

**KNOWLEDGE, ATTITUDE AND PRACTICES OF EXCLUSIVE
BREAST FEEDING AMONG PRIMIPAROUS LACTATING
MOTHERS ATTENDING KYABUGIMBI HEALTH**

**CENTRE IV, BUSHENYI DISTRICT,
WESTERN UGANDA**

BY

AHUMUZA ALEX

DCM/0010/152/DU

**A RESEARCH REPORT SUBMITTED TO SCHOOL OF ALLIED
HEALTH EXAMINATION BOARD IN PARTIAL FULFILMENT
FOR THE AWARD OF DIPLOMA IN CLINICAL MEDICINE**

AND COMMUNITY HEALTH OF KAMPALA

INTERNATIONAL UNIVERSITY

WESTERN CAMPUS.

DECEMBER, 2017

DECLARATION

I AHUMUZA ALEX, (DCM/0010/152/DU) hereby declare that except where reference was made to public literature, the whole of this work is as a result of my original work and has never been submitted to any institution or authority of academic qualification or publication where it is indebted to others, acknowledgement has been already observed.

AHUMUZA ALEX

Signature

Date

SUPERVISOR`S APPROVAL

I hereby accept that this research report presented is the original work of the named student who has been under my supervision throughout the study period. I approve it to Faculty of Allied Health School of Health Sciences.

DR. KYALEMA SAMUEL (HEAD OF DEPARTMENT ACCIDENT AND EMMERENCY)

.....

Signature

.....

Date

DEDICATION

I dedicate this report to my mother Mrs. Nyakoojo Margret, my father Mr. Kyamanywa Godfrey, my brothers Kaahwa Daniel, Ayebale Justus, Maanigamukama Job, My sisters; Tugume Catherine, Atugonza Dorothy, Musiimenta Joanita and lastly my closest friend Nambooze Christine

ACKNOWLEDGEMENT

Success is not measured by where you are in life, but by the obstacles you have overcome. Now that the dust has settled, I feel it is proper to express my sincere gratitude to the following individuals for their support. I extend my sincere gratitude to my heart fully devoted supervisor DR. KYALEMA SAMUEL who offered me right guidance and support from the start of my report until completion. May GOD bless him abundantly.

Lastly, I thank my friends, relatives and others for their support during the time I was doing my proposal, their ideas have been very helpful and I do appreciate.

LIST OF ABBREVIATIONS.

KAP:	Knowledge, Attitude and practices
EBF:	Exclusive Breastfeeding
KHCIV:	Kyabugimbi Health Centre IV
MOH:	Ministry of Health.
OPD:	Out Patient Department.
USAID:	United States Agency for International Development
WHO:	World Health Organization.
AFASS:	Acceptable, Feasible, Affordable, Sustainable and Safe
MCH:	Mother and Child Health
EAF:	Exclusive Artificial Feeding
MDG:	Millennium Development Goals
NBS:	National Bureau of Statistics
PMTCT:	Prevention of Mother to Child Transmission
SIDS:	Sudden Infant Death Syndrome
UNAID:	Joint United Nations Program on HIV and AIDS
UNICEF:	United Nations Children's Fund
IYCF:	Infant and Young Child Feeding
TBA:	Traditional Birth Attendant
WABA:	World Alliance for Breastfeeding Action
IYCN:	Infant and Young Child Nutrition

LIST OF OPERATING DEFINITIONS

Bottle-feeding: Feeding mode where the child receives a liquid or semi-solid foods from a bottle with a nipple/teat. This term applies irrespective of the nature of the liquid or semi-liquid

Breast milk Substitute: Any food marketed or otherwise represented as partial or total replacement for breast milk

Colostrums: Thick yellowish secretion from the breast within the first few days after delivery

Exclusive artificial feeding: A feeding method that solely involves the use of none breast milk foods.

Exclusive breastfeeding: The infant receives only breast milk (including expressed breast milk) but no other liquids or solids with exception of drops or syrups consisting of vitamins, mineral supplements or medicines

Lactational amenorrhea: it is a natural form of birth control mechanism or protection against pregnancy that occurs during breastfeeding. The effect is observed to be particularly strong when breastfeeding is exclusive.

Mixed feeding: Breastfeeding a child while giving non-human milk or other foods and liquids

Morbidity: Occurrences of illnesses

Mortality: Occurrences of death

Neonate: refers to a new born baby especially one that is less than one month old.

Post-lacteal: Fluid or food given after breastfeeding has commenced, within three days of birth

Postpartum: the immediate period after child birth especially the first 6 weeks

Pre-lacteal food: Giving the infant feed liquids before initiating breastfeeding after birth

Primiparous: Mothers who have experienced their very first childbirth.

TABLE OF CONTENTS

DECLARATION	I
SUPERVISOR`S APPROVAL	II
DEDICATION	III
ACKNOWLEDGEMENT	IV
LIST OF ABBREVIATIONS.....	V
LIST OF OPERATING DEFINITIONS	VI
LIST OF TABLES.....	X
LIST OF FIGURES	XI
ABSTRACT.....	XII
1.1 BACKGROUND OF THE STUDY	1
1.2. PROBLEM STATEMENT	2
1.3 OBJECTIVES OF STUDY.....	4
1.3.1 MAIN OBJECTIVES	4
1.3.2 SPECIFIC OBJECTIVES	4
1.4 RESEARCH QUESTIONS	4
1.5 JUSTIFICATION OF STUDY.....	4
1.6 SCOPE OF STUDY	5
1.7 CONCEPTUAL FRAME WORK	6
CHAPTER TWO:	7
LITERATURE REVIEW	7
2.0 INTRODUCTION	7
2.1 BACKGROUND OF EXCLUSIVE BREASTFEEDING	7
2.2 MATERNAL KNOWLEDGE ON EXCLUSIVE BREASTFEEDING	9

2.3 MATERNAL ATTITUDES TOWARDS EXCLUSIVE BREASTFEEDING	10
2.4 SOURCES OF INFORMATION ON BREASTFEEDING	11
2.5 MATERNAL PRACTICE OF EXCLUSIVE BREASTFEEDING	11
CAPTER THREE:	13
METHODOLOGY	13
3.0 INTRODUCTION	13
3.1 STUDY AREA	13
3.2 STUDY POPULATION	14
3.3 STUDY DESIGN.....	14
3.4 STUDY VARIABLES.....	14
3.3.1 INCLUSION CRITERIA.....	15
3.3.2 EXCLUSION CRITERIA	15
3.4 SAMPLE SIZE ESTIMATION	16
3.5 DATA COLLECTION MANAGEMENT	17
3.5.1 DATA ANALYSIS.....	17
3.5.2 QUALITY CONTROL.....	17
3.5.3 LIMITATIONS.....	17
3.5.4. DELIMITATIONS	18
3.6 ETHICAL CONSIDERATION	18
CHAPHTER FOUR.....	19
DATA PRESENTATION.....	19
4.1 INTRODUCTION	19
4.2 SOCIAL-DEMOGRAPHIC CHARACTERISTICS WITH THEIR INDEX	19
TRIBE FINDINGS	19

4.3 INFANT FEEDING INFORMATION AND PRACTICES.....	21
4.4 INFANT AND MATERNAL HEALTH.....	23
CHAPTER FIVE	27
DISCUSSION, CONCLUSION AND RECOMMENDATIONS.....	27
INTRODUCTION	27
5.1 DISCUSSION OF THE RESULTS.....	27
5.1.1 SOCIAL-DEMOGRAPHIC FINDINGS.....	27
5.1.2 INFANT FEEDING INFORMATION AND PRACTICES.....	28
5.1.3 MATERNAL ATTITUDES TOWARDS EXCLUSIVE BREASTFEEDING.....	28
5.2 CONCLUSION.....	30
5.3 RECOMMENDATIONS	30
REFERENCES	32
APPENDIX I: QUESTIONNAIRE CONSENT FORM AND INTRODUCTION	35
APPENDIX II: MAP OF UGANDA SHOWING BUSHENYI DISTRICT.....	42
APPENDIX III; MAP OF BUSHENYI DISTRICT SHOWING LOCATION OF KYABUGIMBI	43
APPENDIX IV: BUDGET ESTIMATE	44
APPENDIX V: WORK PLAN	45

LIST OF TABLES

Table 1: Krejcie table	16
Table 2: tribe of respondents	19
Table 3: table showing mother age of the respondents.....	20
Table 4: table showing mothers education of respondents:.....	20
Table 5: table showing Martial status of respondents	21
Table 6: table showing Employment status of respondents.....	21
Table 7: table showing Table showing if mother had ever breastfed their babies.....	21
Table 8: Table showing the time after birth the baby was put on the breast	22
Table 9: Table showing drinks given to babies in the first 3 days after delivery	22
Table 10: Table showing drinks given to babies in the first 3 days after delivery	23
Table 11: Table showing drinks given to babies in the first 3 days after delivery	23
Table 12: table showing maternal attitudes towards exclusive breastfeeding	25

LIST OF FIGURES

Figure 1: conceptual frame work.....6

ABSTRACT

Methods: This study was conducted Kyabugimbi Sub County, Bushenyi district in the southern part of Uganda, 21 KM from Bushenyi town along Ishaka- Mbarara road.to assess the knowledge, attitude and practice of exclusive breast feeding among Primiparous lactating mothers attending Kyabugimbi health center IV. A questionnaire consisting of both closed and open ended questions was used to collect both qualitative and quantitative data. SPSS was used for data entry and analysis and data was presented in tables.

