aids in child spacing" (Table 4.3a).

Overall, only (50.2%) of respondent have positive attitude towards breastfeeding (Table 4.3b).

Table 4.3a: Respondents attitude towards breastfeeding (N=271)

Attitude	Agree(%)	Undecided (%)	Disagree(%)
Breast feeding increases mother-infant bonding	249(91.9)*	19(7.0)	3(1.1)
Breast fed babies are healthier than formula fed babies	159(58.7)*	42(15.5)	70(25.8)
Breast milk is cheaper than infant formula	243(89.7)*	25(9.2)	3(1.1)
Breast milk only is not sufficient for a baby in the	131(48.3)	30(11.1)	110(40.6)*
first 6 months of life			
Benefits of breastfeeding last till adulthood	177(65.3)*	54(19.9)	40(14.8)
Breast feeding will make my breasts sag	121(44.6)	79(29.2)	71(26.2)*
It is embarrassing to be seen breast feeding in public places like banks, cafeteria, church etc	90(33.2)	45(16.6)	136(50.2)*
Formula feeding my baby will be more convenient than breast feeding	46(17.0)	51(18.8)	174(64.2)*
Formula feeding is better most especially for working mothers	145(53.5)	58(21.4)	68(25.1)*
Colostrum does not protects the baby from infections	83(30.6)	113(41.7)	75(27.7)*
Breastfeeding cannot be continued when semi solid or some adult foods are introduced to a baby	39(14.4)	35(12.9)	197(72.7)*
Water should be given to my baby before six months of life	155(57.2)	27(10.0)	89(32.8)*
Breastfeeding aids in child spacing	90(33.2)*	116(42.8)	65(24.0)

<sup>\*</sup>Correct responses

Table 4.3b Overall attitude score (N=271)

Score	Frequency	Percent(%)
Negative 0-6	135	49.8
Positive 7-13	136	50.2
Total	271	100

### 4.4 Respondents intention to breastfeed

When asked "do you know all it takes to breastfeed", "are you well prepared for breastfeeding" and "will you breastfeed your child later in the future" (54.2%), (46.1%) and (96.3%) respectively responded claiming "yes". Of the 261(96.3%) respondents who responded "yes" to breastfeeding later in future, only (57.2%) will breastfeed as baby demands. Only (36.9%) of respondents responded to having the intention of introducing breast milk to their baby within 1 hour of birth. A larger amount (43.5%) have the intention of introducing breast milk after 1 hour of birth. Also, less than half of the respondents (46.1%) have the intention to breastfeed exclusively. However, only (33.2%) will exclusively breast for 6 months and above (Table 4.4a).

Similarly, when asked "when do you intend to introduce water to your newborn", (28.8%) and (30.3%) of respondents responded "immediately after birth" and "a week to six months" respectively. Similarly, when asked "when do you intend to introduce complimentary foods (pap) to your newborn", (5.9%) and (43.9%) of respondents responded "immediately after birth" and "a week to six months" respectively. Approximately 74% of respondents will breastfeed for less than 24 months in total (Table 4.4b). Only 37.6% of respondents had good intentions (Table 4.4c).

Table 4.4a: Respondents intention to breastfeeding

Intention Statement	Frequency	Percent(%)
Know all it takes to breastfeed		
Yes	147	54.2
No	124	45.8
Well prepared for breastfeeding		
Yes	125	46.1
No	146	53.9
Breastfeed your child later in the future		2
Yes	261	96.3
No	10	3.7
The mode of breastfeeding a child	7	
At mother's will	35	12.9
As baby demands	155	57.2
As scheduled by mother	73	26.9
At Husband's will	8	3
Intended time to introduce breast milk	to	
child		
Within 1 hour of birth	100	36.9
After 1 hour of delivery	118	43.5
Day 2 and above	4	1.5
Yet to decide	49	18.1
Intention to breastfeed exclusively		
Yes	108	39.9
No	125	46.1
Yet to decide	38	14.0
Intended length of EBF		
< 6 months	17	6.3
$\geq$ 6 months	90	33.2
Undecided	164	60.5

Table 4.4b: Respondents intention to breastfeeding

	Intention Statement	Frequency	Percent(%)
	Introduction of water to infants		
	Immediately after birth	78	28.8
	A week to six months	82	30.3
	6 months and above	111	41.0
	Introduction of complementary foods		
	Immediately after birth	16	5.9
	A week to six months	119	43.9
	6 months and above	136	50.2
	Cessation of breastfeeding by the mother expo	ected	
	Before 24 months	201	74.2
	After 24 months	68	25.1
	LRS IT		
<i>(1)</i>			

Table 4.4c: Overall intention score (N=271)

	Frequency	Percent(%)	
Poor 0-5	169	62.4	
Good 6-10	102	37.6	1
Total	271	100	R

# 4.5 Test of Hypotheses

**Hypothesis One:** There is no association between social demographic variables and exclusive breastfeeding intention.

Chi square test  $(X^2)$  was used in testing this hypothesis at 95% confidence interval (p<0.05).It was found that there is statistical relationship between respondents' exclusive breastfeeding intention and age  $(X^2=11.384 \text{ p-value}=0.023)$ , religion  $(X^2=4.707 \text{ p-value}=0.030)$ , education  $(X^2=14.988, \text{ p-value}=0.005)$ , occupation  $(X^2=8.916 \text{ p-value}=0.030)$  (Table 4.5a), Father's education  $(X^2=12.961 \text{ p-value}=0.044)$  and mother's education  $(X^2=13.186 \text{ p-value}=0.040)$ . Therefore the null hypothesis is hereby rejected (Table 4.5b).

Table 4.5a: Relationship between respondent's intention to breastfeed exclusively and socio-demographic characteristics

Variables	Intention t	o breastfeed	Total	$X^2$	df	p-value	
	Good(%)	Poor(%)					
Age							
15	6(33.3)	12(66.7)	18(6.6)	11.4	4	0.023*	
16	14(22.2)	49(77.8)	63(23.2)		7		
17	14(33.3)	28(66.7)	42(15.5)		2		
18	30(44.1)	38(55.9)	68(25.0)	<b>9</b>			
19	38(47.5)	42(52.5)	80(29.5)				
Ethnicity							
Yoruba	90(37.0)	153(63)	243(89.7)	2.1	3	0.553ª	
Igbo	9(45)	11(55)	20(7.4)				
Hausa	0(0)	2(100)	2(0.7)				
Others	2(33.3)	4(66.6)	8(2.2)				
Religion							
Christianity	68(43.0)	90(57)	158(58.3)	4.7	1	0.030*	
Islam	34(30.0)	79(70.0)	113(41.7)				
Highest Educational							
Attainment							
No Formal Education	1(33.3)	2(66.7)	3(1.1)	15.0	4	0.005*a	
Primary	0(0)	5(100.0)	5(1.8)				
Junior Sec	19(29.2)	46(70.8)	65(24.0)				
Senior Sec	66(37.7)	109(62.3)	175(64.6)				
Tertiary	16(69.6)	7(30.4)	23(8.5)				
Occupation							
Student	49(32.7)	101(57.3)	150(55.4)	8.9	3	0.030*	
Out-of-School	35(53.0)	31(57.0)	66(24.4)				
Apprentice	17(33.3)	34(66.7)	51(18.8)				

