

# **KIBOGORA POLYTECHNIC**

## **FACULTY OF HEALTH SCIENCES**

### **DEPARTMENT OF GENERAL NURSING**

#### **ASSESSMENT OF KNOWLEDGE, ATTITUDE AND PRACTICES OF EXCLUSIVE BREASTFEEDING AMONG POSTPARTUM MOTHERS ATTENDING KIBOGORA LEVEL TWO TEACHING HOSPITAL**

**Period: July 2023 to August 2023**

Undergraduate research paper submitted in partial fulfillment of the requirements for the award of Bachelor's degree with honor in nursing sciences.

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# DECLARATION

## Declaration by the Candidates

We NTAKIYINANIRA Denys and INGABIRE Jacqueline, hereby declare that this is our own original work and not a duplication of any similar academic work. It has therefore not been previously or concurrently submitted for any other degree, diploma or other qualification to Kibogora Polytechnic or any other institution. All materials cited in this paper which are not our own have been duly acknowledged.

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Signed.....

Signed.....

Date.....

Date.....

## Declaration by the Supervisor

I declare that this work has been submitted for examination with my approval as KP Supervisor

Supervisor's name: NGIRINSHUTI Vedaste

Signed.....

Date.....

## ABSTRACT

**Introduction:** Exclusive breastfeeding is considered as optimal feeding method for infants with numerous benefits for both mother and infant therefore improves maternal health and reduce neonatal and infant mortality. As recommended by WHO and UNICEF, child should breastfeed only breast milk that start within first hour of birth and last for at least 6 months of age. Globally, exclusive breastfeeding rate is 38%, however the World health assembly 2012 the target is to increase the rate at least 50% by 2025. The aim of this study was to identify the knowledge, attitude and practice of exclusive breast feeding among postpartum mothers.

**Methodology:** descriptive exploratory study was conducted from July to August 2023, total of 144 mothers in postpartum period were interviewed using a questionnaire. SPSS was used for data entry and analysis by defining variables using frequencies and percentages.

**Results:** Among large number of breastfeeding mothers learning exclusive breastfeeding from different sources, Majority of the mothers knows the description of EBF (71%) as recommended by WHO. therefore 77.1% of the mothers had good knowledge about the appropriate time to initiate breast feeding while just 67.4% mothers initiated breast feeding within one hour after birth, only 25% knows that breast milk can protect infection and chronic diarrhea for the neonate, therefore nearly a half (51%) have good knowledge regarding the importance of EBF. EBM feeding is low among the interviewed mothers (39%), However, from the total study participants, based on attitude score, 59.5% of the Respondents were grouped as having positive and 40.5% of the study participants were categorized as having a negative attitude, and the level breastfeeding practice is not good enough (57.5%).

**Conclusion:** The findings of this study the knowledge, attitude, and practice of mothers towards EBF was found not good enough, most of the mothers has good knowledge on definitions of EBF but with poor knowledge on benefits of EFB, most of women with good knowledge and a positive attitude on EBF had a higher level of EBF practice.

## **DEDICATION**

This work is dedicated to:

Our lovely parents, siblings and friends

All KP staff members

Our supervisor Vedaste NGIRINSHUTI

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# **CHAPTER ONE: GENERAL INTRODUCTION**

## **1.0. INTRODUCTION**

This chapter discusses the background of the study, problem statement, Objectives of the study, research questions, Operational definition of key terms, significance of the study, limitations and scope of the study.

## **1.1. BACKGROUND OF THE STUDY**

World Health Organization (WHO) and the United Nation Children's Fund (UNICEF) recommend exclusive breastfeeding for infants to start within first hour of life and continue until first 6 months of age, where infants should not be given any other food or drink except breast milk, or when have prescribed medications, vitamin or mineral drops, oral rehydration solution and must continue with supplementary foods up to 2 years of age or over (WHO, 2014)

Children who have exclusively breastfeed are at least six times more likely to survive in the early months than non-breastfed children according to UNICEF, promoting EBF is the most successful intervention for child health and is currently feasible for low-income populations (WHO, World Breastfeeding Week 2019, 2019).

Children and mothers are highly considered to be prone to illness, and there are some underlying risk factors for neonatal mortality and morbidity for instance insufficient breastfeeding, following defective breastfeeding methods, mother's unawareness of feeding practices, culture and beliefs, lack of health education, and practices are prevalent in the postpartum period. Besides, delaying the introduction of a baby to the breast immediately after birth is also a great concern because the colostrum is very useful for the immunity and growth of the baby. Therefore, all these poor practices lead to the suppression of lactation by inactivating prolactin hence reducing the quantity of breast milk. (Shewasinad et al, 2017)

Rwanda's ministry of health target is to increase the rate of EBF infants aged 0–6 months to at least 90% in July 2018 to June 2024, has mainstreamed promotion of EBF as one of the priority's nutrition interventions in the country (MOH, 2020).

This study will provide information about mothers' knowledge, attitudes, and practice towards EBF in the study area, information provided from this study will be baseline for planning for further interventions that will improve practices of EBF for postpartum mothers attending Kibogora level two teaching hospital.

## 1.2 PROBLEM STATEMENT

According to the previous papers in the sub-Saharan Africa region, only 53.5% of children in East African countries were practiced on EBF for six months, and the global rate of EBF is 37%. Rwandan mothers practicing EBF are currently at 81% according to the recent published demographic and health survey (DHS) in Rwanda (2019-20) which is still below the WHO target of 90% and Rwanda nutrition profile, the infant mortality rate is 32 per 1,000 live births, and the under-five mortality rate is 50 per 1,000 live births. One of the contributing factors to infant mortality is sub-optimal breastfeeding. Moreover, lack of awareness and the benefits of EBF coupled with the hazards, and risks associated with bottle feeding needs also emerging interventions (NISR, 2020).

According to Rwanda DHS 2019-20, the prevalence of stunting among children under 5 years is 33%, and 16.2% of children were stunted at six months of age, and this indicates that stunting is attributed to inadequate nutrition of the mother or serious illness during perinatal period. The national KAP study found that about 32% of mothers don't know the time to introduce complementary foods, this is because many of these infants were stunted during the gestation period. Intrauterine growth from poor nutrition during pregnancy. Moreover, the previous study conducted at the University Teaching Hospital of Kigali (CHUK) reported that 96.1% did not receive any type of education about breastfeeding during their antenatal care visits and only 5% knew the risks of providing breast milk substitutes to their infants and this knowledge was independent of education during their antenatal care (ANC) attendance (USAID, 2018).

In 2013 the government of Rwanda launched a continuous campaign for improving families nutritional conditions mainly focusing on pregnant and breastfeeding mothers, and children in their first 1000 days and this program includes community based activities such feeding demonstrations which targeted pregnant and breastfeeding mothers and under 2 years old children and this was done to enhance the development of appropriate mother's knowledge, attitudes and practices for better feeding (Ministry of Health, 2014). Even if this was done, In Rwanda, 33% of children are stunted (NISR, 2020) and 34% of under-five children in Nyamasheke district are stunted (Nyamasheke District, 2018).

A report on screening done in the catchment area of Kibogora Hospital in March 2022 among 2063 under-five years' old children indicated that 3% of them have malnutrition and among these with malnutrition 82% have acute moderate malnutrition and 18% have acute severe

malnutrition. Also this screening indicated that among 660 children screened in the catchment area of Kibogora health centre 1% has malnutrition (Kibogora District Hospital, 2022).

There is no previous study conducted to prove the level of knowledge, attitudes, and practice of postpartum mothers towards EBF at Kibogora level two teaching hospital.

### **1.3 OBJECTIVES OF THE STUDY**

The general objective of the study is:

The main objective of the study is to identify the knowledge, attitude and practice of exclusive breast feeding among postpartum mothers attending Kibogora level two teaching hospital

The specific objectives of this study are:

1. To identify the knowledge of postpartum mothers about exclusive breast at Kibogora LTT Hospital?
2. To identify attitudes of postpartum mothers towards breast feeding behavior at Kibogora LTT Hospital?
3. To analyze mothers' practices of exclusive breast feeding among postpartum mothers attending Kibogora LTT Hospital?

### **1.4 RESEARCH QUESTIONS**

1. What is the knowledge of postpartum mothers about exclusive breast feeding at Kibogora LTT Hospital?
2. What are attitudes of postpartum mothers towards breast feeding behavior at Kibogora LTT Hospital?
3. What are practices of exclusive breast feeding among postpartum mothers attending Kibogora LTT Hospital?

### **1.5 SIGNIFICANCE OF THE STUDY**

The findings from the study will provide baseline information for further research. The findings of the research may help people to know about level of knowledge, attitude and practice of exclusive breast-feeding therefore plan for improvement. The concerned institutions will be benefitted from this research work in planning for further health action.