Results: Majority were Banyankole accounting to 84.1% of the respondents and majority of the respondents where for secondary level with 63.6% and primary with 31.8%. Majority of babies were put on breast from 0-3 hours accounting to 75.1% and above 3 hours accounted to 24.9%. Majority of the babies were not given any thing that is 86.4% and 13.6% were given sugar or glucose water. Majority of these babies were still breast feeding accounting to 90.9%. 97.7% of the mothers believed in EBF being beneficial to the children. 56.8% believed that babies can survive without water, 34.1% didn't believe and 9.1% were not sure. Husband were involved in breast feeding decisions carrying 52.3% of the respondents. 88.6% believed that animal milk is not suitable for new born babies, 9.1% believed that it is suitable and only 2.3 were not sure. Of the working mothers 63.6% were using formula feeding, 34.1% were not using it and 2.3% were not sure. 95.5% believed that breast fed babies are healthier than formula fed babies. And 65.9% believed that breast feeding destroys figure and only 34.1% didn't believe. 79.5% knew that breast milk is easily digested than formula, 15.9% were not sure and only 4.5% didn't know.

Conclusion: Though the practice of breastfeeding was high and majority of the respondents were aware of EBF, the exclusive breastfeeding rate was not sufficient. Based on study findings, it was concluded that:

- Study participants have a good knowledge regarding breastfeeding's health benefits for mother and baby.
- Participants have a positive attitude toward breastfeeding.
- Participant's knowledge level is positively correlated with their age and attitude toward breastfeeding.
- Several barriers might prevent participants from breast feeding their babies although they have good knowledge regarding its importance such as destruction of mothers figure.

CHAPTER ONE

1.0 INTRODUCTION.

This chapter includes the following; background of the study, problem statement, major and specific objectives of the study, research questions, significance of the study and scope of the study.

1.1 BACKGROUND OF THE STUDY

Breastfeeding is the universally accepted mode of infant feeding. Appropriate Infant and Young Child Nutrition (breastfeeding and complementary feeding) have the single largest impact on child mortality (19%) of all preventives interventions (Akinremi & Samuel, 2015). The protection, promotion and support of breastfeeding are now major public health priorities, as emphasized in the Global Strategy for Infant and Young Child Feeding.

The WHO and UNICEF recommendations on breastfeeding are as follows: initiation of breastfeeding within the first hour after birth; Exclusive Breastfeeding (EBF) for the first six months; and continued breastfeeding for two years or more, together with safe, nutritionally adequate, age appropriate, responsive complementary feeding starting from the sixth month (www.unicef.org; access Universal (90%) coverage of exclusive breastfeeding is estimated to prevent around 13% of all deaths among children under five years of age in low and middle income countries (Joshi, 2014).

According to Black et al., 2013 in Series on Maternal and Child under nutrition, failure to exclusively breastfeed for 6 months is associated with increased risk of childhood mortality and morbidity). In the same series, breastfed infants were shown to have at least six times greater chance of survival in the early months than non-breastfed children and an exclusively breastfed child is 14 times less likely to die in the first six months than a non-breastfed.

Historically, breastfeeding has generally been considered by health professionals as the ideal feeding practice for infants. It is the first communication pathway between the mother and her infant. Previous studies confirm that breastfeeding has advantages for both babies and mothers,

including providing the needed nutrition for the babies, boosting the baby's immune system, helping mothers to lose weight after pregnancy, and stimulating the uterus to return to its previous position before pregnancy (Tanash, 2014). In addition, infants can absorb and digest breast milk more easily than baby formula (The Office on Women's Health, 2012).

World Health Organization (WHO) recommends breastfeeding as a main source of food for babies for the first six months, and encourages mothers to consider breastfeeding as the only feeding source. Between six months and two years old, it is recommended that mothers could use other supplemental sources (such as water, other liquids, or solid baby food) to feed their babies along with breastfeeding (WHO, 2013).

The Healthy People objectives for 2020, has set a target to increase the percentage of infants who are breastfed by 2020 to be 81.9 % for children who ever breastfed, 60.6% for children who Breastfed for 6 months, 34.1% for children who breastfed for 12 months, 46.2% for children who exclusively breastfed for 3 months, and 25.5% for children who exclusively breastfed for 6months (United States Breastfeeding Committee, 2013).Globally, sub-optimal breastfeeding still accounts for an estimated 1.4 million deaths in children under five years annually (http://www.unicef.org/nutrition/index_24824.html).

Globally, Cai, Wardlaw, & Brown, 2012 discovered that 39% of infants 0-5 months were breastfed exclusively. Also, the regions with high rates of infants exclusively breastfed for less than 6 months were Eastern/Southern Africa (52%), as well as South Asia (47%). Hence Sub-Saharan Africa recorded the lowest coverage of 37% where Uganda is among, (WHO, 2012). Many centers have studied about KAP of EBF among multiparous mothers but little is known in this area about the KAP of EBF among primiparous lactating mothers in the country and the study area, hence the need to do a research in this effect. Thus this study seeks to assess the KAP of EBF among Primiparous lactating mothers at Kyabugimbi health Centre IV, Bushenyi, western Uganda.

1.2. PROBLEM STATEMENT

Uganda has the third lowest exclusive breastfeeding rate among the East African countries with a prevalence of 63.2% among infants less than 6 months and just 39% of those 0-6 months old

benefit from the practice of continued breastfeeding this has led to increase in malnutrition, neonatal morbidity and mortality. Majority of the studies on IYCF practices have targeted adult women. Primiparous mothers are likely to have more challenges in practicing EBF, being their first experience with difficulties in adjusting to the new role and the breastfeeding techniques. Mothers tend to receive varied information on IYCF from different sources including parents, relatives, media, friends and healthcare providers (Tully & Ball, 2013). Most of the information received may not be scientifically sound and may negatively influence the practice of EBF among the Primiparous mothers because of lack of experience.

On average, only around 35% of infants <6 months are exclusively breastfed globally (WHO, 2010). Only 38% of children less than six months of age in the developing world are exclusively breastfed (UNICEF, 2013). In the year 2010, the prevalence of EBF in developing countries was at 39%, 45% in South Asia, 28% in West and Central Africa and 47% in Eastern and Southern Africa (Cai *et al.*, 2012). In East Africa, the EBF rates are quite impressive with Rwanda (84.90%), Burundi (69.3%), Uganda (63.2%), Kenya (61%) and Tanzania (50%).

No published study has been done at Kyabugimbi HCIV to give a clear picture of KAP on EBF among primiparous lactating mothers and this study will provide information about the KAP on EBF among primiparous lactating mothers attending Kyabugimbi HCIV, Bushenyi district.

Therefore, this study seeks to assess the KAP of EBF among primiparous lactating mothers attending Kyabugimbi health Centre IV and find out predictors of failure for establishment of exclusive breastfeeding in the first six months. Information about breastfeeding KAP in this population will be useful for policy makers, for interventional programs and come up with the strategies of how to reduce the prevalence which in turn may reduce on the mortality and morbidity rates of infants

1.3 OBJECTIVES OF STUDY

1.3.1 MAIN OBJECTIVES

1. To assess the knowledge, attitude and practice of exclusive breast feeding among Primiparous lactating mothers attending Kyabugimbi health center IV.