<sup>\*</sup>significant

<sup>&</sup>lt;sup>a</sup> Fishers Exact Test p-value reported (due to Chi-Square assumption violation)

Table 4.5b: Relationship between respondent's intention to breastfeed exclusively and significant others socio-demographic characteristics

Variables	Intention to	breastfeed	Total	$X^2$	df	p-value
	Good	Poor				1
Marital Status						2
Single	100(38.0)	163(62.0)	263(97.1)	0.6	1>	0.454 <sup>a</sup>
Married	2(25.0)	6(75.0)	8(2.9)			
Fathers' Highest				(A)		
<b>Educational Attainment</b>						
No formal education	1(100.0)	0(0)	1(0.4)	13.0	6	0.044*a
Primary	4(25.0)	12(75.0)	16(6.2)			
Secondary	56(39.4)	86(60.6)	142(57.0)			
OND/Colleges of Edu	6(21.4)	22(78.5)	28(11.4)			
Bachelor's Degree	19(43.2)	25(56.8)	44(17.7)			
Postgraduate	11(61.1)	7(38.9)	18(7.2)			
Mothers' Highest						
<b>Educational Attainment</b>						
No formal education	1(50.0)	1(50.0)	2(0.8)	13.2	6	0.040*a
Primary	4(13.3)	26(86.7)	30(11.3)			
Secondary	58(38.4)	93(61.6)	151(56.8)			
OND/Colleges of Edu	10(34.5)	19(65.5)	29(11.0)			
Bachelor's Degree	20(52.6)	18(47.4)	38(14.3)			
Postgraduate	8(50.0)	8(50.0)	16(6.0)			

<sup>\*</sup>significant

<sup>&</sup>lt;sup>a</sup> Fishers Exact Test p-value reported (due to Chi-Square assumption violation)

Hypothesis Two: There is no association between knowledge and exclusive breastfeeding intention.

Table 4.5c indicates the cross tabulation of respondents knowledge and intention to breastfeed exclusively at 95% confidence interval (p<0.05). Respondents'intention and knowledge of exclusive breastfeedinghas a significant influence (X<sup>2</sup>=118.959, p-value = <0.001).

Table 4.5c: Relationship between knowledge and EBF intention

Knowledge	Intention to breastfeed		Total	$X^2$	df	p-value
Score	Good(%)	Poor(%)	n(%)			
Poor	1(1.4)	73(98.6)	74(27.3)	119.0	2	<0.001**
Fair	45(33.1)	91(66.9)	136(50.2)			2
Good	56(91.8)	5(8.2)	61(22.5)			
Total	102(37.6)	169(62.4)	271(100)			26

<sup>\*</sup>significant

<sup>&</sup>lt;sup>a</sup> Fishers Exact Test p-value reported (due to Chi-Square assumption violation)

**Hypothesis Three:** There is no association between attitude and intention to breastfeed exclusively. Chi square  $(X^2)$  at confidence interval of (p<0.05) was used to test the statistical significance. It was found that there is statistical relationship between respondents' exclusive breastfeeding intention and attitude  $(X^2=94.727, p-value = <0.001)$ . Therefore the null hypothesis is hereby rejected (Table 4.5d).

Table 4.5d: Relationship between attitude and intention to breastfeed exclusively

Attitude Score	Intention to	breastfeed	Total	$X^2$	df	p-value
	Good	Poor	n(%)			
Negative	12(8.9)	123(91.1)	135(49.8)	94.7	1	<0.001*
Positive	90(66.2)	46(33.8)	136(50.2)			
Total	102(37.6)	169(62.4)	271(100)			
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NERS!	70					
NEPS!	40					
	40					

# 4.6 Logistic regression model coefficients on intention to breastfeed exclusively

Logistic regression was used to assess association of knowledge, attitude and socio-demographic variables on intention to breastfeed. The Wald statistic in Logistic regression model indicated the coefficient of knowledge (p = <0.001) (Table 4.6a), and attitude (p = <0.001) to be significant predictors of good intention to practise EBF (Table 6b).

Table 4.6a: Logistic regression model coefficients on intention of exclusive breastfeeding

Variables	В	S.E.	Wald	df	p-value	Exp(B)	95%	C.I.for
							EX	P(B)
							Lower	Upper
Age	089	.181	.241	1	.623	.915	.641	1.305
Religion (Muslim)	478	.459	1.087	1	.297	.620	.252	1.523
Education			4.907	4	.297	.0		
No Formal Education	2.141	1.921	1.243	1	.265	8.511	.197	367.448
Primary	-15.235	15759.887	.000	1	.999	.000	.000	
Junior Sec	2.256	1.118	4.074	1	.044	9.548	1.068	85.393
Senior Sec	2.293	1.044	4.825	1	.028	9.908	1.280	76.673
Occupation			6.367	3	.095			
Out-of-School	1.077	.629	2.935	1	.087	2.936	.856	10.068
Apprentice	1.570	.654	5.753	1	.016	4.805	1.332	17.328
Others	1.063	1.748	.370	1	.543	2.894	.094	88.990

Predictors: age, religion, education, occupation, father's education and mother's education, knowledge scoreand attitude score.

Variable type used: numeric (age, source of information, knowledge score and attitude score); categorical (religion, education, occupation, father's education and mother's education).

Reference category:religion (Christianity); education (tertiary); occupation (student).

