

**FACTORS INFLUENCING EXCLUSIVE BREAST FEEDING AMONG MOTHERS IN
KISENYI VILLAGE – RUBAGA DIVISION KAMPALA**

BY

UBAH MOHAMED HAJI

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DECLARATION

I Ubah Mohamed Haji hereby that to the best of my knowledge this is my work trully my original research work and never submitted to any university or institute for reward of degree or any other qualification

Sign.....

Date.....

UBAH MOHAMWD HAJI

APPROVAL

This research work has been supervised and approved by;

Ms Atuhairwe Christine

Sign:

Date:

DEDICATION

Dedicate this work to my family members specially my sisters Deqa Abdi Haji, Halima Mohamed Haji and my brother Abdi Asis Mohamed who supported me financially and emotionally and has been always my side by making sure that I fulfill my dreams. I also dedicated this work to my friends who have supported me throughout the study specially Mohamed Ahmed, Mohamed Cabbas, Nafisa, Maryam and my young niece Najma.

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OPERATIONAL DEFINITIONS

Breastfeeding: It is a process that transfers breast milk to the baby that has numerous other benefits (emotional, psychological, and physiological for both mother and baby).

Exclusive breastfeeding: in case of this study the infant has received only breast milk from his/her mother or a wet nurse, or expressed milk and no other liquids, or solids with the exception of drops or syrups consisting of vitamins, mineral supplements, or medicines.

Initiation of breast feeding: mothers initiate breastfeeding if, within 48 hours of birth, she puts the baby to breast or baby is given any of the mothers' breast milk.

Colostrums: the yellowish, sticky first breast milk produced after birth is the best food for the new born as recommended

Complementary feeding: giving a child other foods (solid or semi-solid) in addition to breastfeeding or replacement feeding to meet the baby's nutrient requirements from 6 months of age.

Peer support: support offered by women who have themselves breastfed, are usually from similar socio-economic backgrounds and locality to the women they are supporting and who have received minimal training to support breastfeeding women.

Teenage mother: young lady under 20 years mostly between 13-19 years who have given birth.

Engorgement: hard swelling of the breast

ABSTRACT

Globally only 35% of infants are breast feed within first hour after delivery and only 37% of newborn are exclusively breast feed up to 6 months (WHO, 2006). Sub- optimal breast feeding particularly non- exclusive breast feeding for the first six month after birth, leads to 1.4 million mortality and 10% of morbidity in children less than five years of age (WHO, 2010).

The broad objective the study is to investigate factors influencing status exclusive breast feeding among mothers in kisenyi village – Rubaga division Kampala.

The research is descriptive study cross-sectional design that employs both qualitative and quantitative method of data collection. All mothers of infants (0– 24 months) who consent to participate in the study and who were mentally sound were the primary target respondents. A sample size of 393 mothers was determined using Kish and Leslie formula and systematic sample method was used to enroll participants in to the study

The proportion of mothers who breast feed their babies is high at 89% although, those who exclusively breast feed their babies in Kisenyi is very low at 22% which is much lower than the national prevalence of 60%. Most Majority of the study participants were youths between 15-35 years (86%). 63.6% of them reported to be married living with their partners or engaged in some form of relationship. There were more Christians (61.1%) than Muslims (38.9%). Majority were Ugandans and Somalis although there were also Kenyan, Congolese and Sudanese.

The study concludes that prevalence of exclusive breastfeeding is generally low among mothers in Kisenyi. The most noteworthy factors that significantly associated with exclusive breastfeeding practice found in this study were socio- demographic factors; age of mother, marital status and occupation. The health service factors among breastfeeding education and place of delivery also

influence breastfeeding. Likewise the other health factors like illnesses of the mother's side and baby and nutritional factors.

These findings suggest a need for a more extensive and comprehensive approach of breastfeeding education and especially of exclusive breastfeeding. The important issues that are related to infant feeding , that are brought up by this study, needs to be taken into account by implementers and policy makers for the purpose of accelerating exclusive breastfeeding practice mothers. However, since health workers are the sole supporters of infant feeding practices, in particular exclusive breastfeeding, capacity building should be done to ensure that they have current information and positive attitude towards EBF.