### **1.6 LIMITATIONS OF THE STUDY**

Basically it is an academic study which has been conducted for partial fulfillment of the requirements for the award of Bachelor's degree with honors in nursing sciences. It has been

undertaken within the boundaries of limited time, place, population size, budgets and other resources. So this is small scale descriptive exploratory study only from postpartum mothers attending on Kibogora LTT Hospital. Thus, the findings and conclusion drawn from this study may not be widely generalized exactly in the same manner for other breast feeding mothers and in other places.

## **1.7 SCOPE OF THE STUDY**

This research project is focused on to identify the knowledge, attitude and practice of exclusive breast feeding among postpartum mothers at Kibogora LTT Hospital.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.0 INTRODUCTION**

The purpose of this chapter is to deal with theoretical concepts and terminology of the project. it aims to provide the required basic concept and definitions that lead throughout the development of the project based on knowledge , attitude , practice of exclusive breastfeeding for mothers in postpartum period at Kibogora LTT Hospital .

### **2.1 DEFINITIONS OF KEY CONCEPTS/TERMS**

#### **a. Knowledge**

Knowledge is the information, facts and skills acquired from experience or education which is the theoretical or practical understanding of a subject (Bratianu, 2018).

#### **b. Attitudes**

Attitude is a set of belief or psychological construct that is a mental and emotional entity which inheres or characterizes a person therefore involves outlook, mind set and feelings about something (Richard, 2016)

#### **c. Practices**

Practice is the procedure or the way of doing something.

#### **d. Excusive breastfeeding**

Breastfeeding is the process by which human breast milk is fed to a child, breast milk may be contact from the breast, or may be expressed and fed to the infant (NIH, 2013)

#### **e. postpartum mothers**

Postpartum mothers are female parent in time that occur after giving birth and last for 6 weeks, this is a time of rapid and many changes to mothers and requires close monitoring for both infant and the mother (Pamela Berens, 2023).

### **2.2 Literature regarding knowledge of exclusive breastfeeding**

According to World Health Organization (WHO), Exclusive breastfeeding is the situation in which an infant receives only breast milk for the first 6 months and no other solids or liquids with the exception of prescription of drops or syrups consisting of vitamins, minerals, supplements, or medicines (WHO, 2014).

Exclusive breastfeeding (EBF) is recommended to start within hour of birth and last for the first six months of age

### **General overview of the issue**

According to WHO, the Convention on the Rights of a Child (2016), every infant has a right to food and nutrition, however, only few children meet their nutritional requirements appropriate for their age. Poor nutrition is responsible for almost half of child mortalities in the world. Per WHO fact sheets (2016) on infant and young child feeding, malnutrition accounts for 2.7 million infant mortalities yearly and more than 800,000 infants are likely to survive annually if all children aged 0-23 months are breastfed adequately (WHO, 2016).

According to Rwanda DHS 2019-2020, the prevalence of stunting among children under 5 years is 33%, and 16.2% of children were stunted at six months of age, and this indicates that stunting is attributed to inadequate nutrition of the mother or serious illness during perinatal period, The national KAP study found that about 32% of mothers don't know the time to introduce complementary foods, this is because many of these infants were stunted during the gestation period, Intrauterine growth from poor nutrition during pregnancy (NISR, 2020). Moreover, the previous study conducted at the University Teaching Hospital of Kigali (CHUK) reported that 96.1% did not receive any type of education about breastfeeding during their antenatal care visits and only 5% knew the risks of providing breast milk substitutes to their infants and this knowledge was independent of education during their antenatal care (ANC) attendance (USAID, 2018).

### **Composition, nutritional value and storage of the breast milk**

Breast milk is a natural ideal food and nourishment for newborns; it forms the main source of nutrients, energy and vitality for an infant. It is considered as the safest means of feeding a child because it is ready fully made, at the right temperature and usually available when needed (WHO, 2014).

In addition, breast milk contains antibodies needed for immune protection of the newborn, therefore an ideal food for babies. The quantity, quality and production of breast milk varies to meet the nutritional and fluid needs of an infant (WHO, World Breastfeeding Week 2019, 2019).

Colostrum is a yellowish, sticky milk produced during the latter part of pregnancy near delivery; is highly recommended by WHO to be given to babies within the initial hour



following the delivery. Colostrum is very definite in volume, appearance and composition, it contains an elevated level of immunologic components like secretory immunoglobulin A (IgA), lactoferrin, leukocytes and epidermal growth factor for development. After the first days of postpartum, colostrum transformed into a transition milk, which lasts for eight to twenty days until it transforms into a mature milk. Each stage of breast milk composition contains nutrients, which are needed for the nourishment and growth of a baby.

Hormones within the human body enhance the growth of breast milk duct; progesterone, estrogen, prolactin and others promote lactation before birth. However, the level of hormones reduces to enable the flow of milk. Nutrients contained in human breast milk include water, protein, fats, carbohydrates, minerals and vitamins. Each nutrient in breastmilk plays a role in nourishing the baby, a breastfed child is protected against diseases through a chain of biomedical reactions which enable enzymes, hormones and immunologic substances to protect the baby against diseases while enhancing the survival of the newborn

**Table 1. Composition of some key nutrients found in mature breast milk (NHMRC Dietary Guidelines for children 2003, Infant Nutrition Council 2016).**

<b>Component</b>	<b>Mean value for mature breastmilk (per 100 ml)</b>	<b>Component</b>	<b>Mean value for mature breastmilk (per 100 ml)</b>
1.Energy (kj)	280	8.Phosphorus (mg)	15
2.Energy (kcal)	67	9.Iron (mcg)	76
3.Protein (g)	1.3	10.Vitamin A (mcg)	60
4.Fat (g)	4.2	11.Vitamin C (mg)	3.8
5.Carbohydrate (g)	7.0	12.Vitamin D (mcg)	0.01
6.Sodium (mg)	15	13.Phosphorus (mg)	5
7.Calcium (mg)	35	14.Iron (mcg)	76

### **Breastfeeding recommendations**

Health care agencies advocate an early initiation of breastfeeding during which infants should be fed on demand unless for exceptional reasons (Fosu-Brefo & Arthur 2015). It is very necessary to feed directly from the breast to avoid the transfer of contaminants to baby,

however busy or working mothers can express breast milk for use in future ensuring that breast milk is kept clean and stored depending on the length of time intended for its use.

Exclusive breastfeeding is defined by UNICEF (2015) as an act of feeding whereby “infant receives only breast milk (includes breast milk which has been expressed or from a wet nurse) and nothing else except for Oral Rehydration Salt (ORS), medicines, vitamins and minerals”. UNICEF and WHO (2016) recommend that babies should be given only breast milk for the first six months of their lives, after which breastfeeding should be continued in addition to appropriate complementary food until the baby is 24 months old. Although breastfeeding for six months is a desirable goal, breastfeeding in general is a very important exercise.

### **2.3 Literature regarding attitudes of EBF**

Mother’s attitudes are important and influence of practices of breastfeeding for outcome regarding improvement of infant’s nutrition, those attitudes are also dependent to various variables according to the previous study conducted on this content, Society and individuals have a two-way relationship, while individuals make up a society, society influences the lives of individuals. Society shapes up the attitudes and behaviors of the individuals (Hossain & Ali 2014). Traditions, norms, lifestyles and shared values such as culture, religion, education, economics and politics influence the quality of life and individual choices (UNESCO, 2010).

Rwandan society is highly imbedded with various culturally oriented perceptions. These are among the factors, which influence a mother’s decision to breastfeed exclusively (MOH, 2020). One paramount feature is a common myth that babies do not get enough nutrients from breast milk hence the need to add other food substitutes such as porridge and other soft food. This popular perception is likely to influence the attitude of most lactating mothers in the choice to breastfeeding exclusively. Results from study conducted in Atwima Nwabiagya District of Ghana showed evidence of cultural approval of exclusive breastfeeding (Ayawine & Aengibise 2015). This shows the effect of cultural diversity and dynamism within a given society and how they impact an individual’s behavior.

Religiosity is an important concept in the lives of people, it is well represented in the less developed and developing countries hence the role played by religious leaders in harnessing a behavior either positive or negative cannot go unnoticed (Pew Research Center 2008, Page et al. 2009, Aldashev & Platteau 2014). Religious leaders are usually accorded much respect within the society, they mainly play the role of an advocate, educator, promotor, healer, counselor and much more (Nicklas 2011, Lumpkins et al. 2013). Studies conducted in the role

of religiosity in health behavioral choices have shown an association between religion and health (Shaikh 2006, Burdette 2012). A study conducted by Burdette in 2012 proved an association between church attendance and the perception about breastfeeding. The role played by church leaders in advocating the importance of breastfeeding was identified as the force behind the high prevalence in breastfeeding since it ignites a positive attitude towards breastfeeding. Likewise, a study by Shaikh in 2006 reported that Islamic religion supports breastfeeding and recognizes it as a natural and divine responsibility of a mother to her child. This positive reinforcement influences mother's attitude towards breastfeeding.