Table 4.6b: Logistic regression model coefficients on intention of exclusive breastfeeding

Variables	В	S.E.	Wald	df	p-value	Exp(B)	95%	C.I.for
							EX	P(B)
							Lower	Upper
Father's			7.451	6	.281			4
Education							•	2
Primary	-25.613	40193.472	.000	1	.999	.000	.000	
Secondary	-25.711	40193.472	.000	1	.999	.000	.000	
OND/Colleg es of Edu	-28.530	40193.472	.000	1	.999	.000	.000	
Bachelor's Degree	-27.511	40193.472	.000	1	.999	.000	.000	
Postgraduate	-27.228	40193.472	.000	1	.999	.000	.000	
Others	-27.156	40193.472	.000	1	.999	.000	.000	
Mother's			6.519		269			
Education			0.319	6	.368			
Primary	-1.103	1.822	.367	1	.545	.332	.009	11.795
Secondary	.791	1.635	.234	1	.628	2.206	.090	54.345
OND/Colleg es of Edu	2.331	1.938	1.446	1	.229	10.286	.230	459.160
Bachelor's Degree	2.620	1.989	1.736	1	.188	13.740	.279	677.130
Postgraduate	2.413	2.240	1.160	1	.282	11.165	.138	901.450
Others	1.005	2.358	.182	1	.670	2.731	.027	277.530
Knowledge	3.598	.704	26.114	1	.000	36.524	9.189	145.177
Attitude	2.271	.502	20.444	1	.000	9.693	3.621	25.946
Constant	12.635	40193.472	.000	1	1.000	307176.1 60		

Predictors: father's education and mother's education, knowledge scoreand attitude score.

Variable type used: categorical (father's education and mother's education).

Reference category: father's education (No formal education) and mother's education (No formal education).

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#### **CHAPTER FIVE**

#### DISCUSSION, CONCLUSION AND RECOMMENDATIONS

#### 5.1 DISCUSSION

This study investigated exclusive breastfeeding intentions among adolescents. This chapter explains the result presented in the previous chapter. The demographic characteristics of the respondents, their knowledge on exclusive breastfeeding, attitude towards exclusive breastfeeding and intention to breastfeed exclusively. The implication of the findings of this study to health promotion and education was discussed and recommendations were made at the end of this report.

#### 5.1.1 Respondents socio-demographic characteristics

The study subjects comprised of adolescents who were either students, out-of-school or apprentice with most of them being students. The age of the respondents ranged from 15 years old to 19 years and according to the WHO definition of adolescent, this category of respondents can be classified as adolescents. The age was 17.5±1.3 years similar to the study by Darby-Carlberg (2010) where the age was 19.3 years+ 1.579). Similar study have been conducted by Ogunba and Agwo (2014) in South West Nigeria. This study was solely among among undergraduate students. In the study most (60%) of the respondents were between the ages of 21 and 24years. This might be attributed to their physical engagement in academicsand understanding whatever discipline they have chosen.

It is expected that the population of residents will be dominated by the Yoruba ethnic group, as the study was carried out in Ibadan, a Yoruba geographical area. This expectation was not exempted most of the respondents were of Yoruba ethnicity. Christianity is the most prominent religion practiced by the respondents and this is corroborated by the study conducted by Ogunba and Agwo (2014)with Christians being (87.5%) and also in another study conducted in Ibadan by Leshi et al., (2016) with(81.2%) of the respondents being Christians.

With regards to marital status, more of the adolescents were single (97.0%). Comparing this to the study by Leshi et al., (2016) whereabout 70% of the respondents were single as well, there is a similarity. This might be due to the fact that the study was conducted among young adults. In another study in Ibadan among young women who are apprenticed to learn hairdressing, majority were single as well (91.4%)(Akinremi and Samuel, 2018).

According to Akinremi and Samuel, (2018) a test of association between the socio-demographic characteristics of respondents and their knowledge showed that respondents' significant relationship age had with the knowledge breastfeeding. Knowledge of EBF increases with increased age. In this study, it was found that there is a statistical association between respondents' age and intention to breastfeed exclusively. Ihudiebube-Splendor et al., (2019) however, did not find a significant relationship between respondents' age andknowledge of breastfeeding. Nonetheless, their study found a significant relationship between knowledge of breastfeeding and marital status, however, there was no association in this study with marital status.

#### 5.1.2 Respondents knowledge on breastfeeding

Findings from this study showed a high level of awareness of breastfeeding by respondents, however, detailed assessment suggested that level of awareness of exclusive breastfeeding was not high. Only (46.9%) of the respondents claimed "yes" to "does exclusive breastfeeding mean giving a new born only breast milk". This differs from findings in a study where breastfeeding exclusively for 6 months, which is a recommendation by health organization, was recognized by 70.1% of the students (Catipovi'c et al., 2012).

The findings from this study revealed that less than half of the respondents (22.5%) had good breastfeeding knowledge. This result is found to be similar with what was reported among Korean undergraduates where breastfeeding knowledge was low, with only 27.9% of questions answered correctly (Nam-Mi, Song, and Ima, 2005), as well as a study in Nigeria among female students of School of Health Technology, Ilesha (Ojofeitimi, Owolabi, Eni-Olorunda, Adesina, and Esimai, 2001). However, findings reported among female undergraduates in Hong Kong (Marie, and Joan, 2007) and China (Lou, et al., 2014) differs. Respondents in these studies had relatively good and moderate breastfeeding knowledge.

Previously, studies in Nigeria have reported slightly higher knowledge among women towards breastfeeding. Oche, Umar, and Ahmed(2011), found (31.0%) of the mothers had adequate knowledge of exclusive breastfeeding. Findings from Leshi et al., (2016) noted (43.1%) having good breastfeeding knowledge. Recent study by Akinremi and Samuel, (2018) found many (63.8%) of the respondents had inadequate knowledge of EBF in a study among young women who are apprenticed to learn hairdressing in Agbowo

community, Ibadan. Majority of respondents (68.1%) in the study thought that infants should be fed water; 41.4% believed infants need to be fed formula/cereal gruel; and more than half (53.4%) of them thought herbal teas are necessary for infants in the first six months of life. In this current study respondents (41.0%) thought that infants should not be fed with breast milk alone; (44.6)% believed infants need to be fed formula/cereal gruel; and (27.7%) of them thought herbal teas are necessary for infants in the first six months of life. In the study by Leshi et al., (2016), about 56% disagreed that herbs/herbal drinks are beneficial to the health of babies especially in the first 6 months. This is similar to the findings in this current study as (59.4%) of respondents responded "no" to "should infantsbe fed herbal teas in the first six months of life".

Although a study in Accra, Ghana, observed that 98.0% of the respondents had adequate knowledge of exclusive breastfeeding (Aidam, Perez-Escamilla, Lartey, and Aidam, 2005), the findings from the current study affirms the likelihood noted by Leshi et al., (2016); of decline in the proportion of Nigerian women with adequate breastfeeding knowledge in the nearest future. If this persists, reduction in optimum breastfeeding practices among Nigerian mothers is predicted.