CHAPTER ONE: INTRODUCTION

1.0 Introduction

This chapter describes the introduction, background of study, the statement of problem, the study objectives research questions, and conceptual frame work. This study was done to investigate factors determining exclusive breastfeeding among mother in kisenyi village Rubaga division Kampala.

1.1. Back ground to the study

One of the most effects of all child health interventions is exclusive breast feeding and it has major role to play in public health, promoting health in both the short and long term for baby and mother. UNICEF and WHO recommends that children should be exclusively breastfeed during the first 6 months of life and that children be given solid or semi-solid complementary food in addition to continued breast feeding from age 6 months until 24 months or more, when the child is fully weaned. it is important mothers to know about that breast milk contains exactly the nutrients a baby needs, it is easily digested and efficiently used by the baby's body, they protects a baby against infection and babies should start breastfeeding within 1 hour of birth before They should not have any other food or drink before they start to breastfeed and should be exclusively breastfed for the first 6 months of life. Breast feeding helps baby's development, mother/baby attachment or bonding and it helps mothers delay a new pregnancy (CDC, 2013). Exclusive breastfeeding reduces infant death due to common childhood illnesses like diarrhea or pneumonia, and helps for a quicker recovery during illness. These effects can be measured in resource-poor and affluent societies (American medical association journal, 2001).

The Colostrums, the yellowish, sticky first breast milk produced after birth is the best food for the new born as recommended by WHO (2012). However globally only 35% of infants are breast feed within first hour after delivery and only 37% of newborn are exclusively breast feed up to 6 months (WHO, 2006). Adequate breastfeeding support for mothers and families could save many young lives. United Kingdom (UK) has one of the lowest rates of breastfeeding worldwide, especially among families from disadvantaged groups and particularly among disadvantaged white young women. The 2000 infant feeding survey (Hamlyn et al 2002) found that 62% of women in the UK initiated breastfeeding. There has been no real increase in initiation rates in England since 1980. In adequate breast feeding and complimentary feeding practice is largely seen in low development countries less than 39% of infants are breastfed exclusively up to six months of age. According to 2006 report in India, 58% of infants less than four months were exclusively breastfed and 46% of those less than six months were exclusively breastfed (WHO, 2012).

Although breast feeding is culturally supported in most of African countries only 46% of mothers initiate breast feeding within first hours after birth. About 32% of children less than five years of age in developing countries stunted and 10% of them are wasted. Sub- optimal breast feeding particularly non- exclusive breast feeding for the first six month after birth, leads to 1.4 million mortality and 10% of morbidity in children less than five years of age (WHO, 2010). Awumbila (2003) reported that In Gana children below age of four months who were exclusively breast fed were only 8% and about 45% of infants were given some form of complementary feeding by age of three months.

Rates for exclusive breastfeeding under 4 months of age are very low in a number of countries in African Region; Considerable variation exists across regions from 34% to 41 % in sub- Sahara

Africa rate doubled over the same period from 15% to 32%. In sub-Saharan Africa, the rate over the same period doubled, from 15 per cent to 32 per cent.

According to report of Kenya demographic and health survey (KDHS) 2009, 32% of infant aged six months are exclusively breastfed (Muraga et al, 2011). And in Uganda according to Save The Children report (2012), mothers exclusively breastfeed approximately six in ten children younger than age 6 months (63 %). Whereas the target of HSSP II was to reach exclusive breast feeding prevalence of 80%, but it has dropped from 70% in 2005 to 61% in 2009. Among sub-groups the percentage of young children who are exclusively breastfed decreases sharply from 82% of infants age 0-1 month to 69 % of those age 2-3 months and, further, to 34% among infants 4-5 months (UDHS, 2011).

Despite efforts of health care provide to enhance level of breast feeding in the society, still there is gap and it's not clear the reason why mother are not breast feeding exclusively therefore, the aim of this study is therefore, is to what factors influencing exclusive breast feeding among mothers in kisenyi village Rubaga division Kampala.