According to the English Oxford Living Dictionary, "Self-motivation is one's own enthusiasm or willingness to achieve a goal without any external pressure". It is the force that drives an individual to embark on an activity aimed at reaching a goal. Self-motivation promotes confidence in an individual's action, confidence in one's ability to perform a task and promotes the inner will to do more (Benabou & Tirole 2001). Although majority of mothers breastfeed their child during their infant life, the decision to attain an optimum breastfeeding target is highly influenced by an intrinsic desire to breastfeed. Having adequate knowledge about the importance of breastmilk, making initial breastfeeding plans, self-efficacy and anxiety heightens the confidence of a lactating mother (O'Brien et al. 2008). Mothers who exhibited positive energy and attitude towards breastfeeding are most likely to decide to breastfeed their infants for a lengthy period and are more likely to breastfeed exclusively (Glassman et al. 2014, Minas & Ganga-Limando 2016). A study by Mogre et al. (2016) revealed that 92.6 % of mothers who participated in the study had a positive attitude towards exclusive breastfeeding.

## **2.4 Literature regarding practices of EFB**

The global exclusive breastfeeding rate is 38 %, however the World Health Assembly in 2012 set a target to increase the rate of exclusive breastfeeding by at least 50 % by 2025 (WHO 2017).

The perception of breast milk as an ideal food for babies is farfetched within the Rwandan society. It used to be a very common practice for mothers to breastfeed their babies from birth until the child is two or more years, however due to barriers faced in breastfeeding, the need to perform other duties, coupled with advertisements airing on national television about infant commercial food products, most mothers have given in to feeding baby with breast milk substitutes (USAID, 2018). Study conducted at Masaka District hospital proved that Lack of

knowledge about the right way to breastfeed a child, the option of bottle feeding a child with expressed breast milk in the mother's absence and the lack of knowledge of the benefits of breastfeeding especially during the first six months of an infant's life are also among the reasons for reduced rates in breastfeeding (Luo et al. 2021).

Reports from a study conducted by Dun-Dery and Laar in 2016 showed that 99 % of Ghanaian children who are under 6 months were breastfed. However, 63 % of these children were given only breastmilk within this period. For those who give supplementary food to their babies before their sixth month, the distribution of complementary food added to breast milk were, 7 % of other milk, 18 % water, 4 % other liquids and 19 % of mashed meals (GDHS 2014). This early introduction of breast milk substitutes, water and food usually increases the baby's risk of infections leading to high incidences of diarrhea and child mortality (Popokin et al. 1990, Arifeen et al. 2001, Aidam et al. 2005). Poor nutrition has been identified as one of the leading causes of under five deaths in the country. Insufficient food nutrients and poor feeding habits reduce the body's immunity to diseases, causing impaired physical and mental development (Arthur et al. 2015).

A study by Gyampoh et al. (2014) reported that 13 % of children less than 5 years are underweight in Ghana. The country recorded a slow decrease in neonatal deaths compared to under five mortalities over the past years (Ghana Health Service 2016). A study conducted in Northern Ghana proved that children who are introduced to complementary foods after their sixth month of life are protected from chronic malnutrition (Saaka et al. 2015). A study by Dun-Dery and Laar in 2016 also reviewed that professional mothers are very much aware of the concept of exclusive breastfeeding and its recommendations; however, its practice was low (10.3 %). Notwithstanding these current trends, the Ghana Child Health Policy regarding recommendations by WHO and UNICEF encourages lactating mothers to breastfeed exclusively for the first six months of their babies' life (GHS 2015).

Results from a cohort study conducted by Saxton and colleagues in 2015 proved that the risk of postpartum hemorrhage can be lowered through the practice of breastfeeding. Continual breastfeeding postpones the menstrual cycle of a lactating mother hence reducing the risk of pregnancy (Gebreselassie et al. 2008). It protects mother from the risk of type 2 diabetes, breast, uterine and ovarian cancers. Breastfeeding helps control post-natal depression in mothers (Swarna 2009).

## **2.5 other relevant and related literature to support the study**

### **Benefits of Exclusive breastfeeding**

It is inarguably true that breastfeeding has a positive impact in the lives of both baby and mother. Breast milk is easy to digest, contains the right proportion of nutrient such as carbohydrates, fatty acids, water and protein necessary for baby's growth and development. Exclusive breastfeeding is a very necessary and important practice recommended to mother and child during the first six months of the baby's life due to its numerous benefits. This practice serves as a growth- monitoring tool which not only support the growth and development of an infant but also monitor the weight as well. During the first year of childhood development, breastfed babies are leaner and healthier than formula fed babies (Ziegler 2006, Gale et al. 2012).

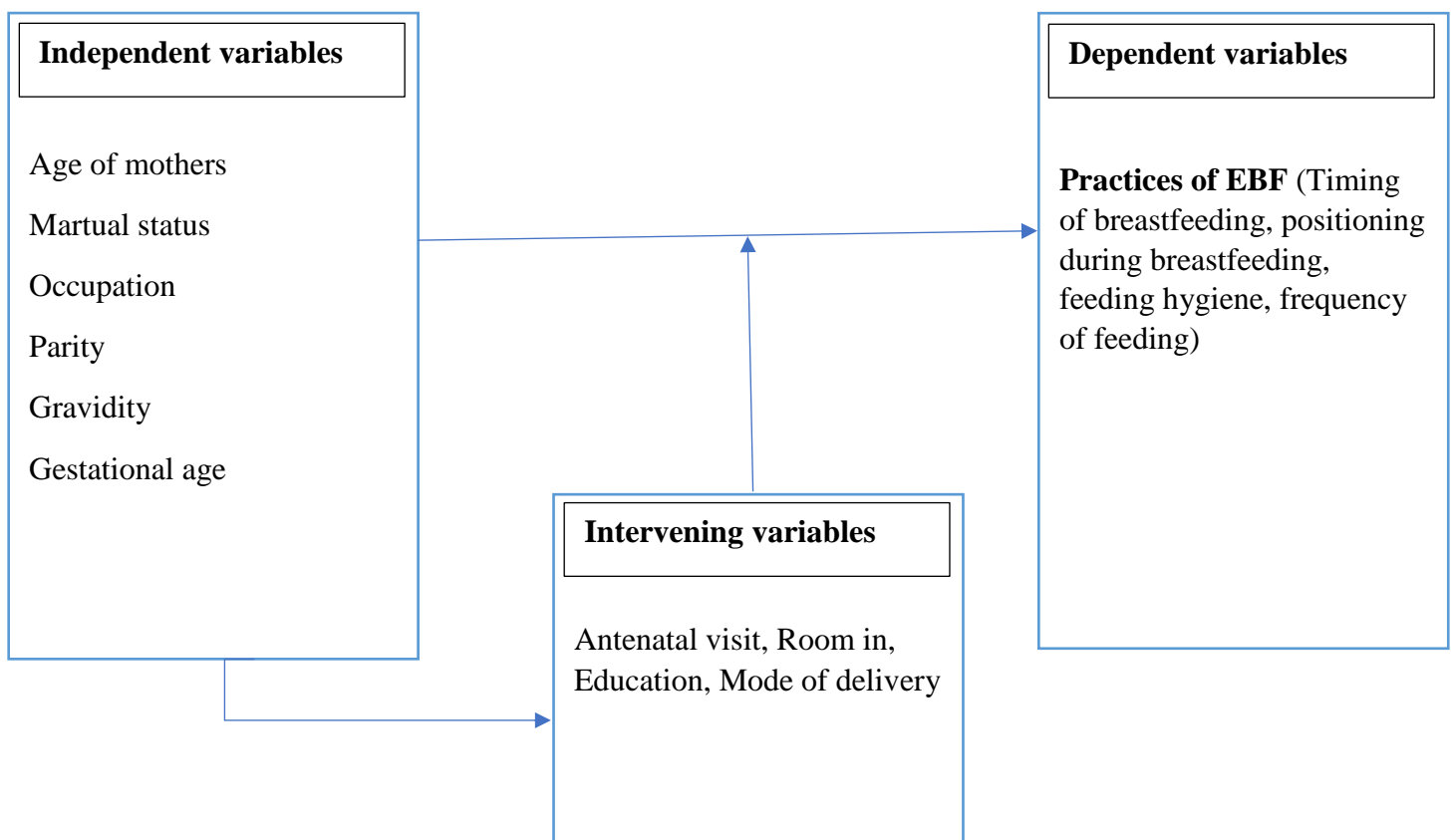
Global health departments advocate the practice of exclusively breastfeeding at the initial stages of an infant's life since it helps stimulate and enhance the development of the mouth and jaws cells in babies and ensures the growth of major organs in newborns. It aids in brain development and enhances the intellectual capacity of the child. This feeding practice helps build the immune system and protects the baby against diseases (Dieterich et al. 2013). There is a heightened proof that exclusive breastfeeding reduces the risk of gastrointestinal infections in children (Szajewska 2012). There is usually an elevated risk of diarrhea among children who are partially breastfed or not giving breastmilk. Practicing exclusive breastfeeding within an hour after birth protects new babies from infection and death. Breastfeeding a baby helps reduce fevers, which occur after child immunization (AAP 2012, NHMRC 2012, WHO/UNICEF 2017.). Under 5 mortality rates per every 1000 births in Ghana as of 2015 was 61.6% (World Bank Group 2016). When exclusive breastfeeding is practiced effectively, it can prevent 13% of under 5 mortalities since it minimizes the severity of infectious diseases (UNICEF 2016).