1.3.2 SPECIFIC OBJECTIVES

1. To determine the knowledge of Primiparous lactating mothers on exclusive breast feeding attending Kyabugimbi health center IV.
2. To determine attitude towards Primiparous lactating mothers on exclusive breast feeding attending Kyabugimbi health center IV.
3. To determine the practice of Primiparous lactating mothers on exclusive breast feeding attending Kyabugimbi health center IV.

1.4 RESEARCH QUESTIONS

The main research question for the study is what is the rate of KAP of exclusive breastfeeding among Primiparous lactating mothers in Kyabugimbi health center IV?

Specific questions include the following;

1. What is the knowledge of exclusive breastfeeding among Primiparous lactating mothers attending Kyabugimbi health center IV?
2. What is the attitude of Primiparous lactating mothers attending Kyabugimbi Health center towards exclusive breastfeeding?
3. What is the practice of exclusive breastfeeding among Primiparous lactating mothers attending Kyabugimbi Health center IV?

1.5 JUSTIFICATION OF STUDY

Goal four of the eight millennium development goals is entirely devoted to reducing child mortality by two thirds by 2020. However, progress in African countries is insufficient in

achieving this goal. Poor feeding practices such as sub-optimal breastfeeding is still widespread and often leads to malnutrition which is a major cause of more than half of all child deaths (Breastfeeding et al., 2015). By studying and bringing out KAP of EBF among Primiparous lactating mothers to therefore. This study will be salutary; as it will contribute to a better understanding of how essential health interventions with proven empirical efficacy such as EBF can be promoted. It is also hoped that this study's outcome will contribute to the growing body of scientific knowledge on infant feeding practices and how to design and situate health interventions in rural communities. Moreover, this research will in no doubt serve as a basis for future research in Kyabugimbi, Bushenyi and the entire country.

1.6 SCOPE OF STUDY

The study will be conducted on primiparous lactating mothers with infants aged 0-6 months of age attending Kyabugimbi HCIV. This health facility is located in Kyabugimbi Sub County, Bushenyi district in the southern part of Uganda, 21 KM from Bushenyi town along Ishaka-Mbarara road. The study will take approximately 1 month from 15th September to October.

1.7 CONCEPTUAL FRAME WORK

Figure 1: conceptual frame work

Independent variables

Socio demographic factors

1. Maternal age
2. Infant`s age
3. Maternal level of education
4. Marital status
5. Religious status
6. Occupation

Knowledge on exclusive breastfeeding

1. Understanding and intellectual capacity
2. Benefits of exclusive breastfeeding
3. Duration of exclusive breastfeeding

Practices on exclusive breast feeding

1. Breasting with the first hour of delivery
2. Breast feeding according to demand

Attitude towards exclusive breastfeeding

1. Perceived benefits
2. Barriers to exclusive breastfeeding
3. Breast feeding on demand
4. Self confidence in exclusive breast feeding

Dependent variable

Exclusive breastfeeding

Consequences

1. Malnutrition
2. Infant morbidity
3. Infant mortality

Intervening variable

1. Childhood illness and infection
2. Source of breastfeeding information
3. Maternal illness or infection e.g. breast cancer

CHAPTER TWO:

LITERATURE REVIEW

2.0 INTRODUCTION

This chapter reviews topical areas found in current literature, works of the previous researchers related to this research which help determine the gaps on this public issue. These topical areas include; knowledge (information from relatives, counseling and guidance at antenatal clinic), attitude (perceived benefit, perceived susceptibility and severity) and practices towards exclusive breastfeeding among lactating mothers.

2.1 BACKGROUND OF EXCLUSIVE BREASTFEEDING

Over the last decade, over whelming scientific evidence supporting the integral role of breast feeding in the survival, growth and development of a child, as well as in the health and wellbeing of mothers, has come to light. According to world health organization WHO), breast milk has the complete nutritional requirements that a baby needs for health development. Furthermore, it is safe and contains antibodies that help protect infants and boost immunity. Consequently, breast feeding contributes to reduced infant morbidity and mortality due to diarrhea, respiratory or ear infections and other infectious diseases. For the mother, breast feeding is economical; milk is always available, clean and at the right temperature. Breast feeding also delays the return of fertility and reduces the risk of developing breast and ovarian cancers (Town, Bedelle, 2014).

According to WIC participant's study of five agencies, Poor practices and attitudes toward exclusive breastfeeding have been reported to be among the major reasons for poor health outcomes among children, particularly in developing countries. The six causes of 90% of under-five child mortality worldwide - acute respiratory infections, diarrhea, measles, malaria, HIV and

AIDS and neonatal conditions - are easily preventable. The highest levels of under-five mortality continue to be found in Sub-Saharan Africa, where one in eight children die before the age of five (129 deaths per 1,000 live births) - nearly twice the average in developing regions overall and around 18 times the average in developed regions. Diarrhea, malaria and pneumonia are responsible for more than half the deaths of children under five in Sub-Saharan Africa. Breastfeeding strengthens children's immunity, child health and survival, and reduces their vulnerability to these diseases. Scientific evidence has shown that breastfeeding could lead to a 13% reduction in deaths of children under five, if infants were exclusively breastfed for six months and continued to be breastfed for up to one year

Exclusive breastfeeding includes initiating breastfeeding of the child within an hour of birth and continue till six months of age without supplemental bottle-feeding.¹ Breastfeeding is beneficial to the child as it is natural with optimal nutrients and has several protective factors against infections. Breastfeeding is eco-friendly and is advantageous to mother, as it reduces the time of bleeding during postnatal period and decreases the risk for malignancies, as well as to the community. (Naseem & Mazher, 2016)

The National Family health Survey-3, in India, had revealed that only 46% of children are exclusively breastfed in the 0-1 month age group. In India about 2.4 million children die each year of which two-thirds are associated with infant feeding practices which are inappropriate. Thirteen percent reduction in infant mortality rate has been estimated with the promotion of exclusive breastfeeding. The children who are not exclusively breastfed are at an increased risk of dying by more than two times than those who are breastfed exclusively in the age group of 1 to 6 months.

The knowledge attitude and practice of exclusive breastfeeding has been prejudiced by cultural, demographic, social, biophysical and psychosocial factors. In Uganda, the rates of early initiation, exclusive breastfeeding are far from desirable. There have been studies on knowledge, attitude and practices towards breastfeeding in the country but there is need to assess the extent of practice of breastfeeding and impact of current policies (Naseem & Mazher, 2016)

La Leache League provides signs that suggest that an exclusively breastfed baby is receiving enough milk. These signs include the baby average feeding per day being 8-12 times, feeds 10-20 minutes or longer per breast, swallowing sounds being audible, gains at least 0.113kg -

0.198kg per week after the fourth day, appears healthy, has good color, firm skin and growing in length and head circumference(Breastfeeding et al., 2015)

2.2 MATERNAL KNOWLEDGE ON EXCLUSIVE BREASTFEEDING

Knowledge is a prerequisite for practice and maternal choices and practices are primarily influenced by maternal knowledge on IYCF (Lutter, 2000). Maternal knowledge on various Breastfeeding issue is crucial in determining how much the mothers understand.

In Bangladesh, while mothers agreed that breast milk was good for the babies, they had limited knowledge on the health benefits of breast milk. Eighty six per cent (86%) of the mothers knew about EBF but many assumed it meant breast milk and other liquids (usually water or cow's milk) during the first 6 months. The knowledge gaps identified among young mothers in Bangladesh were: misinterpretations of the meaning of EBF, confusion regarding appropriate timing of initiation and duration of breastfeeding and negative expectations regarding breast milk production (Hackett et al., 2012).

In Ethiopia, 87.3% of mothers had knowledge about EBF and 12.7% mothers had no knowledge about EBF and started complementary feeding before 4 months of age because they thought breast milk alone is not sufficient for the baby (Wolde et al., 2014). In Nigeria, it was found that maternal knowledge and awareness does not translate to practice of exclusive breastfeeding (Onah et al., 2014). There is paucity in information that compares knowledge on EBF between primiparous and multiparous mothers. In Kibera slums, Nairobi, breastfeeding knowledge among breastfeeding mothers was found to be inadequate. About two-thirds (65.3%) of the mothers knew babies should be breastfed for a period of 2 years or more; 88.3% knew that babies should be breastfed on demand. In contrast, only 22.2% of the mothers stated babies should be exclusively breastfed for 6 months, whereas about a third (32.2%) stated that EBF should be done for a period of 1 to 3 month.