1.2 Statement of the problem

Exclusive breast feeding is the best feeding practice for infants up to six month recommended by WHO and UNICEF. Breast milk improves sensory and cognitive development and protects the baby against infections and chronic diseases. Exclusive breastfeeding reduces infant death due to common childhood illnesses like diarrhea or pneumonia, and helps for a quicker recovery during illness. It has a protective effect against morbidity and mortality of infants and young children and it seems to lower transmission of HIV-1 than complementary feeding (MOH, 2007).

These effects can be measured in resource-poor and affluent societies (American Medical Association Journal, 2001). To enhance proper child growth and development, all children should be breast fed for at least six month exclusively and more than one year with complimentary feeding. The government of Uganda has a designed the policy that is continuously communicated to all health staff to inform all pregnant women about advantages of breastfeeding and encourage breastfeeding on demand and despite efforts of health care provide to enhance level of breast feeding in the society the practices are not yet optimal.

Although breastfeeding is culturally supported in Uganda, HMIS reported (2012) more than 63% of mothers exclusively breast feed for less than 3 months. Whereas the target of HSSP II is to reach exclusive breast feeding prevalence by 80%, but it has dropped from 70% in 2005 to 61% in 2009. The deference get been children less than six month who are partially breast fed are five times higher chance of dying from diarrhea and almost three times higher the chance of dying from any cause, compare to children who are exclusively breastfed (AAP, 2009). About 32% of children less than five years of age in developing countries stunted and 10% of them are wasted. Sub- optimal breast feeding particularly non- exclusive breast feeding for the first six month after birth, leads to 1.4 million mortality and 10% of morbidity in children less than five years of age (WHO, 2010) this could have being prevented or reduced, if mothers breastfeed exclusively up to six months and continue to breast feed with nutritious well balanced feeds up to two years.

In spite of continues efforts of health workers and government interventions it is not clear the reason why mothers are not breastfeeding. Therefore, This study is going to investigate factors

influencing exclusive breast feeding among mothers in kisenyi village Rubaga Division Kampala.

1.3. Research objectives

1.3.1. General objectives

To investigate factors influencing status exclusive breast feeding among mothers in kisenyi village – Rubaga division Kampala.

1.3.2. Specific objectives

- i. To determine proportion of mothers who breastfeed exclusively in kisenyi village – Rubaga division Kampala.
- ii. To establish association between socio-demographic factors and exclusive breast feeding among mothers in kisenyi village – Rubaga division Kampala.
- iii. To determine influence of health care service factors on exclusive breast feeding among mothers in kisenyi village – Rubaga division Kampala.
- iv. To assess influence health status on breastfeeding among mothers in kisenyi village – Rubaga division Kampala?

1.3. Research question

1.3.1. General question

What factors influencing exclusive breast feeding among mothers in Kisenyi village – Rubaga division Kampala?