#### 5.1.3 Respondents attitude towards breastfeeding

Five out of 10 respondents were of the opinion that breast milk is not sufficient for the infant in the first 6 months of life. More than half of the participants agreed that water should be introduced to babies before 6 months of life while 3 out of every 10 respondents were of the view that breastfeeding in the public is embarrassing. Leshi et al., (2016) noted similar responses as 4 out of 10 respondents were of the opinion that breast milk is not sufficient for the infant in the first 6 months of life. Although in the study, about half of the participants agreed that water should be introduced to babies before 6 months of life; 3 out of every 10 respondents were of the view that breastfeeding in the public is embarrassing.

With regards breastfeeding in public, (33.2%) of the respondents were of the opinion that it was embarrassing to be seen breastfeeding in public. Ogunba and Agwo (2014), documented similar figures in their study where (39.5%) of respondents cannot breast feed in public. A slightly lower percentage was seen in the study by Leshi et al., (2016) with (27.2%).

Furthermore, attitudes which were favourable to breastfeeding included Breastfeeding increases mother-infant bonding with 91.9%; Breastfed babies are healthier than formula fed babies 58.7%; Breast milk is cheaper than formula 89.7% and Benefits of EBF last till adulthood 48.3%. Most of the respondents 65.3% agreed that breast feeding makes mothers breasts sag. The findings in this current study are closely related with the findings in the study by Akinremi and Samuel, (2018). Attitudinal statements- Breastfeeding increases mother-infant bonding; Breastfed babies are healthier than formula fed babies; Breast milk is cheaper than formula and Benefits of EBF last till adulthood were found to be favourable to breastfeeding. Similarly, a larger percentage of the respondents were of the view that breastfeeding makes mothers breasts sag (Akinremi and Samuel, 2018).

From this current study, (49.8%) of respondents had negative attitude towards exclusive breastfeeding. Similar negative attitude (46.2%) was found by Leshi et al., (2016). This is in contrast to the study in Rwanda, Kigali where 28.9% of the study participants were categorized as having negative attitude towards EBF (Bahemuka et al., 2013) and another study conducted in Ethiopia with a slightly lower (24.0%) attitudinal score (Alamirew et al., 2017). A lower negative attitude (14.6%) towards EBF was also noted in the study in Ile-Ife by Ogunba and Ago, (2014) with neutral (77.4%) and positive (8.0%).

#### 5.1.4 Respondents intention to breastfeed

Just a little above half of the respondents (54.2%) revealed to know all it requires to breastfeed their future children whereas approximately half (46.1%) reported to have been prepared for breastfeeding. Nonetheless, it is important to note that majority of the study respondents (96.3%) intended to breastfeed in the future. This is not in conformity with the study by Leshi et al., (2016), where 35.% and 55.4% know all it requires to breastfeed their future children and are prepared for breastfeeding respectively.

It is recommended by the WHO that breastfeeding be initiated within one hour of birth. Finding from this current study is not in line with this. Although, a study on intention to breastfeed and awareness of health recommendations by Wen et al., (2009), found that a vast percentage of the respondents plan to initiate breastfeeding within the first hour of birth, however, Leshi et al., (2016) found just a little above average (54.0%) of respondents in their study. This is in contrast to the current study where only (36.9%) of the respondent intended to initiate breastfeeding with one hour of birth while about one-sixth was yet to decide. A

study among undergraduates in Nigeria nevertheless, reported a higher proportion (65%) of its responded intending to initiate breastfeeding in the first 6 hour of birth (Ogunba and Agwo (2014). Overall, 62.4% of respondents had poor intention. Leshi et al., (2016) found 67.7%. These results from Nigeria are not in line with the WHO recommendation. This study further disclosed that young adults were fairly aware of breastfeeding and its benefit in relation to both the mother and child.

### 5.1.5 Implication of the study finding for health promotion and education

This study investigated exclusive breastfeeding intentions among adolescents in Ibadan, with emphasis on knowledge, attitude and intentions of exclusive breastfeeding. Knowledge has been established to be associated with the intention to breastfeed exclusively, low level of knowledge was significantly associated with poor intention to breastfeed exclusively. Within the context of this study, respondents had poor knowledge of exclusive breastfeeding despite a high level of awareness. An observed slightly positive attitude towards breastfeed exclusively was also reflected in the poor intention to breastfeed exclusively.

Also, effort needs to be made towards providing facts on exclusive breastfeeding through the mass media. If these sources provide information on exclusive breastfeeding, the misconception and poor knowledge will be reduced and there will be an improved attitude. All of these will lead to a good intention to breastfeed exclusively. Without these, there will continue to be a decline in the proportion of Nigerian women with adequate breastfeeding knowledge and in turn poorer intention to breastfeed which comes with decreased child survival.

#### 5.2 Conclusion

From the study, adolescents showed high level of awareness of breastfeeding. However, majority of adolescents demonstrated fair breastfeeding knowledge and attitude. Also, the intention to breastfeed exclusively was poor as majority of the respondents reported that they would introduce water to their new-born before six months of life. This fair knowledge and attitude but poor intention demonstrated, predicts possible continuous decline in breastfeeding practice. As adolescents lack knowledge of breastfeeding, its cost-effective benefits will be forfeited. Intervention to improve knowledge, attitude and intention should be encouraged. There is need for efforts to improve adolescents' knowledge and attitude

which will in turn reflect in good intention. This is because knowledge and attitude were found to be major predictors of intention to breastfeed exclusively among respondents.

#### 5.3 Recommendations

In view of the findings, the following recommendations were made:

- 1. This study has highlighted education to be associated with the intention to breastfeed. It is recommended that through the school settings, adolescents should be provided with information on EBF as a child survival strategy by health professionals and initiatives centred on breastfeeding.
- This study found that adolescents rely on their parents for information on breastfeeding. However, if parents do not have valid information on breastfeeding, misconception trend will persist. Therefore, parents should be educated through the mass media that can reach reach a large audience on the essentiality of exclusive breastfeeding so that they do not transfer wrong information or misconceptions.
- 3. Overall knowledge and intention scores were found to be low. Therefore, the Ministry of Health through hospitals and Primary Healthcare centres should organise rallies on exclusive breastfeeding at short intervals. This will help improve knowledge. Frequent, adequate and unbiased information from health centres will reinforce correct exclusive information and bring about improved knowledge and ultimately better intention to breastfeed exclusively.
- 4. Further research should be carried out targetting adolescents to explore other aspects of EBF intentions.

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#### APPENDIX I

#### INFORMED CONSENT

Dear Respondent,

I am a post graduate student at the department of Health Promotion and Education, Faculty of Public Health, College of Medicine, University of Ibadan. The purpose of this study is to gather information about PREDICTING EXCLUSIVE BREASTFEEDING INTENTIONS AMONG ADOLESCENTS IN IBADAN NORTH LOCAL GOVERNMENT AREA, OYO STATE, NIGERIA. Please note that your participation in this study is entirely voluntary. Each questionnaire has been given a CODE NUMBER to conceal your identity. All information that would be collected during this study will be treated with utmost confidentiality.