In a similar research carried out in Uganda, Majority of the respondents answered correctly when asked about optimal time to start breast feeding 119 (86.2%) said soon after birth, 18(13%) answered one day after birth, and only 1 mother had no idea when to start breast feeding. Sixty seven (48.6%) of mothers had the knowledge that exclusive breast feeding was sufficient for 6

months, forty seven (34.1%) thought it should be continued till 2-4 months, twenty two (15.9%) knew it should be continued till 1 year and beyond, two mothers had no idea.

2.3 MATERNAL ATTITUDES TOWARDS EXCLUSIVE BREASTFEEDING

In the United Kingdom, a positive attitude towards breastfeeding was associated with a longer duration of breastfeeding. Similarly, positive attitudes were associated with high level of support, confidence and a natural determination to breastfeed (Brown et al., 2011). Majority of adolescents living in many sub-Saharan African settings are likely to have internalized norms and models of child feeding behaviors quite early before they have had a child and this negatively impacts on their attitude towards EBF henceforth. These norms are widely agreed upon by members of the community as the ‘right’ way to do things and forms a basis that mothers refer to when making child care decisions. What gives these cultural models directive force is that they are widely agreed upon by other members of the community as the ‘right’ way to do things (Tanash, 2014).

In a similar study carried out in Ethiopia, it was found out that Most of mothers 161 (63.4%) strongly agree that the advantage of EBF, in contrary 51 (20.3%) were disagree and 41 (16.3%) were undecided. Moreover 207 (82.0%) agree that colostrum should not be discarded, 31 (11.9%) agree as it should be discarded and the rest 15 (6.1%) were neutral. A large number of mothers 253 (100%) believed baby should be breast fed as frequently as he/she needs. 155 (61.3%) mothers were considered bottle feeding is dangerous and should not be used at all. Majority of mothers in this study were familiar with a concept of breast feeding, 212 (83.7%) had perception that breast feeding is natural and appropriate to day, 31 (2.2%) believed that it makes her old and 10(4.1%) were suggested breast feeding is outmoded. (Hadgu et al., 2016) There is lack of information that could demystify the differences in attitudes towards EBF among breastfeeding mothers in relation to their parity and age.

2.4 SOURCES OF INFORMATION ON BREASTFEEDING

First-time mothers in five European countries reported that books, partners and health professionals most influenced their infant feeding decisions. Women may receive information about IYCF during pregnancy from many sources including formal services (health-care providers, antenatal classes), informally (family members and friends), through consulting books and other written materials, and engaging with audio-visual media, such as television and DVDs (Tully & Ball, 2013). Younger mothers are shown to be strongly influenced by their partners, mothers and peers and that they rely upon them for breastfeeding information and support and therefore the need for customized clear, concise and consistent breastfeeding information for the young mothers to have them achieve optimum IYCF (Noble-Carr & Bell, 2012).

Mothers are also influenced by the information they receive from healthcare providers during their antenatal visits to healthcare facilities (Ochola, 2008).

2.5 MATERNAL PRACTICE OF EXCLUSIVE BREASTFEEDING

Globally an average of around 38% of infants 0 to 6 months old are exclusively breastfed; 48% from the least developed countries are exclusively breastfed, 36% sub-Saharan Africa and 52% Eastern and Southern Africa (UNICEF, 2014).

In a study, involving 140 countries, showed that, despite the well-acknowledged importance of EBF worldwide and efforts made by UNICEF and health policy makers to support and enhance its practice. The situation is not improving worldwide especially in the developing countries. It was observed that though majority of women were aware of the advantages and disadvantages of breastfeeding and bottle-feeding there were differences in their perception and practices and breastfeeding was seen to cause weakness in mothers (Breastfeeding et al., 2015). It was also realized a greater number of mothers practiced EBF in countries with guaranteed paid work breaks with the low-income level earners recording the highest rate of EBF practices (Heymann et al, 2013; Cai, Wardlaw, & Brown, 2012). Continuation of EBF is positively associated with the

value of advice and support that physicians and other healthcare providers give regarding the decision-making process for infant feeding (Textor et al., 2013). To promote exclusive breastfeeding, healthcare professionals supporting breastfeeding mothers should motivate and encourage mothers to begin and continue breastfeeding and be familiar with breastfeeding issues and the prevention, diagnosis, and treatment of breastfeeding problems when they occur (Bergmann et al., 2014).

Primiparous mothers are likely to have more challenges in practicing EBF, being their first experience. They may have difficulties in adjusting to the new role and the breastfeeding techniques (Tanash, 2014). They are also more likely to get confusing, unscientific and contradictory information from various sources including parents, relatives, media, friends and healthcare providers (Tully & Ball, 2013). This study therefore investigated the KAP on EBF among the first time mothers attending Kyabugimbi health center IV.

CAPTER THREE:

METHODOLOGY

3.0 INTRODUCTION

This chapter includes study design, study population, sample size determination, sampling techniques, sampling procedure, data collection method, data collection tools, data collection procedure, pre-testing, piloting the study, quality control, data analysis and presentation, ethical consideration, study limitations and dissemination of results.

3.1 STUDY AREA

This study was carried out in Kyabugimbi health center IV, Bushenyi, western Uganda. It served villages in Kyabugimbi sub-county since it was a sub-district hospital located a few km from Mbarara Kasese road. Kyabugimbi Health Center is level IV primary health care Centre located in the Bushenyi District of South Western Uganda at an altitude of approximately 1400 meters. It offered a general service, provided pediatric, adult and maternity care. Limited in-patient pediatric facilities made this health center primarily an outpatient center.

Children with more severe disease were referred to higher level health centers. The health center provided care to approximately 10–20 pediatric patients per day (1-2 infants aged 0-6 months born to Primiparous mothers), with seasonal fluctuations. Most children accessing care lived within 30 minutes of this clinic (either by walking or public transportation). The care was provided primarily by nurses with 1–2 years of training and clinical officers (3-years diploma trained paramedical with diagnostic and therapeutic training). There were generally no physicians available and the Centre operation is primarily during the day time. The Integrated Management of Childhood Illness (IMCI) guidelines form part of the national guidelines of care in the diagnosis and treatment of the most common childhood illnesses and was used at this center. This health center could treat the common diseases of childhood including, but not

limited to diarrhea, pneumonia, malaria, skin and soft tissue infections and tuberculosis. This health center conducted health promotion and immunization activities in the community. A referral strategy for these illnesses would be generally based on the national guidelines and IMCI. The nearest referral center is approximately 25 km away. In this population approximately 17% of children under five years were considered underweight, 36% stunted and 8% wasted (unpublished data from the baseline survey conducted by Healthy Child Uganda in Bushenyi District in 2012)

3.2 STUDY POPULATION

The target population was all women of first delivery who were currently breastfeeding their children aged 0-6 months, since the researcher was interested in maternal KAP of exclusive breast feeding within six months feeding recommendation as well as to prevent recall bias among these mothers. Study population was obtained according to selection criteria, that is inclusion and exclusion criteria.

3.3 STUDY DESIGN

Across-sectional study design that is analytical in nature was used to determine the knowledge, attitude and practice of exclusive breast feeding among Primiparous lactating mothers. The design would allow for one-time data collection on Knowledge, attitudes and practice of mothers on EBF. Quantitative and qualitative techniques were applied in data collection, analysis and presentation.

3.4 STUDY VARIABLES

Dependent variable

- Practice of exclusive breast feeding

Independent variables

Mother's knowledge and attitudes towards exclusive breastfeeding as well as family pressures, maternal level of education, knowledge, attitude, socio-cultural tradition, maternal age, marital status, family income/social class, place of delivery, and time of initiation of first breastfeeding

3.3.1 INCLUSION CRITERIA

All children under aged 0- 6 months attending Kyabugimbi health center IV between the month of September and October, 2017 whose mothers would have consented.

3.3.2 EXCLUSION CRITERIA

All children to mothers who were too ill, with mental illness, children brought by care takers or maids and children with acute illness

3.4 SAMPLE SIZE ESTIMATION

Krejcie and Morgan table was used to determine the sample size, According to the profile, KHCIV received 1-2 Primiparous lactating mothers with infants aged 0-6 months per day and since the time scope for the research was one month, 2 multiplied by 30 days in the month. Therefore the study population was 60.