1.3.2. Specific question

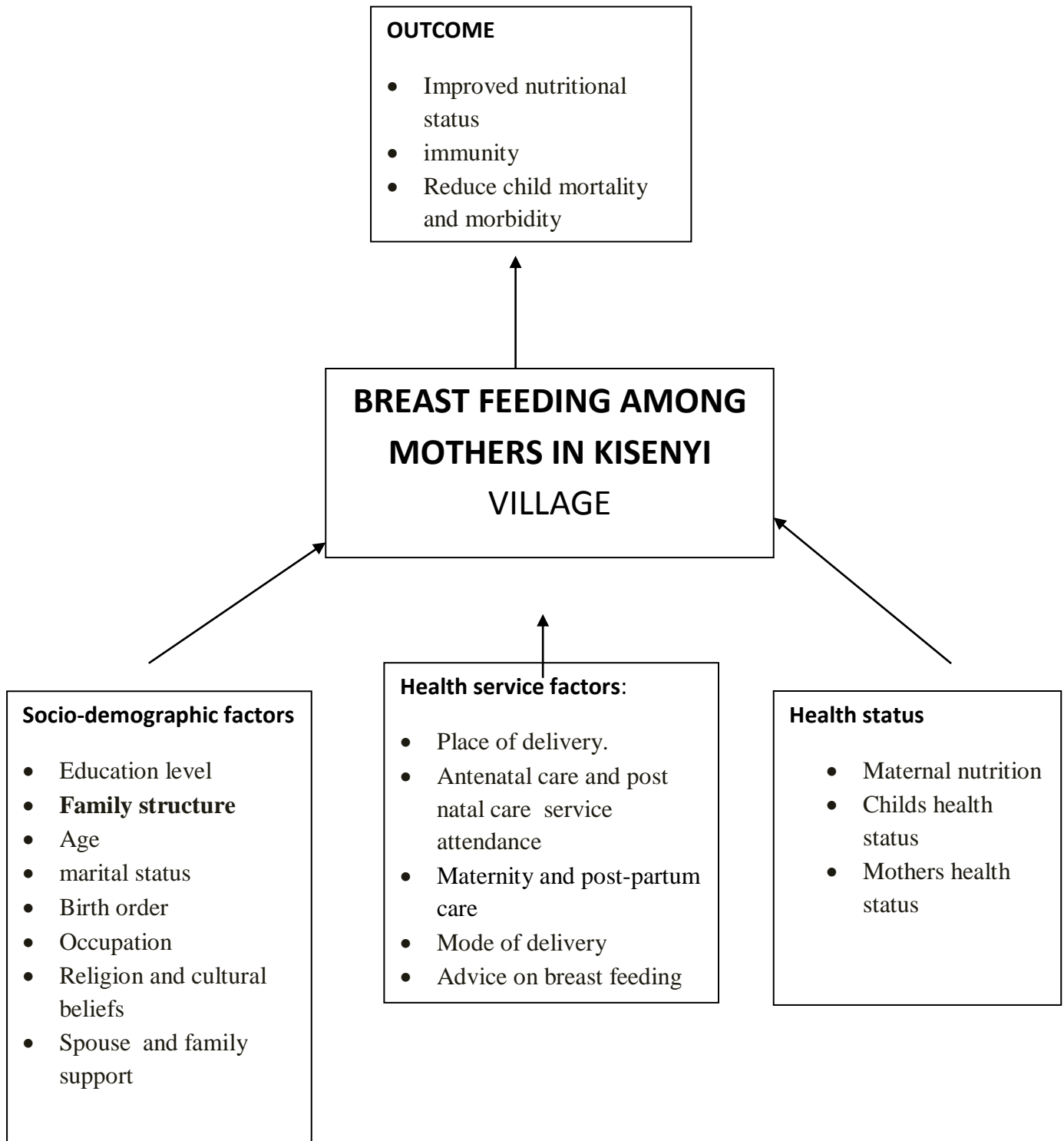
- i. What is the proportion of mothers that are exclusively breastfeeding their children in kisenyi village – Rubaga division Kampala?
- ii. What is the association between socio-demographic factors and exclusive breast feeding among mothers in kisenyi village – Rubaga division Kampala?
- iii. How do health service factors influence exclusive breastfeeding among mothers in kisenyi village – Rubaga division Kampala?
- iv. What is the influence of an individual's health status on breastfeeding exclusive breastfeeding among mothers in kisenyi village – Rubaga division Kampala?

1.4. Significance of the study

Exclusive breastfeeding is important determinant of nutrition and health status of children. This study is aimed to assess factors influencing exclusive breastfeeding among mothers and it's anticipated that findings of this study will contribute to the knowledge and information pool in the scholarly world as far as exclusive breastfeeding is concerned. It's anticipated that the findings will direct the planning of local authorities to provide required facilities and links to enhance exclusive breastfeeding practice. The results of the study were expected to provide mothers with a better understanding in importance of exclusive breastfeeding and adversely improve nutrition status in infant and young children. The study would suggest significant policy statements through its recommendations on factors determining exclusive breastfeeding status. As such, it would enable policy formulation in both local and national level that will sustain the recommended standards of infant feeding.

1.5 Conceptual framework

Figure 1: Conceptual framework of the study



1.5.1 Description of conceptual framework

Dependent variable of this study is breast feeding status among mothers in kisenyi while the independent variables are socio-demographic factors, health service factors and health status and the outcome of the study is improved nutritional status immunity and reduces child mortality and morbidity.