Your participation in this study is very important as it would help to better understand adolescents' intentions on breastfeeding, the effects and the overall benefits on reducing infants and child malnutrition. Please also note that there are no right or wrong answers to the questions asked or the statements made. Your willingness to be interviewed implies you have given consent to participate.

Thank you for cooperating.
Serial Number
Respondents' signature
If below 18 years, Parent/Guardian's Signature
Researcher's signature
Please answer all the questions as honestly and accurately as you can — this is ver important.

## PREDICTING EXCLUSIVE BREASTFEEDINGINTENTIONSAMONG ADOLESCENTS IN IBADAN NORTH LOCAL GOVERNMENT AREA, OYO STATE, **NIGERIA**

Kindly respond appropriately to the following questions that would be read out to you

Section A: Demographic Characteristics of participants
1. Age at last birthday (years):
2. Ethnicity: (1) Yoruba □ (2) Igbo□ (3) Hausa □□ (4) Others (specify)
3. Religion: (1) Christianity $\square$ (2) Muslim $\square$ (3) Traditional $\square$ (4) Others
(specify)
4. Highest level of education: (1) No formal education $\square$ (2) Primary $\square$ (3) Junior
Secondary (4) Senior Secondary (5) Others (specify)
5. Occupation: (1) Student □ (2) Out-of-school □ (3) Apprentice □ (4) Others (specify)
6.Marital status: (1) Single/never married ☐ (2) Married ☐
6b. If married, Spouse's highest level of education: (1) No formal education □(2) Primary □
(3) Secondary □ (4) OND/Colleges of Education □ (5) Bachelor's degree/ HND □ (6)
Others (specify)
7. Father's highest level of education:(1) No formal education $\Box$ (2) Primary $\Box$ (3)
Secondary $\square$ (4) OND/Colleges of Education $\square$ (5) Bachelor's degree/ HND $\square$ (6)
Postgraduate Degree (7) Others (specify)
8. Mother's highest level of education: (1) No formal education $\Box$ (2) Primary $\Box$ (3)
Secondary $\square$ (4) OND/Colleges of Education $\square$ (5) bachelor's degree/ HND $\square$ (6)
Postgraduate Degree ☐ (7) Others ☐ (specify)
Section B: Knowledge of breastfeeding among adolescents
9. How often do you see, hear or read messages about breastfeeding?
(1) Daily $\square$ (2)Weekly $\square$ (3) Occasionally $\square$ (4) Not at all $\square$

10. Why have you not seen, heard or read a message about breastfeeding?	Yes	No
a. Nobody has specifically told me about it		
b. Others (Specify)		4

11. I get information on breastfeeding from	Yes	No
a. Parents		
b. Relatives		
c. Teachers in school		
d. Mass Media (radio, television, newspaper/magazine billboard/poster)		
e. Hospital/Clinics		
f. Friends		
g. Social Workers		
h. Books/Pamphlets		
i. Folklore/Traditional Music		
j. Drama/Debates		
k. Others (specify)		

12. What influences your choice of medium learning about breastfeeding?	for Yes	No	Don't Know
a. It is available in my house			
b. It is a trusted source			1
c. It is confidential (i.e. private)			2
d. I can see it practically			
e. It is detailed			
f. It is culturally known to me		VO.	
g. It is cheap			
75 AFRICAN DIGITAL HEALTH REPOSITOR	DV DDQ IFCT		

	Knowledge Statement	Yes	No	Don't know
13.	Are you aware of breastfeeding			
14.	Does exclusive breastfeeding mean giving a new born only breast milk			
15.	Are babies who are bottle-fed more prone to illnesses than babies who are breastfed			Y
16.	Does breastfeeding facilitate bonding between mother and baby		2	
17.	Does breastfeeding prevents a woman from returning to her pre-pregnancy weight			
18.	Breastfeeding can be described as unhygienic causing germs to spread			
19.	Is breastfeeding beneficial to mothers			
20.	Do breastfeeding mums have lesser risk of breast cancer			
21.	Do Breastfeeding mums have lesser risk of ovarian cancer			
22.	Does breast milk contain antibodies which strengthens infant's immune system			
23.	Is Exclusive breastfeeding recommended for the first 6 months of a baby's life			
24.	Does breast milk provide all the nutrients a baby needs			
25.	Breastfed babies do not have better mental development than babies fed on infant formula			
26.	Should infants be fed with breast milk alone in the first six months of life			
27.	Should infants be fed liquid foods like infant formula/cereal gruel in the first six months of life			
28.	Should infants be fed herbal teas in the first six months of life			

Knowledge Statement	Yes	No	Don't know
Should infants be fed with colostrum- pre-lacteal liquid			
Colostrum should not be given to the baby			1
Is complete covering of the nipples and its surroundings by the mouth of the infants one of the appropriate positioning for breastfeeding			M.
Breastfeeding does not protect baby against		X	
a. Diarrhoea			
b. Infection			
c. Childhood malnutrition			
d. Sudden death			
Breast milk does not contain right amount of nutrients and water			
	Should infants be fed with colostrum- pre-lacteal liquid  Colostrum should not be given to the baby  Is complete covering of the nipples and its surroundings by the mouth of the infants one of the appropriate positioning for breastfeeding  Breastfeeding does not protect baby against  a. Diarrhoea  b. Infection  c. Childhood malnutrition  d. Sudden death  Breast milk does not contain right amount of	Should infants be fed with colostrum- pre-lacteal liquid  Colostrum should not be given to the baby  Is complete covering of the nipples and its surroundings by the mouth of the infants one of the appropriate positioning for breastfeeding  Breastfeeding does not protect baby against  a. Diarrhoea  b. Infection  c. Childhood malnutrition  d. Sudden death  Breast milk does not contain right amount of	Should infants be fed with colostrum- pre-lacteal liquid  Colostrum should not be given to the baby  Is complete covering of the nipples and its surroundings by the mouth of the infants one of the appropriate positioning for breastfeeding  Breastfeeding does not protect baby against  a. Diarrhoea  b. Infection  c. Childhood malnutrition  d. Sudden death  Breast milk does not contain right amount of

34. When should breastfeeding be initiated (1) Within 1 hour after delivery □ (2) After the should breastfeeding be initiated (1) Within 1 hour after delivery □
35. When should a mother completely wean her child of breastfeeding?
Before 24 months after delivery $\square$ (2) 24 months and above after delivery $\square$