Practicing exclusive breastfeeding is not only beneficial to infants but nursing mothers too. In emergency situations, such as of food shortage or an outbreak of a water borne disease, breastfeeding serves as the most cost-effective means of meeting the nutritional requirement of infants and a life-saver. Exclusive breastfeeding is an effective means of minimizing child malnutrition, it provides food security for infants in deprived and poor communities, hence highly recommended in low and middle-income countries (UNICEF 2015, WHO 2016, Nkrumah 2017). In addition, breastfeeding increases the connection and love between mother

and child. Skin to skin contact create warmth, closure and help reduces neonatal deaths. Nevertheless, fathers are encouraged to support mothers during the period of breastfeeding. Supportive fathers also win a stronger bond with their infants as well through bottle-feeding and spending quality time with baby (Anderzén-Carlsson et al. 2014.).

There are numerous advantages of breast milk over formula milk. Formula milk given to babies as a breast milk alternative is expensive and poses a lot of risk to an infant’s life especially in developing countries. This form of feeding is quite challenging since it needs to be measured adequately, mixed well with clean water at the right temperature for the baby, while ensuring that feeding bottles are kept clean; failure to perform this practice right can lead to contamination and diarrhea. In the developing countries, the contamination risk during formula feed is high and challenging (Mead 2008, UNICEF 2015.).

## 2.6 Conceptual Frame work



**Figure1: conceptual framework**

## **2.7. Gaps from previous study to be covered**

The gaps in previous study, was mainly the lower consideration of nutrition for little infants, while is the focus and main root for their growth and development, in this study we took into consideration the assessment of the level of knowledge, attitudes and practices regarding breastfeeding by focusing on mothers in postpartum period where both mothers and their infants more vulnerable to different health conditions

## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.0 INTRODUCTION**

This chapter explain the methodological approach and techniques that has been used in the study. It includes area of the study and study population. It also shows the methods and techniques used in choosing sample and data collection. It describes how data have been collected, processed and finally analyzed to give the implication of findings.

### **3.1 RESEARCH APPROACHES AND DESIGN**

#### **3.1 Research approaches**

This study is a cross sectional study where both quantitative and qualitative method was conducted.

#### **3.2 Target Population**

The study population are postpartum mothers attending Kibogora hospital for period of two months from July to august who were 252.

#### **3.3 Sampling Procedures**

The process of choosing sample for representing the whole population which was done by non-probability sampling.

Inclusion criteria was mothers in postpartum period with babies aged less than six weeks and who gave consent to participate in the study.

Exclusion criteria was those mothers who declined to participate in the study.

#### **3.4 Sample Size**

For calculating the sample size, we have used Taro Yamane formula, where the following notations have been used.

n: stands for sample size to be calculated

N: stands for total population which was equal to 230

e: stands for margin of error which is equal to 5%

$$n = \frac{N}{1 + N(e)^2}$$

We have found sample size of 144 participants



### **3.5 Data Collection process**

Data were collected during the study period by face-to-face interviews with women on a randomly selected working weekday. We have approached the mothers who attended KLTTH who accepted to participate in the study were interviewed until the final sample number was reached.

The structured questionnaire was used to guide the interview after being tested for validity and reliability.

The interviews were performed mainly in three departments: maternity, neonatology and pediatrics using a questionnaire. Also, the interviews lasted 10 minutes as average and privacy were maintained during the interviewing period. This was done to maximize the chances of the participants feeling comfortable and able to answer the questionnaire.

Before starting the interview, the researchers described the survey topic and the organization of the questionnaire to the participants and assured them that the interview was completely anonymous, and that the data collected would be saved privately, and that the written informed consent was collected.

Besides, the research team explained to the women that they could stop the interview at any time without penalty, the participation was voluntary, and that no payment to be given.

### **3.6. Validity and reliability measures**

#### **3.6.1. Validity**

The items of the questionnaire covers all research objectives. Questionnaire was observed to test whether it's complete. Data entry has been accomplished and analyzed to check the achievement of research objectives. Adjustments were made accordingly, in case required, with the guidance of the supervisor.

#### **3.6.2. Reliability**

The questionnaire has been checked and tested for correctness in collecting data before data collection. And was approved by supervisor and gave us go ahead for data collection.

### **3.7. Data analysis**

The data was checked, cleaned, and coded, and analyzed using Statistical package for social sciences (SPSS) version 26. All data were analyzed using descriptive statistics of the frequencies and percentages for categorical variables. The findings are presented as odds ratios and their respective confidence intervals at 95 %. The p-value < 0.05 was considered statistically significant in all analyses.

### **3.8. Ethical issues**

The researchers requested approval from Kibogora level two teaching hospital ethic committee before conducting the study, the permission to conduct this study was obtained, whereby applications was made a minimum of 1 month before the proposed start date of the research. All the information regarding the study was provided to the participants. The participants were explained the risks and benefits of the study. The participants were recruited voluntarily and then they were given an informed consent to read before being asked to append their signature.

## CHAPTER FOUR: DATA PRESENTATION, ANALYSIS AND INTERPRETATION

### 4.0 INTRODUCTION

This chapter is concerned with the presentation, analysis, and interpretation of data collected with providing a summary.

### 4.1 PRESENTATION OF FINDINGS AND INTERPRETATION

#### 4.1.1 Demographic characteristics of respondents

In this study 144 mothers in postpartum period attended Kibogora level two teaching hospital were interviewed. Table 1. Shows the Socio-demographic characteristics of mothers. Most women were in range of 26 to 35 years old (58.3%), with median age of 30years, were married with (81.3%), had primary level of education with (45.1%), many of partner were not educated(35.4%), many of them are employed (51.4%), most party is between 1 to 3(75.7%), Most Gravity 1to 3 (53.5%), Hospital delivery (83.3%), vaginal delivery (65.3%), most of GA of babies 38 to 40 weeks(52.8%), most are aged 1 to 7days(68.7%), most of their babies weigh 2.6 to 3kg(57.6%), mostly performed Room in with 70.8%, ANC 4times (81.3%).

**Table 2. Socio-demographic characteristics of the study participants**

Variable	Ranges	Frequency	Percentage
Ages in years	15 to 25 years	28	19.4
	26 to 35 years	84	58.3
	36 to 45 years	32	22.2
	<b>Total</b>	<b>144</b>	<b>100.0</b>
Martual status	Single	17	11.8
	Married	117	81.3
	Divorced	10	6.9
	<b>Total</b>	<b>144</b>	<b>100.0</b>
Education levels	None	25	17.4
	Primary	65	45.1
	Secondary	41	28.5

	University	13	9.0
	<b>Total</b>	<b>144</b>	<b>100.0</b>
Partner Education levels	None	51	35.4
	Primary	27	18.8
	Secondary	42	29.2
	University	13	9.0
	<b>Total</b>	<b>144</b>	<b>100.0</b>
Occupation	Unemployed/housewife	18	12.5
	Employed	74	51.4
	Student	18	12.5
	Others (cultivator)	34	23.6
	<b>Total</b>	<b>144</b>	<b>100.0</b>
Participant Party	P1	37	25.7
	P2	37	25.7
	P3	35	24.3
	Over 3	35.0	24.3
	<b>Total</b>	<b>144</b>	<b>100.0</b>
Participant Gravidity	G1	31	21.5
	G2	17	11.8
	G3	29	20.1
	Over 3	67	32.6
	<b>Total</b>	<b>144</b>	<b>100.0</b>
Place of birth	Hospital	120	83.3
	Health center	24	16.7
	<b>Total</b>	<b>144</b>	<b>100.0</b>
Mode of delivery	Vaginal delivery	94	65.3
	Cesarean delivery	50	34.7
	<b>Total</b>	<b>144</b>	<b>100.0</b>
	35 to 37 weeks	47	32.6

Gestation age of the baby	38 to 40 weeks	76	52.8
	Over 40 weeks	21	14.6
	<b>Total</b>	<b>144</b>	<b>100.0</b>
Age of the baby	1 to 7days	99	68.75
	8 to 14 days	33	22.9
	Over 14 days	12	8.3
	<b>Total</b>	<b>144</b>	<b>100.0</b>
Weight of the baby	1.5kg to 2.5kg	46.0	31.9
	2.6kg to 3kg	83.0	57.6
	3.1kg to 4kg	15	10.4
	<b>Total</b>	<b>144</b>	<b>100.0</b>
Did mother perform rooming-in?	Yes	102	70.8
	No	42	29.2
	<b>Total</b>	<b>144</b>	<b>100.0</b>
Number of antenatal care visit?	2	7	4.9
	3	20	13.9
	4	117	81.3
	<b>Total</b>	<b>144</b>	<b>100.0</b>