CHAPTER TWO: LITERATURE REVIEW

2.0. Introduction

This chapter reviews existing literature on factors influencing exclusive breast feeding among mothers from different sources. The important factors affecting exclusive breast feeding are socio-demographic factors, health care system factors and maternal health factors.

Breastfeeding refers the normal way of providing young infant with the nutrient they need for healthy growth, development and numerous other benefits - emotional, psychological and physiological for both mother and baby (WHO, 2013).

Breast feeding is defined by UNICEF feeding a child only through breast milk, giving no other liquid, semisolid or solid, not even water, except prescribed drops or syrups consist of nutrients or medicines and expressed breast milk (Al-Shoshan, 2007).

Exclusive breast feeding is the best recommended infant feed up to six months of age and continues to two years with appropriate complementary foods (WHO, 2002).

Breastfeeding has a main role in public health and health promotion of both mother and infant and it is important mothers to know about that breast milk contains exactly the nutrients a baby needs, it is easily digested and efficiently used by the baby's body, they protects a baby against infection and babies should start breastfeeding within 1 hour of birth before They should not have any other food or drink before they start to breastfeed and should be exclusively breastfed for the first 6 months of life. Breast feeding helps baby's development, mother/baby attachment or bonding and it helps mothers delay a new pregnancy (CDC, 2013).

Breast milk improves sensory and cognitive development and protects the baby against infections and chronic diseases. Exclusive breastfeeding reduces infant death due to common

childhood illnesses like diarrhea or pneumonia, and helps for a quicker recovery during illness. These effects can be measured in resource-poor and affluent societies (American Medical Association Journal, 2001). In addition to the nutritional and immunological superiority of breast milk over formula milk, formula feeding is related with many specific risks to which breastfeeding can prevent. These include the possibility of over- or under concentrating formula milk during reconstitution, and the potential for infection introduced by using substitute milk products, bottles, teats, and other vessels (Renfrew et al, 2003).

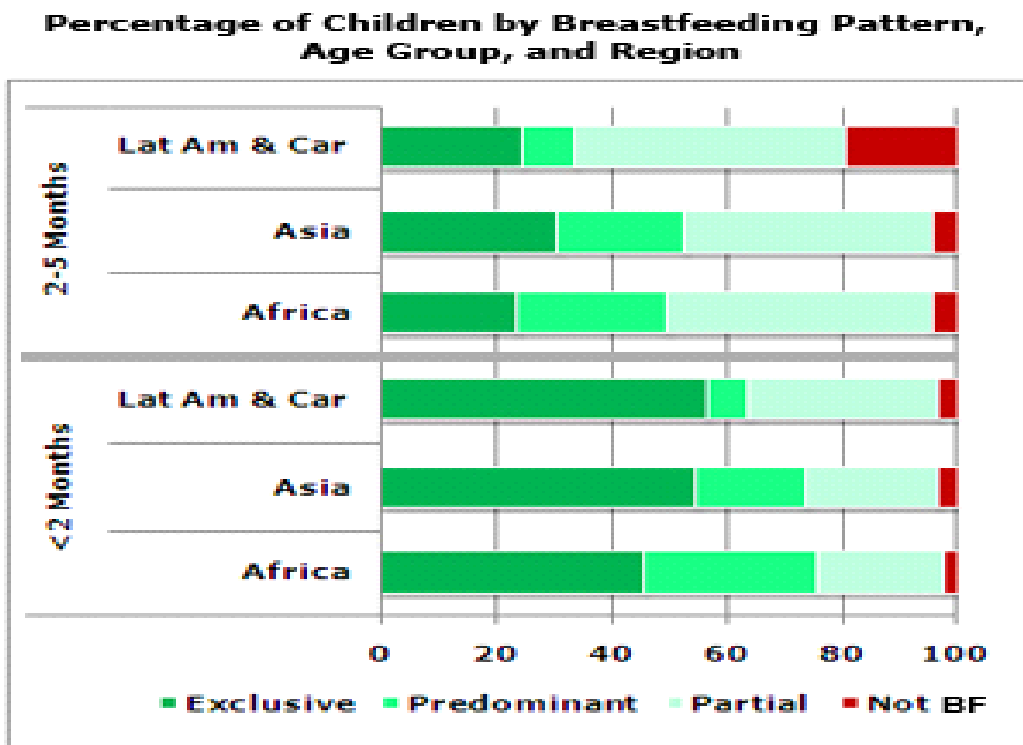
An HIV- infected mother can pass the infection to her infant during pregnancy, delivery and through breastfeeding. An antiretroviral (ARV) drug intervention to either the mother or HIV- exposed infant reduces the risk of transmission of HIV through breastfeeding and they have potential to significantly improve infants' chances of surviving while remaining HIV uninfected. WHO recommends that when HIV- infected mother breastfeed, she should receive ARVs and follow WHO guideline for breastfeeding and complementary feeding.