	From whom do you want to learn more about astfeeding?	Yes	No	Don't Know
a.	Hospital/Clinics			
b.	Parents			1
c.	Relatives			
d.	Mass Media (radio, television, newspaper/magazine billboard/poster)		7	
e.	Teachers in school			
f.	Books/Pamphlets			
g.	Drama/Debates			
h.	Social Workers			
i.	Friends			
j.	Folklore/Traditional Music			
k.	Others (specify)			

37. From the options below, Please tick the communication devices in your house	Yes	No
a. Television		
b. Films		
c. Radio		
d. Newspapers		
e. Satellite Dish		

## Section C: Attitude towards breastfeeding

	Attitude Statement	Agree	Undecided	Disagree
38	Breast feeding increases mother-infant bonding.			
39	Breast fed babies are healthier than formula fed babies			
40	Breast milk is cheaper than infant formula			2
41	Breast milk only is not sufficient for a baby in the first 6 months of life		Q.P.	
42	Benefits of breastfeeding last till adulthood.			
43	Breast feeding will make my breasts sag.			
44	It is embarrassing to be seen breast feeding in public places like banks, cafeteria, church etc			
45	Formula feeding my baby will be more convenient than breast feeding			
46	Formula feeding is better most especially for working mothers			
47	Colostrum does not protects the baby from infections			
48	Breastfeeding cannot be continued when semi solid or some adult foods are introduced to a baby			
49	Water should be given to my baby before six months of life			
50	Breastfeeding aids in child spacing			

## Section D:- Intention of breastfeeding

51. Do you know all it takes to breastfeed?	$(1)$ Yes $\sqcup$ $(2)$ No $\sqcup$
52. Are you well prepared for breastfeeding	(1)Yes $\square$ (2) No $\square$
53. Will you breastfeed your child later in the	future? (1)Yes $\Box$ (2) No $\Box$
54. If yes, how will you breastfeed your child?	? (1) At mother's will $\Box$ (2) A
baby demands $\Box$ (3) As scheduled by i	mother $\square$ (4) At Husband's will

<ul> <li>55. What time do you intend to introduce breast milk to your baby? (1)Within 1 hour of birth □ (2) After 1 hour of delivery □ (3) Day 2 and above □ (4) Yet to decide □</li> </ul>
56. Do you have the intention to breastfeed exclusively? (1)Yes $\Box$ (2)No $\Box$ (3) Yet to decide $\Box$
57. If yes, what is your intended length of EBF?(1) < 6 months $\square$ (2) $\geq$ 6 months $\square$ (3) Undecided $\square$
58. When do you intend to introduce water to your newborn?(1) Immediately after birth □ (2) A week to six months □ (3) 6 months and above□
59. When do you intend to introduce complimentary foods (pap) to your newborn?(1)  Immediately after birth□ (2) A week to six months □ (3) 6 months and above□
60. For how long do you intend to breastfeed your child in total? (1) Before 24 months □ (2) 24 months and above □

#### IRINSE TI A FE FI GBA QRQ SILE LORII IWADII YII

ÌWÉ ÌBÉÈRÈ LÓRII SISE ASỌTĘLĘ NIPA ANIYAN LORI FIFUN ỌMỌ LỌMU NI ADAYANRI LAARIN AWỌN ỌDỌMỌDEBINRIN NI AGBEGBE IJOBA IBILE IBADAN ARIWA (NORTH) NI ILU IBADAN, IPINLĘ ỌYỌ, ORILEDE NAIJIRIYA.

Eyin Olùkópa mi Owon,

Mo jè akèékó làtí ile ìwé giga Yunifàsitì tí Ile Ibádán ni eka tí àtí n risi eto nípa idanilekoo ati igbega eto ilera, ti o wa ni Koleeji tí ati n se itoju alaisan pélu oogun, ni abala tí ohun risi eto ilera àwon ara ilu. Mo nse iwadi loriisise asoṭele nipa aniyan lori fifun omo lomu ni adayanrilaarin awon odomodebinrin ni agbegbe ijoba ibile ibadan ariwa (north) ni ilu ibadan, ipinle oyo, orilede naijiriya. Kikopa nínúu iwadi yìí jè tí eyi ti oti okan yin wa, asiti fi ohunka idanimo si ara awon iwe ibeere kookan lati dabobo idanimo yin. Gbogbo àlàyé tí eba si se fún mi ninu iwadi yi ni yìí o wa ni ipamo larin emi àtí eyìín, mi ko sini se afihan re fún enikeni.

Kikopa yin ninu iwadi yii şe pataki pupo nitoriwipe yi o şe iranlowo fun oluwadi lati mo aniyan awon odomodebinrin lori fifun omo lomu ni adayanri. E jowo eni lati şe akiyesi wipe ko si idahun ti o to tabi eyi ti koto ninu gbogbo idahun eyikeyi ti eba fi fesi si awon ibeere ti a ba bi yin. Didahun si awon ibeere yi ko ni gbayin ni akoko pupo, nitoriwipe ko ni gbayin ju ogun tabi ogbon iseju lo. Ki a to maa te siwaju, o tunmo siwipe e ti fi aramo lati kopa ninu iwadi yi pelu gbigba lati kopa ninu iforowanilenuwo. A dupe lowo yin fub ifowoospo yin

	Ohunka
	Idanimo
ìwadií yií.	n nípa ìwadìí yìí, mo sì finúfedo láti nínúu kópa
Ìbuwólùwé olùkópa àí ojó	
Ìbuwólùwé obi tabi alagbato fun	olokopa ti o ti pe omo mejidinlogun
Ìbuwólùwé olùwádìí	
E jowo, e se àlàyé tí o ba péye, ti o si j pataki pupo.	je otito fún mi lori awon ibeere won yi - eleyi se
Ilana: E jowo e fi idahun si awon ibeere alafo ti a pese.	wọn yii pẹlu fi fi ila tabi kikọ esi ti o yẹ si awọn