Table 1: Krejcie table

Populasi (N)	Sampel (n)	Populasi (N)	Sampel (n)	Populasi (N)	Sampel (n)
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	1000000	384

According to Krejcie and Morgan table above, the sample size was 52 participants

3.5 DATA COLLECTION MANAGEMENT

A questionnaire consisting of both closed and open ended questions was used to collect all data on socio- demographic factors (maternal age, infant's age, parity as well as maternal educational level, marital, occupational and religious statuses), knowledge on exclusive breastfeeding (EBF), attitude towards EBF, and practice of EBF. The open ended questions was included to gain understanding of why mothers gave a specific answer. Items for the knowledge, attitude and practice of EBF scales of the questionnaire was adapted from the Food and Agriculture Organization of the United Nations (FAO) guidelines for assessing nutrition-related knowledge, attitudes and practices (KAP) manual. This manual contained guidelines that serve as a reference guide and practical tools for undertaking high quality evaluation of nutrition and health related knowledge, attitudes and practices at the community level. Based on the aims and objectives of this study, the questionnaire pertaining to feeding infants younger than 6 months was adapted for this study.

3.5.1 DATA ANALYSIS

Statistical Package for Social Sciences (SPSS) version 19 was used for data entry and analysis. Descriptive analysis was done and presented in terms of Frequency which was reported in terms of numbers and percentages using tables.

3.5.2 QUALITY CONTROL

In order to ensure quality control, the questionnaires were pre-tested and adjustments were made accordingly.

3.5.3 LIMITATIONS

1. Clients that were not willing to participate in the study
2. Language barrier as the questionnaire was in English language
3. The overload of duty especially during data collection

3.5.4. DELIMITATIONS

1. Clients that were not willing to participate in the study were allowed due respect and research was extended to have ample time to meet the targeted number of participants.
2. Language barrier as the questionnaire was in English language was solved by interpreting each question to the participant in the language she understood best.
3. The overload of duty especially during data collection was solved by training research assistants who aided the author in collection of data.

3.6 ETHICAL CONSIDERATION

Authority to conduct the research was sought from the Graduate School of Kampala International University- Western campus. Ethical clearance to conduct the study was sought from the Ethics committee of Kampala International University western campus.

The researcher also reported to the Chief Officer for health and in charge of Kyabugimbi health center IV. The benefits of the study were highlighted to the respondents and they were informed that there were no risks involved by participating in the study. Informed written or thumb print consent was sought from the respondents who were selected to take part in the study. Mothers could sign consent forms before participating in the study. The names of the participants were included on a separate page with respective codes. All the participants were also assured that the information they were giving would only be used for purposes of research and that findings would be communicated to them.

CHAPTER FOUR

DATA PRESENTATION

4.1 INTRODUCTION

This chapter presents the findings of the results from the 52 respondents who participated in the study entitled “assessing the knowledge, attitude and practice of exclusive breast feeding among primiparous lactating mothers attending Kyabugimbi Health Center IV.” Of these 52 respondents 44 turned up. The results were purely raw data from the respondents and were presented in accordance to the study objectives as arranged below:-

4.2 SOCIAL-DEMOGRAPHIC CHARACTERISTICS WITH THEIR INDEX

The social demographic characteristics were corrected basing on the mothers tribe, religion, employment status, marital status, and level of education and findings are represented in tables below.

TRIBE FINDINGS

Table 2: tribe of respondents

Tribe	Frequency	Percent
Mukiga	6	13.6
Munyankole	37	84.1
Munyoro	1	2.3
Total	44	100.0

Majority were Banyankole accounting to 84.1% of the respondents, 13.6% were Bakiga, and 2.3% were Banyoro specify their tribes.

Table 3: table showing mother age of the respondents

	age of the respondents
N	43
Age missing	1
Mean	18.7442
Median	19.0000
Mode	20.00
Range	7.00
Minimum	16.00
Maximum	23.00
Sum	806.00

From table 4.2.1 above, the mean of the respondents were 19 years, the maximum and minimum age was 23 and 16 respectively.

Table 4: table showing mothers education of respondents:

Education level	Frequency	Percent
Non	1	2.3
primary	14	31.8
secondary	28	63.6
tertiary	1	2.3
Total	44	100.0

Majority of the respondents where for secondary level with 63.6%, primary with 31.8%, and the least had attended tertiary institutes with 2.3%.

Table 5: table showing Marital status of respondents

Marital status	Frequency	Percent
divorced	1	2.3
married	30	68.2
single	13	29.5
Total	44	100.0

Majority of respondents were married accounting to 68.2%, the singles were accounting to 29.5%, and the divorced accounted to 2.3%

Table 6: table showing Employment status of respondents

Employment status	Frequency	Percent
employed	4	9.1
self employed	21	47.7
student	3	6.8
un employed	16	36.4
Total	44	100.0

Majority of respondents were self-employed accounting to 47.7%, the unemployed were accounting to 36.4%, the employed were accounting to 9.1% and students accounted to 6.8%

4.3 INFRANT FEEDING IFORMATION AND PRACTICES

This section shows table represents the feeding information and practices of infants

Table 7: table showing Table showing if mother had ever breastfed their babies

	Frequency	Percent
yes	44	100.0

All the mother in the study had ever breast fed their babies.

Table 8: Table showing the time after birth the baby was put on the breast

Time	Frequency	Percent
0	8	18.2
1	1	2.3
2	19	43.2
3	5	11.4
4	1	2.3
5	3	6.8
6	1	2.3
7	3	6.8
8	2	4.5
12	1	2.3
Total	44	100.0

Majority of the babies were put on breast after 2 hours from their birth that was accounting to 43.2%, followed babies put on the breast before an hour accounting to 18.2%. 11.4% were put on breast after 3 hours. This made the majority of babies to be put on breast from 0-3 hours accounting to 75.1% and above 3 hours accounted to 24.9%.

Table 9: Table showing drinks given to babies in the first 3 days after delivery

Drinks given	Frequency	Percent
Not given	38	86.4
sugar or glucose water	6	13.6
Total	44	100.0

Majority of the babies were not given any thing that is 86.4% and 13.6% were given sugar or glucose water.

Table 10: Table showing drinks given to babies in the first 3 days after delivery

Babies still breastfeeding	Frequency	Percent
no	4	9.09
yes	40	90.9
Total	44	100.0

Majority of these babies were still breast feeding accounting to 90.9% where as 9.09% were not.

4.4 INFANT AND MATERNAL HEALTH

Table 11: Table showing drinks given to babies in the first 3 days after delivery

Unwell babies in last two week		
Unwell baby	Frequency	Percent
no	1	2.3
yes	43	97.7
Total	44	100.0
Condition the baby was suffering from		
Valid	2	4.5
cough	6	13.6
diarrhea	6	13.6
fever	7	15.9
Flu	8	18.2
malaria	8	18.2
prematurity	3	6.8
vomiting	4	9.1
Total	44	100.0

Seeking for medical care for the baby

Valid	1	2.3
no	4	9.1
yes	39	88.6
Total	44	100.0

place of seeking for medical care

Valid	5	11.4
brought drugs from a chemist/shop	1	2.3
private health facility	4	9.1
public health facility	33	75.0
used herbal medicine	1	2.3
Total	44	100.0

Babies on treatment at present

I8Valid	1	2.3
no	6	13.6
yes	37	84.1
Total	44	100.0

Illness interfering with breast feeding

Valid	1	2.3
no	18	40.9
yes	25	56.8
Total	44	100.0

Problems interfering with breast feeding

Valid	7	15.9
no	21	47.7
yes	16	36.4
Total	44	100.0

According to the table above majority of the babies were unwell taking 97.7%. The conditions associated with these babies were cough, diarrhea, fever, flu, malaria, prematurity and vomiting. Out of these respondents 88.6% had requested for medical care for their babies. And these place for seeking this medical were public health facilities taking 75.0%, 11.4% of respondents could buy drugs from chemists/shops, 9.1% used public health facilities, and 2.3% used herbal medicine.

84.1% of the respondents were treated at present time of the study. Of these babies 56.8% of the babies' illness was interfering with breast feeding and 40.9% were not being affected by illness.