### 4.1.2 Findings of knowledge regarding Exclusive breastfeeding

About the knowledge regarding Exclusive breastfeeding, majority of the mothers heard about the EBF (77.8%), regarding duration of EBF (66.7%), of them knew that EBF should be practiced for at least six months, concerning initiation, (77.1%), replied that breast milk should be started immediately after birth within an hour, about (76.4%), understand the importance of the first breast milk or colostrum, (63.2%) know the right time to start Complementary feeding, about (48.6%), know breast milk alone is enough for an infant during in the first 6months of life, while (30.6%) of mothers responded that EBF can be used to prevent early pregnancies. However, a child who is breastfed is less likely to get sick compared with formula-fed babies (53.5%), (47.9%) of mothers knew that EBF for six months protects their child from diarrhea. (73.6%) of the Participants understand that breast milk is a natural food for babies that contain all nutrients, (38.2%) know breastfeeding reduces the risk of malnutrition and obesity in children, about (25.7%) admits that breast milk may protect the baby against infection and chronic diseases, (81.3%) know breast milk is safe and hygienic and always available in need. 37.5% knows that baby should be breastfed on demand, about 68.8% knows dangers of herbal medicine to neonates, 69.4% knows that Frequent sucking help for milk production, 88% responds that Breastfeeding mothers should eat a healthy diet, 50% knows dangers of bottle feeding.

**Table 3. Knowledge regarding Exclusive breastfeeding**

<b>Have you heard about the exclusive breastfeeding?</b>		
Ranges	Frequency	Percent
YES	112	77.8
NO	32	22.2
Total	144	100.0
<b>The knowledge that EBF should be practiced for at 6 months</b>		
	Frequency	Percent
YES	96	66.7
NO	48	33.3
Total	144	100.0
<b>What is the right time to give breast milk after birth?</b>		
	Frequency	Percent
within one hour	111	77.1

After one hour	33	22.9
Total	144	100.0
<b>What are the importance of the first breast milk or colostrum?</b>		
	Frequency	Percent
No importance mentioned	34	23.6
Mention one	62	43.1
Mentioned two importances	38	26.4
Mentioned three	10	6.9
Total	144	100.0
<b>What is right time to start complementary foods?</b>		
	Frequency	Percent
Right answer	91	63.2
Wrong answer	53	36.8
Total	144	100.0
<b>Breastfeeding reduces the risk of malnutrition and obesity in children?</b>		
	Frequency	Percent
YES	55	38.2
NO	89	61.8
Total	144	100.0
<b>Breast milk alone is enough for an infant during the first 6months?</b>		
	Frequency	Percent
YES	70	48.6
NO	74	51.4
Total	144	100.0
<b>EBF for the first 6 months used to prevent pregnancy?</b>		
	Frequency	Percent
YES	44	30.6
NO	100	69.4
Total	144	100.0
<b>Breast milk may protect the baby against infection and chronic diseases?</b>		

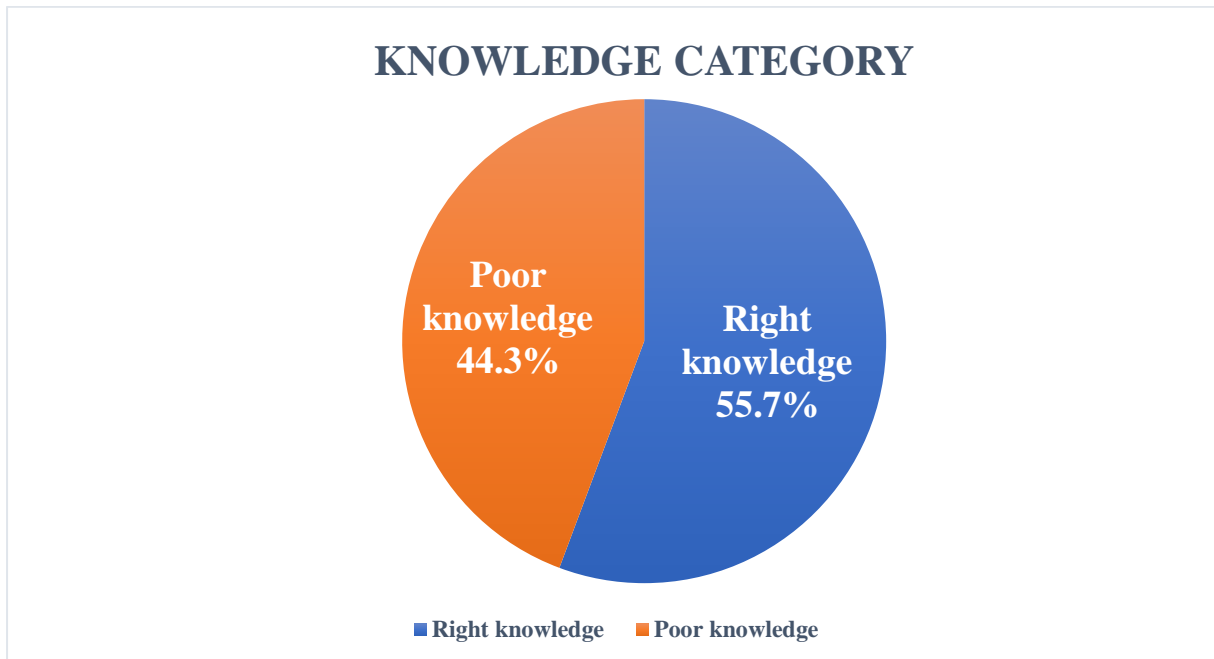
	Frequency	Percent
YES	37	25.7
NO	107	74.3
Total	144	100.0
<b>A child who is breastfed is less likely to get sick compared with formula-fed?</b>		
	Frequency	Percent
YES	77	53.5
NO	67	46.5
Total	144	100.0
<b>EBF protects against baby diarrhea?</b>		
	Frequency	Percent
YES	69	47.9
NO	75	52.1
Total	144	100.0
<b>A baby should be breastfed on demand?</b>		
	Frequency	Percent
Valid YES	54	37.5
NO	90	62.5
Total	144	100.0
<b>BM is a natural food for babies that contain all nutrients</b>		
	Frequency	Percent
YES	106	73.6
NO	38	26.4
Total	144	100.0
<b>BM is safe hygienic and always available?</b>		
	Frequency	Percent
Valid YES	117	81.3
NO	27	18.8
Total	144	100.0
<b>EBF infants grow healthy and strong?</b>		
	Frequency	Percent



	YES	120	83.3
	NO	24	16.7
	Total	144	100.0
<b>Knowledge about the dangers of bottle breastfeeding for the baby?</b>			
		Frequency	Percent
Valid	YES	72	50.0
	NO	72	50.0
	Total	144	100.0
<b>Knowledge about cleaning the breasts before breastfeeding?</b>			
		Frequency	Percent
	YES	50	34.7
	NO	94	65.3
	Total	144	100.0
<b>Breastfeeding mothers should eat a healthy diet?</b>			
		Frequency	Percent
Valid	YES	128	88.9
	NO	16	11.1
	Total	144	100.0
<b>Frequent sucking help for milk production?</b>			
		Frequency	Percent
	YES	100	69.4
	NO	44	30.6
	Total	144	100.0
<b>Knowledge to give a newborn herbal medicine is dangerous</b>			
		Frequency	Percent
	YES	99	68.8
	NO	45	31.3
	Total	144	100.0
<b>Knowledge Category</b>			
	<b>Right knowledge</b>	<b>81</b>	<b>55.7</b>
	<b>Poor knowledge</b>	<b>63</b>	<b>44.3</b>

Majority of the mothers knows the description of EBF (71%), however nearly a half (52%) have poor knowledge regarding the importance of EBF, only 25% knows that breast milk can protect infection and chronic diarrhoea for the neonate.

**Figure 2: knowledge category of study participants**



#### **4.1.3 Findings of attitudes towards exclusive breastfeeding**

The EBF of the mother's table concerning the attitude is presented in Table 3. The majority of mothers 94.2% agree that introducing colostrum within an hour after delivery is important for the baby, most of the mothers 84.7% agree that breast milk for a new-born within an hour after birth is important and 46.7% of mothers understand that breastfeeding is better than artificial feeding. However, 46.5% of participants Reported that is difficult for breast feeders to take care of their family, and 81.9% of mothers agree that breastfeeding increases mother-infant bonding. Furthermore, 52.8% of mothers agreed to prefer breastfed babies are healthier than formula-fed babies, and 73.6% agree that women should breastfeed in public places. Almost all respondents 66.7% believe that breast milk is the ideal food for babies, about half the mothers 50.7% agree that starting complementary feeding to a child before 6 months is important, while 59.7% prefer to feed your baby breast milk alone for the first 6 months. 34.7% of mothers agree breastfeeding will make mother's breasts sag, and only 19.4% of participants agree that breastfeeding affects their beauty. However, from the total study participants, based

on attitude score, 59.5% of the Respondents were grouped as having positive and 40.5% of the study participants were categorized as having a negative attitude.