# IPIN A (Alàkókó): SOCIO-DEMOGRAPHIC CHARACTERISTICS (Àlàyé lori eto igbesiaye olùkópa)

1. Omo odůn mělo ni e je ni igbá ti e se ojo ibi yin kehin (ni odůn)?  2. Kíni Eya tí e tíwa?  1) Yorůbá [ ]
2) Ígbò [ ]
3) Haúsá [ ]
4) Eyà míràn: (e dárúko è ni pàtó )
3. Kíni ẹsìn tí ẹ n sìn?  1) Kìrìstíẹnì [ ]  2) Mùsùlùmí [ ]  3) Elesìn ìbílẹ [ ]  4) Elesìn miran: (ẹ dárúkọ è ni pàtó)  4. Kíni ipéle tí ẹ ka ìwé de?  1) Mi o ka iwe Kankan rara [ ]
2 ) ile ìwé alakobere [ ] 3 ) Ile ìwé girama [ ] 4 ) Ile eko míràn: (e dárúko è ni pàtó )
5. Kini iṣẹ-iṣẹ yin: 1 ) Akẹeko 2 ) Mi o lọ ile ekọ mọ 3 ) ọmọ ekọse 4 ) Isẹ miiran: (e dárúkọ è ni pàtó ) 6. Kíni ipo igbeyawo yìín?: (1) Mi o tí fe oko / mi o ti ṣe igbeyawo ri rara (2) Mo tíṣe igbeyawo 6b. Ti e ba ti tí ṣe igbeyawo , Kíni ipéle tí ọkọ yin ka ìwé de? 1) Wọn o ka iwe Kankan rara 2 ) ile ìwé alakobere 3 ) Ile ìwé girama 4 ) OND/Ile iwe giga agba; 5) Akẹeko gboye/HND 6) Ipele ekọ miira: (e dárúkọ è ni pàtó )
7. Kíni ipéle tí baba yin ka ìwé de? 1) Wọn o ka iwe Kankan rara 2 ) ile ìwé alakobere 3 ) Ile ìwé girama 4 ) OND/Ile iwe giga agba; 5) Akẹẹkọ gboye/HND 6) Ipele ekọ miiran: (e dárúkọ è ni pàtó )

## ÌPÍN B (eleekeji): Ìwé-Ìbéèrè lórii Ìmò Awon Omodebinrin lorii Fifun omo Lomu

9. Bawo ni ese man ri, gbọ ati ka awọn alaye nipa Fifun ọmọ lọmu? (1) Ni ojoojumọ (2) Lọse ọse (3) Leekookan £ (4) Mi o gba rara

10. Kilo fa ti e o fi ti ri, gbo tabi ka awon alaye nipa fifun omo lomu?	Béèni	Béèkó	Mi ò mọ
a. Ko si eniti o so fun mi nipa re			
b. Esin mi lodi si o			1
d. Awon idi miran (e dárúko è ni pàtó ).			2

11. Mo n gba alaye lori Fifun ọmọ lọmu lati ọdọ	Béèni	Béèkó	Mi ò mọ
a. Awọn ọrẹ			
b? Awon obi			
d. Awon ibatan			
e. Awon oluko ni ile-iwe			
e. Awon ohun igba iroyin (redio, telifisionu, iwe irohin / iwe irohin / iwe atejade)			
f. Ile-iwosan / Awon ile-iwosan			
g. Awon osise Awujo			
gb. Awon iwe pelebe / Pamphlets			
i. Awon itan adidun / Orin ibile			
j. Ere itage / Awon idije alariyanjiyan			
k. Awon ona miran (e dárúko è ni pàtó).			

12. Kini ni o n fa tabi ni ipa lori yiyan ona ti e n gba lati fi ko nipa fifun omo lomu?	Béèni	Béèkó	Mi mọ	ò
a. Tori wipe o wa ni ile mi				
b? Toi wipe o je orisun ti o gbekele				

c. Toi wipe o se gbekele		
o. Toi wipe mo le rii bi a sen kekọọ (O se afihan bi wọn se nlo nkan naa)		
é. Toi wipe o ni alaye kikun		
f. Toi wipe o jęmo asa mi		1
g. Toi wipe o ję olowo poku	0	
ę. Awọn ọna miran (ẹ dárúkọ è ni pàtó ).	27	

	Awọn Ìbéèrè lórii Ìmò Awọn Qmọdebinrin lorii Fifun ọmọ Lọmu	Béèni	Béèkó	Mi mọ	ò
13	Nje o mo nipa fifun omo-owo lomu				
14	Nje fifun omo lomu ni adayanritumosi fifun omo-owo lomu lasan				
15	Nje fifun omo ni omu maa n ran irepo atimimo ra fun omo ati iya				
16	Nje awon omo-owo ti a fun ni ohuje inu igo je le ma se aisan ju awon omo ti o mu omú omu lo				
17	Nje fifun omo ni omu mu le se idiwo fun obirin lati pada si iwon ara ati titobi ti o siwaju akoko-oyun re				
18	Nje o le se apejuwe Fifun omu si iwa egbin ati aibikita ti o nfa itankale awon kokoro				
19	Njẹ fifun ọmọ ni ọmu ni anfani fun awọn iya ọmọ				
20	Njẹ fifun ọmọ ni ọmu din ewu arun jẹjẹrẹ ọyan larin awọn iya ti o n fun ọmu ku				
21	Nje fifun omo ni omu din ewu arun jejere abelarin awon iya ti o n fun omu ku				
22	Nje wara omu ni awon eroja ti o nmu ki ago ara ti on gbogun				

	ti arun tubo lagbara si		
23	Nje fifun ọmọ lómú ni adayanri fún osù mefa àkókó wa ni ibamu pelu liana awon eleto ilera		
24	Şe wara-omu pese gbogbo awon eroja ati ounje ti omo nilo		4
25	Awọn ọmọ ti a fun ni wara ọmu ko lee ni idagbasoke opolo daradara ju awọn ọmọ ti a fun ni wara alagolo		7
26	Se o yẹ ki a fún awọn ọmọ lộmú nìkan ni osù mefa àkộkộ leyìín tí a bíi tan	6	
27	Se o ye ki a fun awon omo ni awon ounje olomi bi ohunje alagolo/ohunje onikoro gbigbe ninu osu mefa akoko ti igbesi aye		
28	Se o yẹ ki a fun awọn ọmọ ni awọn agbo ninu oṣu mẹfa akọkọ ti igbesi aye		
29	Se o ye ki a fun awon omo ni omi omu akoko ti o ba koko yo		
30	A ko gbọdọ fun awọn ọmọ ni omi ọmu akọkọ ti o ba kọkọ yọ		
31	Se ki omo fi enu bo ori ati egbegbe oyan je okan ninu ipo ti o ye ati eyi ti o bojumu fun fifun omo lomu		
32	Fifun omo lomu ko lee dabobo omo kuro nibi		
	Aarun igbe gbuuru		
	Kiko aarun		
	Aijehun kanu		
	Iku Ojiji		
33	Wara omu ko ni awon eroja ohunje ati omit i o peye fun omo		

- 34. Nigbawo ni o ye ki fifun omo lomu bere (1) Laarin wakati akoko leyin ti a ba bii tan (2) Lehin wakati akoko leyin ti a ba bii tan
- 35. Nigbawo ni o ye ki iya gba omu lenu omo?