Table 12: table showing maternal attitudes towards exclusive breastfeeding

Mother believing that EBF is beneficial to the child		
	Frequency	Percent
no	1	2.3
yes	43	97.7
Total	44	100.0
Can a baby survive without water?		
no	15	34.1
very sure	1	2.3
not sure	3	6.8
yes	25	56.8
Total	44	100.0
If husbands can be involved in breast feeding decisions		
no	21	47.7
yes	23	52.3
Total	44	100.0
Is animal milk suitable for a new born baby?		
no	39	88.6
not sure	1	2.3
yes	4	9.1
Total	44	100.0

Working mother using formula feeding

no	15	34.1
not sure	1	2.3
yes	28	63.6
Total	44	100.0
Are breast fed babies healthier than formula fed babies?		
no	2	4.5
yes	42	95.5
Total	44	100.0
Breast feeding destroying figure		
no	15	34.1
yes	29	65.9
Total	44	100.0
Breast milk being easily digested than formula		
no	2	4.5
not sure	7	15.9
Yes	35	79.5
Total	44	100.0

97.7% of the mothers believed in EBF being beneficial to the children. 56.8% believed that babies can survive without water, 34.1% didn't believe and 9.1% were not sure. Husbands were involved in breast feeding decision making (52.3%) of the respondents.

88.6% believed that animal milk is not suitable for new born babies, 9.1% believed that it is suitable and only 2.3 were not sure. Of the working mothers 63.6% were using formula feeding, 34.1% were not using it and 2.3% were not sure.

95.5% believed that breast fed babies are healthier than formula fed babies. And 65.9% believed that breast feeding destroys figure and only 34.1% didn't believe. 79.5% knew that breast milk is easily digested than formula, 15.9% were not sure and only 4.5% didn't know.

CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

Introduction

The findings were discussed basing on the results as presented in the previous chapter. The findings were discussed in relation with other literature from different authors.

5.1 Discussion of the results

5.1.1 Social-demographic findings

This study showed that majority were Banyankole accounting to 84.1% of the respondents, 13.6% were Bakiga, and 2.3% were Banyoro by their tribes. The mean of the respondents were 19 years, the maximum and minimum age was 23 and 16 respectively. This came to disagreed with (Mahat, 2012) where the median age was 26 (16-40) and the mean age was 26.21 ± 5.43 though being primigravida, the mothers were significantly younger than the multiparous mothers, with 58.4% of the Primiparous below 25 years as compared to 37.5% of the multiparous. According to the study on “Knowledge, attitudes and determinants of exclusive breastfeeding practice among Ghanaian rural lactating mothers” the mothers mean age of 27.27 ± 5.87 years which also disagrees with 19 years mean age of this study (Mogre et al. 2016). Furthermore this study showed that majority of the mothers were for secondary level with 63.6%, primary with 31.8%, and the least had attended tertiary institutes with 2.3% which agrees with (Mogre et al. 2016) where majority had had some form of formal education (61 %, $n = 1160$).

In this study majority of mothers were married accounting to 68.2%, the singles were accounting to 29.5%, and the divorced accounted to 2.3%. Which somehow agrees with (Mahat, 2012) where majority (83.3%) of the mothers were married, 5.0% were single, 6.0% separated and 2.1% widowed. In addition to this majority of respondents were self-employed accounting to 47.7%, the unemployed were accounting to 36.4%, the employed were accounting to 9.1% and students accounted to 6.8% which agreed with (Mogre et al. 2016) where majority of the mothers

were employed 79.5 %, $n = 151$). And disagreed with the study on “Knowledge, attitude and techniques of breastfeeding among Nigerian mothers from a semi-urban community” where unskilled according to 41.6% (Chidozie, 2013).

5.1.2 Infant feeding information and practices.

Basing on this study all the mother in the study had ever breast fed their babies. Majority of the babies were put on breast after 2 hours from their birth that was accounting to 43.2%, followed babies put on the breast before an hour accounting to 18.2%. 11.4% were put on breast after 3 hours. This made the majority of babies to be put on breast from 0-3 hours accounting to 75.1% and above 3 hours accounted to 24.9%. Majority of the babies were not given any thing that is 86.4% and 13.6% were given sugar or glucose water. Majority of these babies were still breast feeding accounting to 90.9% where as 6.8% were not, lastly 2.3% were unspecified.

A similar study showed that though all the mothers in the present study breastfed their babies within the first six months of life, only 26.9% of them breast fed exclusively for 6 months. This is not surprising as it has been found that in the developing world, breastfeeding is nearly universal among mothers but not exclusive breastfeeding as early supplementation with water and other fluids and food is the norm (Peterside, 2013). The exclusive breastfeeding rate of 26.9% though higher than the 2008 Nigerian national exclusive breast feeding prevalence of 13.0%, 12 is far below the WHO recommended prevalence of 90% (Jones et al, 2003).

5.1.3 Maternal attitudes towards exclusive breastfeeding

97.7% of the mothers believed in EBF being beneficial to the children. 56.8% believed that babies can survive without water, 34.1% didn't believe and 9.1% were not sure. Husband were involved in breast feeding decisions carrying 52.3% of the respondents. 88.6% believed that animal milk is not suitable for new born babies, 9.1% believed that it is suitable and only 2.3% were not sure. Of the working mothers 63.6% were using formula feeding, 34.1% were not using it and 2.3% were not sure. 95.5% believed that breast fed babies are healthier than formula fed babies. And 65.9% believed that breast feeding destroys figure and only 34.1% didn't believe. 79.5% knew that breast milk is easily digested than formula, 15.9% were not sure and only 4.5% didn't know.

Findings also showed that the knowledge of respondents about some aspects of EBF. 114(90.1%) of respondents were aware of EBF, 77 (60.3%) knew what exclusive breastfeeding is and 89(70%) knew that breast milk alone is sufficient for the baby for the first six months. However, only 25(20%) knew when to prevent the baby. This result supported the aim of the “Baby friendly hospital initiative” which encourages the spread of awareness of exclusive breastfeeding. The high level of awareness on exclusive breastfeeding was supported by (WHO, 2007) and (Racheal et al 2008). Furthermore, the high level of awareness in this study was attributed to the efforts made by the health care personnel’s in disseminating information on exclusive breastfeeding. Although the hospital was designated as baby friendly, not all hospitals designated as baby friendly carry out activities that leads to successful exclusive breastfeeding. According to (Kever, 2014), Out of 113(88.9%) respondents who were aware of exclusive breastfeeding, 64% received information from health workers, 22% from friends and relatives, 5.30% from Radio and 7.96% from the television. Results showed that only a few percentages heard about exclusive breastfeeding through the media. This implied that the media in Maiduguri was not effective about information dissemination on the promotion of breastfeeding and hence need to improve on their efforts. In spite of the high level of knowledge among the respondents, there existed a gap between knowledge and mothers intension to practice EBF. This gap was partly due to cultural beliefs since exclusive breastfeeding is not among the traditional norms and most of the cultural practices involve giving herbs or traditional medicines in addition to breast milk to babies under 6 month of age. It could also be due to the fact that majority of the mothers fall into the categories of civil servants and house wives, with civil servant carrying the highest percentage. These mothers (working mothers) tended to introduce supplements earlier.

According to (Peterside, 2013), 80 (59.7%) of the mothers knew the correct definition and duration of exclusive breastfeeding while 26(19.4%) had never heard of exclusive breastfeeding. One hundred and eight (80.6%) of the mothers heard about exclusive breast feeding from health workers during antenatal clinic visits, 14 (10.4%) heard about it from either the television or radio and 12 (9.0%) heard about exclusive breast feeding from relatives and/or friends. Ninety eight (73.1%) knew at least one benefit of exclusive breast feeding to the baby while 36(26.9%) had no idea that exclusive breastfeeding had any benefit to the baby. Forty two (31.3%) thought exclusive breastfeeding had benefits to the mother while 92(68.7%) did not. All 134 (100%) of the mothers breastfed their babies within the first 6 months of life. However 60 (44.8%) of them

breastfed exclusively for 3 to 6 months with a mean duration of 5.4 months. Thirty six of the 134 mothers breast fed exclusively for 6 months giving an exclusive breast feeding rate of 26.9%, fourteen (10.4%) breastfed exclusively for 3 months, 8 (6.0%) for 4 months and 2 (1.5%) for 5 months

5.2 Conclusion

Though the practice of breastfeeding was high and majority of the respondents were aware of EBF, the exclusive breastfeeding rate was not sufficient. Based on study findings, it can be concluded that:

- Study participants have a good knowledge regarding breastfeeding's health benefits for mother and baby.
- Participants have a positive attitude toward breastfeeding.
- Participant's knowledge level is positively correlated with their age and attitude toward breastfeeding.
- Several barriers might prevent participants from breast feeding their babies although they have good knowledge regarding its importance such as destruction of mothers figure.
- Not all participants had been educated regarding breastfeeding

5.3 Recommendations

The followings strategies are recommended to promote and encourage breastfeeding as well as improve the rates of exclusive breastfeeding:

- Mothers need to be supported from family to practice breastfeeding.
- Importance of antenatal follow up should be emphasized.
- Health education about importance of breastfeeding should be part of antenatal care and nursing management to increase its perceived value.
- Postnatal follow up of mothers to assure their breastfeeding practice and trying to solve any faced problem or overcome barriers.
- Programs aimed at promoting exclusive breastfeeding as well as educating and re-educating health personnel as well as members of the public.