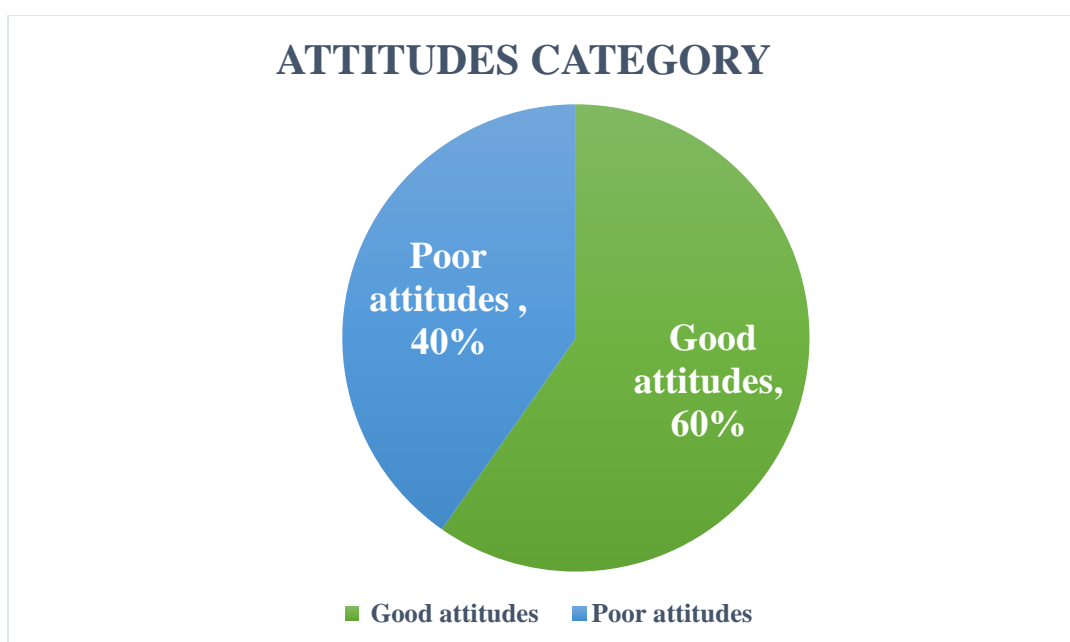
**Table 4. Attitudes towards exclusive breastfeeding**

<b>Breastfeeding immediately the first milk or colostrum is important?</b>			
		Frequency	Percent
	Agree	140	97.2
	Disagree	4	2.8
	Total	144	100.0
<b>Breastmilk for a newborn immediately within an hour after birth is important?</b>			
		Frequency	Percent
	Agree	122	84.7
	Neutral	11	7.6
	Disagree	11	7.6
	Total	144	100.0
<b>Breastfeeding is better than artificial feeding?</b>			
		Frequency	Percent
	Agree	67	46.5
	Neutral	56	38.9
	Disagree	21	14.6
	Total	144	100.0
<b>Is difficult for breast-feeders to take care of their family?</b>			
		Frequency	Percent
	Agree	67	46.5
	Neutral	40	27.8
	Disagree	37	25.7
	Total	144	100.0
<b>Breastfeeding increases mother-infant bonding?</b>			
		Frequency	Percent
	Agree	118	81.9
	Neutral	6	4.2
	Disagree	20	13.9
	Total	144	100.0

<b>Prefer breastfed babies are healthier than formula-fed babies?</b>			
		Frequency	Percent
	Agree	76	52.8
	Neutral	57	39.6
	Disagree	11	7.6
	Total	144	100.0
<b>Women should breastfeed in public places?</b>			
		Frequency	Percent
	Agree	106	73.6
	Neutral	24	16.7
	Disagree	14	9.7
	Total	144	100.0
<b>BM is the ideal food for babies?</b>			
		Frequency	Percent
	Agree	96	66.7
	Neutral	18	12.5
	Disagree	30	20.8
	Total	144	100.0
<b>Starting complementary foods to a child before 6 months is important?</b>			
		Frequency	Percent
	Agree	73	50.7
	Neutral	26	18.1
	Disagree	45	31.3
	Total	144	100.0
<b>Prefer to feed your baby breast milk alone for the first 6 months?</b>			
		Frequency	Percent
	Agree	86	59.7
	Neutral	26	18.1
	Disagree	32	22.2
	Total	144	100.0
<b>Breastfeeding will make the mother's breasts sag?</b>			
		Frequency	Percent
	Agree	50	34.7
	Neutral	48	33.3

	Disagree	46	31.9
	Total	144	100.0
<b>Breastfeeding affects your beauty?</b>			
		Frequency	Percent
	Agree	28	19.4
	Neutral	40	27.8
	Disagree	76	52.8
	Total	144	100.0
<b>Attitudes category</b>			
	<b>Positive attitudes</b>	<b>86</b>	<b>59.5%</b>
	<b>Negative attitudes</b>	<b>58</b>	<b>40.5%</b>

**Figure3: attitudes category of study participants**



#### **4.1.4 Findings of Exclusive breastfeeding practices**

Table 4 shows the respondent's practice of EBF. 67.4% of the surveyed mothers had initiated breastfeeding in the 1st hour of delivery, for those who didn't feed within 1 hour, most reasons were maternal sickness 51%, baby sickness 32%, 70.8% did skin to skin contact with your baby after birth, 9.7% had developed breast problems, 32.6% has bottles for expressing milk, 57.6% of mothers perform hand washing before breastfeeding, 59% experienced signs of good

latch during feeding, 63% uses 2 to 3 hours between two feeds, 59.7% of mothers uses average time of 10 to 25 min for one breastfeeding session, 49.3% of mothers uses good positions when breastfeeding their babies.

**Table 5. Exclusive breastfeeding practices**

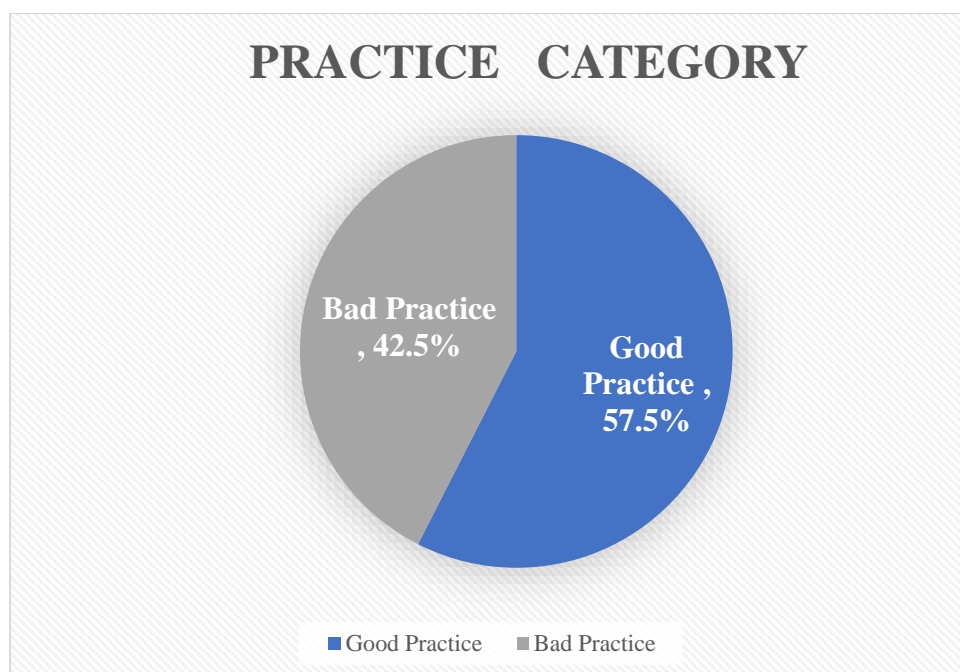
<b>Did you initiate breastfeeding in the 1st hour of delivery?</b>			
		Frequency	Percent
	YES	97	67.4
	NO	47	32.6
	Total	144	100.0
<b>If answer for Question QIV.1 is no, when did you initiate breastfeeding? in hours</b>			
		Frequency	Percent
	2	6	12.8
	4	8	17.0
	5	29	61.7
	7	1	2.1
	10	2	4.3
	12	1	2.1
	Total	47	100
<b>For answer of Question QIV.2 what was the reasons?</b>			
		Frequency	Percent
	colostrum is not good	6	12.8
	No milk	2	4.3
	Mother was sick	24	51.1
	Baby was sick	15	31.9
	Total	47	100.0
<b>Did you have skin to skin contact with your baby after birth?</b>			
		Frequency	Percent
	YES	102	70.8
	NO	42	29.2
	Total	144	100.0
<b>Did you develop breast problems?</b>			
		Frequency	Percent
	YES	14	9.7