(1) Şiwaju ki omo to pe oşu merinlelogun leyin ti a ba bii tan (2) oşu merinlelogun lo soke leyin ti a ba bii tan

36. Lati odo tani iwo fe lati ko eko nipa fifun omo-owo?	Béèni	Béèkó	Mi ò mọ
a. Awon ore		7	
b? Awon obi		~ C	
d. Awon ibatan			
e. Awon oluko ni ile-iwe			
e. Awon ohun igba iroyin (redio, telifisionu, iwe irohin / iwe irohin / iwe atejade)			
f. Ile-iwosan / Awon ile-iwosan			
g. Awọn oṣiṣẹ Awujọ			
gb. Awon iwe pelebe / Pamphlets			
i. Awon itan adidun / Orin ibile			
j. Ere itage / Awon idije alariyanjiyan			
k. Awọn ọna miran (ẹ dárúkọ è ni pàtó ).			

37. Larin awon aşayan ti o wa ni isale, Jowo fi ami si awon irinse ibaraenisoro ti o wa ni ile yin	Bệệni	Béèkó	Mi o mo
a. Tęlifisionu			
b? Awon fiimu			
c. Redio			
o. Iwe iroyin			
é. Awọn iwe irohin			

I. Satelatti Dishi	f. Satelaiti Dishi			
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# ÌPÍN D (eleeketa): Ìwé-Ìbéèrè lórii Ìseesi awon Qmodebinrin lorii fifun omo lomu

	Àlàyé lori Isesi awon Qmodebinrin lorii fifun omo lomu	Mo faramo gidi	Ko daju pé mo faramo	Mi o faramo
38	Fifun omo ni omu mu ma nse alekun imora ati asopo laarin iya ati omo		28	
39	Awọn ọmọ ti o mu wara ọmu ni ilera pipe ju awọn ọmọ ti a fun ni ohunje alagolo		10,	
40	Wara omu rorun atiwipe ko nani lowo to ohunje alagolo			
41	Omi omu ko le yo omo larin osu mefa ti a ba bii tan			
42	Awọn anfani ti o wa ninu fifun omu lọmu yi o ran ọmọ lọwọ titi ti yi o fi dagba.			
43	Fifun omo ni omu yoo je ki omu mi denukole.			
44	O je ohun itiju lati ri eńi ti ohun fun omo ni omu			
	ni awon aarin opo ero ati ni ita gbangba bi awon ile ifowopamo, ile ounje, ile ijosin abbl			
45	Fifun omo ni ohunje alagolo rorun ju fifun omo ni omu lo			
46	Fifun omo ni ohunje alagolo ni o dara julo paapaa fun awon iya omo ti o ba n sise			
47	Omi omu akoko ti o ba koko yo kole dena kiko aarun			
48	A ko gbodo fun omo ni omi omu leyin akoko ti o ba ti hun je ohunje olokele tabi ohunje agbalagba			

	49	Oye ki n fun omo mi ni omi kotope osu mefa leyin yi mob a bi tan				
	50	Fifun omo lomu ma n se iranlowo lati fi alafo si ohunka omo bibi				
Ìŀ	PÍN E	E (ęlęękęrin): Ìwé-Ìbéèrè lórii Aniyan awon Omodebinrin lorii fifun omo lomu				
51. Njẹ ẹ mọ gbogbo ohun ti ẹ nilo lati fun ọmọ lọmu? 1) Bệệni □ 2) Bệệko □						
52. Nje e ro pe e ti dangagia fun fifun omo lomu? 1) Bệệni □ 2) Bệệko □						
53. Nję ę ma fun omo yin lomu ni ojo iwaju? 1) Béèni □ 2) Béèkó□						
54. Ti o ba je beeni, bawo ni e o se fun omo yin ni omu? (1) Bi o ba se wu yin □ (2) Bii omo ba se beere si □ (3) Bi e ba se seto gege bi iya re □						
55. Kini akoko ti e pinnu lati beere fifun omo yin lomu? 1) Laarin wakati akoko leyin ti a ba bii tan □ (2) Lehin wakati akoko leyin ti a ba bii tan □ (3) Leyin ojo keji losoke □ (4) Mi o ti se ipinnu lori □						
	56. Şe e ni ipinnu lati fun omo yin ni omu ni adayanri ? (1) Béèni □ (2) Béèkó □ (3) Mi o ti se ipinnu lori e □					
57. Nigbawo ni e pinnu lati bere fifun omo lomu ni adayanri nigbati e ba bimo? (1) Lesekese lehin ibimo □ (2) Nigbamii □ (3) Mi o ti se ipinnu lori e □						
58. Akoko wo ni e pinnu lati fun omo yin ni omu ni adayanri di? (1) ki o to pe osù mefa ☐ (2) leyin oṣu mefa ☐ (3) Mi o ti se ipinnu lori e ☐						
	59. Fun igba melo ni e ni ipinnu lati fun omo yin ni omu ni adayanri ni apapo? (1) Ṣiwaju oṣu merinleloogun □ (2) Leyin oṣu merinleloogun ati losoke □					
	60	e. Ni ojo ori wo ni e pinnu lati se afikun ounje miiran pelu omu fun omo ? (1) ki o to pe osu mefa □ (2) Laarin osu mefa si mokanla □ (3) Lati osu mejila ati ju bee □ (4) Mi o ti se ipinnu lori e □				

ESE ADUPE FUN DIDAHUN SII AWON IBEERE WA WON YII

#### APPENDIX II

ELEGRAMS	TELEPHONE



## MINISTRY OF HEALTH

DEPARTMENT OF PLANNING, RESEARCH & STATISTICS DIVISION

PRIVATE MAIL BAG NO. 5027, OYO STATE OF NIGERIA

4n 29 August, 2019

The Principal Investigator,
Department of Health Promotion and Education,
Faculty of Public Health,
College of Medicine,
University of Ibadan,
Ibadan.

## Attention: Odukova Oluwaponmile

ETHICS APPROVAL FOR THE IMPLEMENTATION OF YOUR RESEARCH PROPOSAL IN OYO STATE

This is to acknowledge that your Research Proposal titled: "Predicting Exclusive Breastfeeding Intentions among Adolescents in Ibadan North Local Government Area, Oyo State, Nigeria." has been reviewed by the Oyo State Ethics Review Committee.

- 2. The committee has noted your compliance. In the light of this, I am pleased to convey to you the full approval by the committee for the implementation of the Research Proposal in Oyo State, Nigeria.
- 3 Please note that the National Code for Health Research Ethics requires you to comply with all institutional guidelines, rules and regulations, in line with this, the Committee will monitor closely and follow up the implementation of the research study. However, the Ministry of Health would like to have a copy of the results and conclusions of findings as this will help in policy making in the health sector.

A REST

bas Gbolahante

Director, Planning, Research & Statistics

Secretary, Oyo State, Research Ethics Review Committee