- Exclusive breast feeding information programs should not only include the definition and recommended duration but should also include its benefits to the infant, mother, family and community.

REFERENCES

- 1) Aliyu, A. M., & Shehu, M. (2016). Knowledge , Attitude and Practice of Exclusive Breastfeeding among Multigravid Women Attending Antenatal Clinic in Aminu Kano Teaching Hospital, 5(6), 59–74. <https://doi.org/10.9790/1959-0506015974>
- 2) Birungi, N., Fadnes, L. T., Okullo, I., & Kasangaki, A. (2015). Effect of Breastfeeding Promotion on Early Childhood Caries and Breastfeeding Duration among 5 Year Old Children in Eastern Uganda: A Cluster Randomized Trial, 8, 1–15. <https://doi.org/10.1371/journal.pone.0125352>
- 3) Breastfeeding, E., Among, P., Municipality, I. N. K., & Adda, L. (2015). University of Ghana <http://ugspace.ug.edu.gh>, (10507117).
- 4) Elizabeth, B. (2015). Knowledge and practice of exclusive breastfeeding among women with children between 9 and 12 months of age in el sabbah hospital juba-south Sudan.
- 5) Engebretsen, M. S., Nankabirwa, V., Doherty, T., Diallo, A., Nankunda, J., Fadnes, L., ... Consortium, P. (2014). Early infant feeding practices in three African countries: the PROMISE-EBF trial promoting exclusive breastfeeding by peer counsellors. *International Breastfeeding Journal*, 9(1), 19. <https://doi.org/10.1186/1746-4358-9-19>
- 6) Slums, K., & County, N. (2016). Relationship between Maternal Knowledge on Exclusive Breastfeeding and Breastfeeding Practices Among Mothers with Infants (0-6 Months) in, 6(October), 221–228.
- 7) Tanash, H. A. (2014). Breastfeeding knowledge , practice , attitudes , and influencing factors : Findings from a selected sample of breastfeeding mothers in Bemidji , Minnesota.
- 8) (Hadgu et al., 2016)Ali, A., & Ayed, N. (2014). RESEARCH ARTICLE KNOWLEDGE , ATTITUDE AND PRACTICE REGARDING EXCLUSIVE BREASTFEEDING AMONG MOTHERS ATTENDING PRIMARY HEALTH CARE CENTERS IN ABHA CITY, 3(11). <https://doi.org/10.5455/ijmsph.2014.140820141>
- 9) Av, O., & Agwu, E. (2015). Uptake of hospital based delivery services and associated infection control in Bushenyi district , of Uganda ., 1(1).
- 10) Establishing Incidence of Health Provider Absenteeism in Bushenyi District By Uganda National Health Users ’/ Consumers ’ Organization (UNHCO). (2010), (May), 1–28.
- 11) Hadgu, G., Gebreegziabher, G., Desawi, T., Ashebr, A., Zeberhe, G., Tesfalew, G., ... Almaz, S. (2016). MOTHER ’ S KNOWLEDGE , ATTITUDE AND PRACTICE

TOWARDS EXCLUSIVE BREAST FEEDING IN SHIRE ENDASLASSIE TOWN ,
NORTH WEST TIGRAY , ETHIOPIA IN 2015, 2(1), 33–38.

- 12) Mgongo, M., Uriyo, J., Damian, D. J., Stray-pedersen, B., & Msuya, S. E. (2015). Determinants of exclusive breastfeeding in Kilimanjaro region , Tanzania Determinants of exclusive breastfeeding in Kilimanjaro region , Tanzania, (January 2014). <https://doi.org/10.11648/j.sjph.20140206.31>
- 13) Na ti onal Popula ti on and Housing Census 2014 Subcounty Report – Central Region. (2014).
- 14) Slums, K., & County, N. (2016). Relationship between Maternal Knowledge on Exclusive Breastfeeding and Breastfeeding Practices Among Mothers with Infants (0-6 Months) in, 6(October), 221–228.
- 15) Thomas, J. V. (2016). Barriers to Exclusive Breastfeeding Among Mothers During the First Four Weeks Postpartum.
- 16) Wiens, M. O., Gan, H., Barigye, C., Zhou, G., Kumbakumba, E., Kabakyenga, J., ... Karlen, W. (2015). RESEARCH ARTICLE A Cohort Study of Morbidity , Mortality and Health Seeking Behavior following Rural Health Center Visits by Children under 12 in Southwestern Uganda, 1–15. <https://doi.org/10.1371/journal.pone.0118055>
- 17) Wiens, M. O., Gan, H., Barigye, C., Zhou, G., Kumbakumba, E., Kabakyenga, J., ... Karlen, W. (2015). RESEARCH ARTICLE A Cohort Study of Morbidity , Mortality and Health Seeking Behavior following Rural Health Center Visits by Children under 12 in Southwestern Uganda, 1–15. <https://doi.org/10.1371/journal.pone.0118055>
- 18) Establishing Incidence of Health Provider Absenteeism in Bushenyi District By Uganda National Health Users ’/ Consumers ’ Organization (UNHCO). (2010), (May), 1–28.
- 19) CENTERS IN ABHA CITY, 3(11). <https://doi.org/10.5455/ijmsph.2014.140820141>
- 20) Av, O., & Agwu, E. (2015). Uptake of hospital based delivery services and associated infection control in Bushenyi district , of Uganda ., 1(1).
- 21) Mahat JM. Comparison of Knowledge, Attitudes and Practices on Exclusive Breastfeeding Between Primiparous and Multiparous Mothers Attending Wajir District Hospital, Wajir County, Kenya. 2012; Available from: http://ir-library.ku.ac.ke/bitstream/handle/123456789/17602/comparison_of_knowledge_attitude.....pdf?sequence=1&isAllowed=y

- 22) Peterside O, E Kunle-olowu O, Duru CO. Knowledge and Practice of Exclusive Breast Feeding Among Mothers in Gbarantoru Community , Bayelsa State , Nigeria. IOSR J Dent Med Sci. 2013;12(6):34–40.
- 23) Jones G, Steketle RW, Black RE, Bhutta ZA, Morris SS, Bellagio child survival strategy group. How many child deaths can we prevent this year? Lancet 2003; 362: 65 –71
- 24) World Health Organization. Exclusive breastfeeding, 2007. Available at [www.who.int/child - adolescent](http://www.who.int/child-adolescent), (Accessed on 7 February 2007).
- 25) Raheal A Grace O, patience A, Bolanle A, Knowledge, Attitude and practice of exclusive breastfeeding among rural mothers in ijebu-ode, Ogun state, Nigeria. West African college of Nursing Journal Vol 19 (2), 2008
- 26) Kever RT, Dathini H, Martins SDM, Inna AK, Habu H, Saidu MA, et al. Knowledge of Exclusive Breastfeeding and Proposed Infant Feeding Pattern of Post-Natal Mothers in Maiduguri , Nigeria. 2014;3(5):66–71.

APPENDIX I: QUESTIONNAIRE CONSENT FORM AND INTRODUCTION

I am AHUMUZA ALEX, a student of Kampala International University pursuing a Diploma in Clinical Medicine and Community Health, doing a research to assess the KNOWLEDGE, ATTITUDE AND PRACTICE OF EXCLUSIVE BREAST FEEDING AMONG PRIMIPAROUS LACTATING MOTHERS ATTENDING KYABGIMBI HEALTH CENTER IV. I request that you take part in this study but before we discuss more about the study, I would like to ask you to reflect on whether you accept to participate in the study. In case you do not understand some words, I will explain them to you, and feel free to ask me any questions as we go along.

I have read the foregoing information. I have had the opportunity to ask questions about it and any questions that I have asked have answered to my satisfaction. I consent voluntarily to participate in this research

CODE.....

Signature/Thumbprint of the participant.....

Date..... (Day/Month/Year)

Name of researcher.....