	NO	130	90.3
	Total	144	100.0
<b>If answer for Question QIV.04, what problem did you have?</b>			
		Frequency	Percent
		129	89.6
	Breast engorgement	3	2.1
	Breast engorgement	2	1.4
	Breast pain	5	3.5
	Insufficient breast milk	2	1.4
	poor milk production	3	2.1
	Total	144	100.0
<b>Do you have bottles for expressed breastmilk?</b>			
		Frequency	Percent
	YES	47	32.6
	NO	97	67.4
	Total	144	100.0
<b>Do you perform hand washing before breastfeeding?</b>			
		Frequency	Percent
	YES	83	57.6
	NO	61	42.4
	Total	144	100.0
<b>What sign do you experience when your baby is breastfeeding?</b>			
		Frequency	Percent
	Signs of Good Latch	85	59.0
	Sign of Poor Latch	59	41.0
	Total	144	100.0
<b>How many hours do you spend between your baby feeds?</b>			
		Frequency	Percent
	less than 1 hour	17	11.8
	2 to 3 hours	91	63.2
	4 to 6 hours	32	22.2
	Mover than 6 hours	4	2.8
	Total	144	100.0
<b>How many minutes does your baby spend during one session of breastfeeding?</b>			
		Frequency	Percent
	less than 10min	11	7.6
	10 to 25min	86	59.7
	26 to 45min	30	20.8

Mover than 45min	17	11.8
Total	144	100.0
<b>How do you position your baby immediately after breastfeeding?</b>		
	Frequency	Percent
Good position	71	49.3
Bad position	73	50.7
Total	144	100.0
<b>Practice category</b>		
<b>Good Practice</b>	<b>83</b>	<b>57.5%</b>
<b>Bad Practice</b>	<b>61</b>	<b>42.5%</b>

From above findings, more that 67% of the mothers has breastfeed within 1 hour of delivery, and are the one who didn't develop breast problems, EBM feeding is low among the interviewed mothers (39%) and the level breastfeeding practice is not good enough.

**Figure 4: Practice category of the study participants**



#### 4.1.5 Discussions about findings

This was the first study that to investigate knowledge, attitude, and practices towards EBF among postpartum mothers attending Kibogora LTT Hospital and it can help as the baseline towards policy change therefore improvement in EBF. The study site, as LTT Hospital has a



particular benefit of providing policy guidance in lower health facilities. Women with good knowledge and a positive attitude on EBF had a higher prevalence of EBF practice and there was a strong belief that breast milk alone for the first 6 months of infant life is enough for child growth. The overall aim was to provide information about mothers' knowledge and attitudes towards practice of EBF.

Our findings of this study show that had 55.7% had good knowledge, 60% had a positive attitude towards EBF were higher. We found that mothers had good knowledge which was lower to previous studies conducted in India 92.5%, in Zimbabwe 89%, and in Nigeria 94.0% but was higher than studies conducted in the United Arab Emirates 51.2%, and in Ghana 45.8%. However, 60% of them presented a positive attitude, the finding was less than previous studies conducted from Nigeria which is 84.7%, in the United Kingdom was 84.7%, Ghana was 82.6%, and Mizan Aman town was 89.5% in Ethiopia, in Debre Birhan, Ethiopia which found 97.5%. However, it was higher than previous studies conducted in Dabat Health Center, Northwest Ethiopia 76%. Contrary to this, the finding is higher than a study conducted in China 14.50%. Good knowledge and a positive attitude were more likely to have good practices of EBF. The higher EBF rate in Rwanda could be further explained by the fact that Rwanda has prioritized and intensified intervention with a focus on health promotion efforts to increase community knowledge and skills on EBF interventions and promote health-seeking behavior. Mothers who had higher knowledge were also likely to have a positive attitude than their counterparts concerning the practices of EBF. Similar to our findings, studies that report high maternal knowledge on EBF also report a high prevalence of the practice of exclusive breastfeeding. This finding is also in line with the study conducted in China that reported that positive maternal attitudes toward breastfeeding are associated with continuing to breastfeed longer and having a greater chance of successful breastfeeding, besides that, maternal education plays a role in attitudes toward breastfeeding. Despite high baseline attitudes and knowledge levels in these women, their scores increased significantly following training. This suggests that it is likely that the training which includes changing cultural and personal breastfeeding attitudes, was accountable for their high scores

Improving knowledge without change in attitude is a failure, which agencies involved in health education should seriously consider. Thus, there is a strong need that when knowledge is conveyed it should be done in a way so that the attitude also changes for the good and help to

improve the practices of EBF. We may have given the right information, but our research points out those efforts are needed to improve attitudes.

## **CHAPTER FIVE: CONCLUSION AND RECOMMENDATIONS**

### **5.0 INTRODUCTIONS**

This chapter provides, the general conclusion of the study, recommendations, and suggestion of the studies.

#### **5.1 CONCLUSION**

In a nutshell, the aim of the study was to identify the knowledge, attitudes and practices of exclusive breastfeeding for mothers in postpartum period attending maternity of Kibogora level two teaching hospital, this study proved that 55.7% of the participants had good knowledge about EBF, 59.5% had good attitudes where as 57.5% performed good practice regarding EBF, therefore most of women with good knowledge and a positive attitude on EBF had a higher level of EBF practice.

#### **5.2 RECOMENDATIONS**

##### **5.2.1 Recommendation to the Ministry of health**

Ministry of health should facilitates the institute to develop strategies for improving knowledge regarding EBF for clients in setting areas and therefore make consistence for maintaining this ideal mode of nutrition for infants, mainly standard tools for education should be considered.

The planning of public health interventions to promote longer and increase the number of mothers who adhere to achieve the better development of children, and also to implement the policymakers, an intervention that could improve knowledge, attitude and practices of women concerning EBF.

##### **5.2.2 Recommendation to Kibogora level two teaching hospital**

As this was our study area, the findings shows the sub-optimal level of knowledge, attitudes and practices of EBF among the postpartum mothers attending maternity, peditary and neonatology services, the hospital quality improvement committee should conduct a survey to have a baseline data among those departments to be considered in a quality improvement plan.

The team of health care providers should improve their concern regarding EBF pattern during their daily service delivery, they should ensure the knowledge and implementation of policy

regarding EBF in each department. Regular assessment of breastfeeding pattern is crucial for the mothers to ensure improvement of their knowledge, attitudes and practices regarding EBF.



### **5.3 SUGGESTION FOR FURTHER STUDY**

According to the limitations of this study we suggest further researcher that will contain larger population size, with enough time and funds, therefore exploratory research will pilot this study and identify associated factors regarding knowledge, attitudes and practices of EBF

## REFERENCES

1. American Academy of Pediatrics (AAP). (2012, February 27). Breastfeeding and the use of human milk. *Pediatrics*, 129, e827–e841. As Retrieved April 27, 2012, from: <http://pediatrics.aappublications.org/content/129/3/e827.full.pdf+html>
2. Bolisani, Ettore; Bratianu, Constantin. (2018). the Elusive Definition of Knowledge. *Emergent Knowledge Strategies: Strategic Thinking in Knowledge Management*. Springer International Publishing. pp. 1–22. [doi: 10.1007/978-3-319-60657-6. 1](https://doi.org/10.1007/978-3-319-60657-6_1). ISBN 978-3-319-60657-6.
3. Lee, M. K., & Binns, C. (2020). Breastfeeding and the risk of infant illness in Asia: a review. *International journal of environmental research and public health*, 17(1), 186.
4. MOH (2020). Rwanda Ministry of Health: *Fourth health sectors strategic plan, July 2018 – June 2024*. As retrieved from: [https://www.childrenandaids.org/sites/default/files/2018-05/Rwanda\\_Nat%20Health%20Sector%20Plan\\_2018-2024.pdf](https://www.childrenandaids.org/sites/default/files/2018-05/Rwanda_Nat%20Health%20Sector%20Plan_2018-2024.pdf).
5. National Institute of Child Health & Human Development. (2009). *Breastfeeding*. Retrieved from: <http://www.nichd.nih.gov/health/topics/Breastfeeding>
6. NISR (2020). Rwanda Demographic and Health survey 2019 to 2020. *Planning NIOSoR-MoFaE*. As retrieved from: <https://www.statistics.gov.rw/datasource/demographic-and-health-survey-2019-20>.
7. Richard M. (2016). The Dynamics of Persuasion: *Communication and Attitudes in the Twenty-First Century*, Routledge.
8. USAID (2018). *Rwanda Nutrition profile*. As retrieved from: [https://www.usaid.gov/.../1864/USAID-Rwanda\\_NCP.pdf](https://www.usaid.gov/.../1864/USAID-Rwanda_NCP.pdf)
9. World Health Organization. (2001). the optimal duration of exclusive breastfeeding: a systematic review.
10. World Health Organization. (2014). WHA Global Nutrition Targets 2025: Breastfeeding Policy Brief as retrieved from: [http://www.who.int/nutrition/topics/globaltargets\\_breastfeeding\\_policybrief.pdf](http://www.who.int/nutrition/topics/globaltargets_breastfeeding_policybrief.pdf)
11. World Health Organization. (2019). World Breastfeeding Week 2019 as retrieved from: <https://www.who.int/.../world-breastfeeding-week-2019World>

## Appendix 1. Requesting letter for research

 **KIBOGORA POLYTECHNIC** 

Kibogora, August 08<sup>th</sup>, 2023

To the DG of Kibogora Level Two Teaching Hospital

**RE: Request of conducting Research**

Dear sir,

We write this letter to humbly request to allow **Mrs. INGABIRE Jaqueline and Mr. NTAKIYINANIRA Denys** to conduct research in your institution.