Signature.....

Date.....

**QUESTIONARE ON KNOWLEDG, ATTITUDE AND PRACTICE OF EXCLUSIVE
BREASTFEEDING AMONG PRIMIPAROUS LACTATING MOTHERS**

SECTION A: BIO DEMOGRAPHIC DATA

SOCIO- DEMOGRAPHIC PARAMETER		RESPONSE/TICK
Age		
Tribe	1.Munyankole	
	2.Mukiga	
	3.Others(Specify)	
Religion	1.Christian	
	2.Moslem	
	3.Others(Specify)	
Employment status (Indicate if a student)	1.Employed	
	2.Self employed	
	3.Un employed	
Marital status	1.Married	
	2.Single	
	3.Divorced	
	4.Widowed	
Level of education	1.None	
	2.Primary	
	3.Secondary	
	4.Tertiary	

SECTION B: SOCIO-ECONOMIC CHARACTERISTICS OF THE HOUSE HOLD

Monthly income in UGX.....

SECTION D: INFANT FEEDING INFORMATION AND PRACTICES

D1. Did you ever breastfeed your baby?

1. Yes ☐
2. NO ☐

D2. If No, why?

- 1= No milk ☐
- 2= did not want to breast feed ☐
- 3= Traditional beliefs (child will die) ☐
- 4= other specify.....

D3. If yes, how soon after birth did you put him/her on the breast?

- If less than an hour record 00 ☐
- If less than 24 hours record number of Hours ☐
- If more than 24 hours record number of Days ☐
- If mother does not know, record: N ☐

D4. In the first 3 days after delivery, was he/she given anything to drink other than breast milk?

- 1= Plain water ☐ 2= Sugar water or glucose water ☐
- 3= Powdered milk or fresh milk ☐ 4= Infant formula (*e.g. Nan*) ☐
- 5= Gripe water ☐ 6= Not given ☐
- 7= others (specify).....

D5. Are you still breastfeeding him/her?

- 1= Yes ☐
- 2= No ☐

SECTION E: INFANT AND MATERNAL HEALTH

E1. Has the baby been unwell in the last two weeks?

- 1-Yes ☐
- 2- No ☐

E2. If YES, what condition was the baby suffering from?

- | | | | |
|------------|--------------------------|---------------------|--------------------------|
| 1-Vomiting | <input type="checkbox"/> | 4- Common cold/ flu | <input type="checkbox"/> |
| 2-Diarrhea | <input type="checkbox"/> | 5- Cough | <input type="checkbox"/> |
| 3- Fever | <input type="checkbox"/> | 6-Malaria | <input type="checkbox"/> |
- 7-Any other (specify).....

E3. Did you seek medical care for the baby?

- 1- YES ☐
- 2- NO ☐

E4. If NO, why did you not seek medical assistance?

.....

E5. If yes where did you seek the medical care?

- 1- Public health facility ☐
- 2- Private health facility ☐
- 3- Used herbal medicine ☐
- 4- Bought drugs from a chemist/shop ☐
- 5- Sought help from relatives/friends/neighbors ☐
- 6-Others (specify).....

E6. Is the baby on treatment at present?

- 1-YES ☐
- 2-NO ☐

E7. Has the illness interfered with the baby's breastfeeding?

- 1-YES ☐
- 2- NO ☐

If YES;

E8. How has the illness of the BABY affected breastfeeding?

.....

E9. Have you (mother) experienced any problems in breastfeeding your baby?

- 1-Yes ☐
- 2-No ☐

If YES;

E10. What problems have you experienced?

- 1-Inadequate breast milk ☐
- 2-Baby refusing to breastfeed ☐
- 3-Pain in breasts ☐
- 4-Other (specify).....

E11. Have the problems interfered with breastfeeding?

- 1-YES ☐
- 2- NO ☐

E12. If yes, how have the problems interfered with breastfeeding?

.....

SECTION F: MATERNAL ATTITUDES TOWARDS EXCLUSIVE BREASTFEEDING

Read the statement to the mother and indicate her response by ticking the in the appropriate box.

STATEMENT	YES	NO	NOT SURE
F1.Do you believe that EBF is beneficial to the child?			
F2. A baby can survive without water			
F3. Husband should be involved in decision making on breastfeeding			
F4. Animal milk is suitable for a new born baby			
F5. Breast milk is not adequate for babies 2 months or older			
F6. Formula feeding is the better choice for a mother who plans to work			
F7. Breastfed babies are healthier than formula fed babies			
F8. Breastfeeding is old fashioned			

F8. Breastfeeding destroys figure			
F9. Breast milk is more easily digested than formula			
F10. An infant cannot survive without water			

SECTION G: MATERNAL KNOWLEDGE ON EXCLUSIVE BREASTFEEDING

Read the statement to the mother and indicate her response in the appropriate box by ticking.

G1. Breastfeeding should be the first feed a baby is given after birth.

1. YES ☐

2. NO ☐

G2. The baby should be put to the breast within one after birth.

1. YES ☐

2. NO ☐

G3. The first yellowish milk/colostrum should be fed to the baby.

1. YES ☐

2. NO ☐

G4. Breast milk alone without even water can sustain the baby for six months.

1. YES ☐

2. NO ☐

G5. Breastfeeding protects the baby from illnesses.

1. YES ☐

2. NO ☐

G6. Expressed breast milk should be fed to the baby when the mother is away.

1. YES ☐

2. NO ☐

G7. Breastfeeding helps the mother not to get pregnant.

1. YES ☐

2. NO ☐

G8. Semi-solid/solid foods should be introduced to the baby at six months of age.

☐

1. YES
2. NO ☐

G9. It is okay to for a pregnant woman to breastfeed her baby.

1. YES ☐
2. NO ☐

G10. A baby should be breastfed on demand.

1. YES ☐
2. NO ☐

SECTION H: SOURCES OF BREASTFEEDING INFORMATION

H1. Did you receive any counseling/information on breastfeeding/infant feeding?

- 1-Yes ☐
- 2- No ☐

H2. If YES, what was the source of the information/counseling?

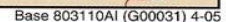
- | | | | |
|----------------------------|--------------------------|-------------------------------|--------------------------|
| 1-Hospital/ Health Centre | <input type="checkbox"/> | 2-Traditional birth attendant | <input type="checkbox"/> |
| 3-Family/friends/relatives | <input type="checkbox"/> | 4-Radio | <input type="checkbox"/> |

5-Others (specify).....

H3. When did you receive breastfeeding counseling? (To be addressed to the mothers who got the counseling from the health facility/hospital) probe for all occasions mentioned.

- 1-Before delivery during antenatal clinics ☐
- 2-At the time of delivery ☐
- 3-After delivery before leaving the hospital ☐
- 4-During post-natal clinics ☐

THANKS FOR YOUR TIME



The map displays the Karamoja District, which is divided into five sub-counties: Kyamuhunga (pink), Kakanju (green), Nyabubare (light green), Bumbaire (blue), and Kyab Gimbi (yellow). Each sub-county is further divided into wards. The district is bordered by Rubirizi to the west, Bushweju to the north, Ruwinda to the south, and Sheema to the east. A legend in the bottom left corner defines the symbols for District Boundary, County Boundary, Sub county Boundary, Parish Boundary, and Road. A scale bar at the bottom right indicates distances of 0, 5, and 10 km. A north arrow is located in the top left corner. A blue triangle with a white border is placed over the Kyab Gimbi sub-county, indicating the location of the study area.

APPENDIX IV: BUDGET ESTIMATE

S/N	Item	Quantity	Cost per unit	Total
1	Project proposal type setting	3	30,000	90,000
	Collection of literature	1	25,000	65,000
2	Data collection			
	Photocopying questionnaires	100	200	20,000
	Training Research Assistants		29,000	40,000
	Allowance for Research Assistants	2	25,000	50,000
	Transport	2		40,000
	Meals	20		50,000
	Stationery			60000
	Airtime			30000
3	Data analysis and compiling final report			
	Internet services			
	Typesetting	1	1,000	20,000
	Printing	1	20,000	20,000
	Final draft	1	15,000	15,000
	Photocopying	2	20,000	20,000
	Binding	3	10,000	6,000
	Grand Total			526,000=

APPENDIX V: WORK PLAN

ACTIVITY	MONTHS					
	August- September	September	October	November	November	December
Proposal writing						
Approval of research proposal						
Data collection						
Data analysis						
Dissertation write up						
Report submission						