The above mentioned are bonafide students of Kibogora Polytechnic pursuing Bachelor's degree in General Nursing Department.



These students are currently conducting a research topic **“ASSESSMENT OF KNOWLEDGE, ATTITUDE AND PRACTICE OF EXCLUSIVE BREASTFEEDING AMONG POSTPARTUM MOTHERS IN KIBOGORA LEVEL TWO TEACHING HOSPITAL”**

We are convinced that your institution will constitute a valuable source of information pertaining to their research, the purpose of this letter is to humbly request you to avail them the pertinent information they may need. we pledge to ensure that all provided information will be confidential and used in the strict academic purpose.


Any assistance rendered to the candidates will be highly appreciated.

Yours sincerely,

On behalf of KP Management

**Mr. NSENGIYUMVA Jean**  
Ag. Dean of Health Sciences Faculty  
Kibogora Polytechnic

  
KIBOGORA LEVEL TWO  
TEACHING HOSPITAL  
RECEPTION  
DATE **11 AUG 2023**  
Names : .....  
Signature : .....

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**Appendix 2. Plagiarism checked document**



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### Appendix 3. Consent form for participants

Kibogora kuwa 10 kanama 2023

#### **AMASEZERANO YO KWEMERA KUGIRA URUHARE MU IBAZA RIGAMIJE KWIGA**

Njyewe .....ndemera kugira uruhare muri iri yiga ryateguwe na **NTAKIYINANIRA Denys** hamwe na **INGABIRE Jacqueline**.

Nsobanukiwe neza umwimerere wiri yiga kandi nkifuza kurigiramo uruhare, Ndabigiramo uruhare nkumukorera bushake . Nsobanukiwe ko nshobora kugira icyo nkora muri iri yiga ntampamvu ntanze , igihe icyaricyo cyose yaba mbere yo gutangira cyangwa mugihe ndi gutanga uruhare rwanjye .

Nakiriye ibisubizo kubibazo byose byabajijwe uri gukora iri yiga .

Umukono wanjye hasi aha ugaragaza ko mbyemeye.

#### **Uwagaragaje uruhare rwe**

Umukono ..... Itariki .....

#### **Ukora ubushakashatsi**

Umukono.....Itariki .....

**Appendix 4. Questionnaire used for interview**

**QUESTIONNAIRE**      **CODE:** \_\_\_\_\_

**DATE:** \_\_\_/\_\_\_/\_\_\_\_\_

**I. Socio-demographic characteristics of the study participants**

1. How old is the mother? \_\_\_\_\_
2. Marital status: Single       Married:       Divorced:       widowed:
3. Level of education:
  - a. None
  - b. Primary
  - c. Secondary
  - d. University
  - e. Others(specify) \_\_\_\_\_
4. Partners level of education:
  - f. None
  - g. Primary
  - h. Secondary
  - i. University
  - j. Others(specify)  \_\_\_\_\_
5. Occupational status:
  - a. Unemployed/housewife
  - b. Employed
  - c. Student
  - d. Other(specify)  \_\_\_\_\_
6. Maternal Parity: \_\_\_\_\_
7. Maternal Gravidity: \_\_\_\_\_
8. Place of birth:
  - a. Hospital
  - b. Health center
  - c. Home
9. Mode of delivery:
  - a. Vaginal delivery
  - b. Cesarean section
10. Gestational age of the baby: \_\_\_\_\_
11. Current age of the baby: \_\_\_\_\_
12. Birth weight of the baby: \_\_\_\_\_
13. Did mother perform rooming-in? Yes       No



14. Number of antenatal care visit? \_\_\_\_\_

## II. Knowledge regarding exclusive breastfeeding

1. Have you heard about the exclusive breastfeeding? Yes  No
2. The knowledge that EBF should be practiced for at 6 months? Yes  No
3. What is the right time to give breast milk after birth?  
Within one hour  after one hour  after 24 hours
4. What are the importance of the first breast milk or colostrum?
  - a. Promote growth and health of infant
  - b. Promote immunity
  - c. Fight infection
  - d. Prevent jaundice
  - e. No importance mentioned
5. What is right time to start complementary foods? \_\_\_\_\_
6. Breastfeeding reduces the risk of malnutrition and obesity in children?
  - a. Yes
  - b. No
7. Breast milk alone is enough for an infant during the first 6months?
  - a. Yes
  - b. No
8. EBF for the first 6 months used to prevent pregnancy?
  - a. Yes
  - b. No
9. Breast milk may protect the baby against infection and chronic diseases?
  - a. Yes
  - b. No
10. A child who is breastfed is less likely to get sick compared with formula-fed?
  - a. Yes
  - b. No
11. EBF protects against baby diarrhea?
  - a. Yes
  - b. No
12. A baby should be breastfed on demand?
  - a. Yes
  - b. No
13. BM is a natural food for babies that contain all nutrients?
  - a. Yes
  - b. No
14. BM is safe hygienic and always available?
  - a. Yes
  - b. No
15. EBF infants grow healthy and strong?
  - a. Yes
  - b. No

16. Knowledge about the dangers of bottle breastfeeding for the baby?

- a. Yes       b. No

17. Knowledge about cleaning the breasts before breastfeeding?

- a. Yes       b. No

18. Breastfeeding mothers should eat a healthy diet?

- a. Yes       b. No

19. Frequent sucking help for milk production?

- a. Yes       b. No

20. Knowledge to give a newborn herbal medicine is dangerous?

- a. Yes       b. No

### III. Attitudes towards exclusive breastfeeding

1. Breastfeeding immediately the first milk or colostrum is important?

- a. Agree       b. Neutral       c. Disagree

2. Breastmilk for a newborn immediately within an hour after birth is important?

- a. Agree       b. Neutral       c. Disagree

3. Breastfeeding is better than artificial feeding?

- a. Agree       b. Neutral       c. Disagree

4. Is difficult for breast-feeders to take care of their family?

- b. Agree       b. Neutral       c. Disagree

5. Breastfeeding increases mother-infant bonding?

- a. Agree       b. Neutral       c. Disagree

6. Prefer breastfed babies are healthier than formula-fed babies?

- a. Agree       b. Neutral       c. Disagree

7. Women should breastfeed in public places?

- a. Agree       b. Neutral       c. Disagree

8. BM is the ideal food for babies?

- a. Agree       b. Neutral       c. Disagree

9. Starting complementary foods to a child before 6 months is important?

- a. Agree       b. Neutral       c. Disagree

10. Prefer to feed your baby breast milk alone for the first 6 months?

- a. Agree       b. Neutral       c. Disagree

11. Breastfeeding will make the mother's breasts sag?  
a. Agree       b. Neutral       c. Disagree
12. Breastfeeding affects your beauty?  
a. Agree       b. Neutral       c. Disagree

#### IV. Exclusive breastfeeding practices of study participants

1. Did you initiate breastfeeding in the 1<sup>st</sup> hour of delivery?  
a. Yes       b. No
2. A. If no, when did you initiate breastfeeding? \_\_\_\_\_
2. B. what was the reasons (*tick all that apply*)
- a. Colostrum is not good
  - b. No milk
  - c. Mother was sick
  - d. Baby was sick
  - e. Baby was taken away from me
3. Did you have skin to skin contact with your baby after birth?  
a. Yes       b. No
4. Did you develop breast problems?  
a. Yes       b. No   
If yes, what problem did you have? \_\_\_\_\_
5. Do you have bottles for expressed breastmilk?  
a. Yes       b. No
6. Do you perform hand washing before breastfeeding?  
a. Yes       b. No
7. What sign do you experience when your baby is breastfeeding? (Select all that apply)
- a. Clicking sound and painful nipple
  - b. Baby lips flared out and wide angle of the mouth
  - c. Feel baby's sucking and sealing breast milk
  - d. Baby is discomfort and crying
  - e. Nipple does not enter in baby's mouth
8. How many hours do you spend between your baby feeds? \_\_\_\_\_

- a. Less than 1 hour
  - b. 2 to 3 hours
  - c. 4 to 6 hours
  - d. Mover than 6 hours
9. How many minutes does your baby spend during one session of breastfeeding? \_\_\_\_\_
- a. Less than 10 min
  - b. 10 to 25min
  - c. From 26 to 45min
  - d. Above 45min
10. How do you position your baby immediately after breastfeeding?
- a. Immediately Put baby lying and rest in bed
  - b. Immediate upright positioning
  - c. Immediate Side lying
  - d. Immediately prone and check diaper