2.1. Breast feeding trends

Breastfeeding has a main role in public health and health promotion in short and long term for both mother and infant. Globally less than 40% of infants less than six months of age are exclusively breastfed. Adequate breastfeeding support for mothers and families could save many young lives. UK has one of the lowest rates of breastfeeding worldwide, especially among families from disadvantaged groups and particularly among disadvantaged white young women. The 2000 infant feeding survey (Hamlyn et al 2002) found that 62% of women in the UK initiated breastfeeding. There has been no real increase in initiation rates in England since 1980.

The graph below indicates that in developing world breastfeeding is commonly practiced although less than third of the children are breastfed beyond two months of age. In among countries in Africa and Asia, many children who were predominantly breastfed receive benefits of breastfeeding but as well exposed to many disease causing agents in the environment (black et al, 2008).

Figure 2: Percentage of children by breast feeding pattern



About 32% of children less than five years of age in developing countries stunted and 10% of them are wasted. Sub- optimal breast feeding particularly non- exclusive breast feeding for the first six month after birth, leads to 1.4 million mortality and 10% of morbidity in children less than five years of age (WHO, 2010).

Rates for exclusive breastfeeding under 4 months of age are very low in a number of countries in African Region; Considerable variation exists across regions from 34% to 41 % in sub-Saharan Africa rate doubled over the same period from 15% to 32%. In sub-Saharan Africa, the rate over the same period doubled, from 15 per cent to 32 per cent. West/Central Africa made noteworthy progress as the exclusive breastfeeding rate rose more than fivefold (WHO, 2010). In Uganda mothers exclusively breastfeed approximately six in ten children younger than age 6 months (63 %). Among sub-groups the percentage of young children who are exclusively breastfed decreases sharply from 82% of infants age 0-1 month to 69 % of those age 2-3 months and, further, to 41 % among infants 4-5 months (Save the Children, 2012).

Although percentages continue to be low across the developing world, trend data indicate that exclusive breastfeeding rates in sub-Saharan Africa including Uganda kept turning 63% since (WHO, 2009). survey on infant feeding practices was performed in Kampala District, central Uganda in 2008 indicates there four feeding categories practiced in Uganda based like exclusive breastfeeding, predominant breastfeeding, complementary feeding and replacement feeding. According (WHO, 2008) survey in Kampala despite Strong cultural support for breastfeeding among women insecurity about breast milk adequacy most of women fall in all the four categories due to demographic and cultural back ground. The survey results showed that nine in ten women said they breastfed or were currently breastfeeding their children and 47% had breastfed their children for at least ten months. However, 40% of breastfeeding mothers did not exclusively breastfeed their children. Focus groups revealed that, on average, women had three children, they breastfed between 3 months and 2years and most women trust their older female relatives and doctors to give them breastfeeding information (UDHS, 2011).

2.2. Socio- demographic factors influencing exclusive breast feeding

Infant and child are the assets of a country and women are the heart of development because they bear children and they are nearly half of the total population in the country. The aim of this study is to identify the effects of socio-demographic variables on breastfeeding to determine which factors are strongest on breastfeeding practices. These factors are including education level, Family structure, age of mother, marital status, birth order, occupation/ job and income level. Social underdevelopment within a country limits accessibility to knowledge and social services, including education counseling and information about breast feeding (king and burgess, 2009).

A Swedish study (2007) find that a lower degree of maternal education and less disposable income reduce probability of mother breastfeeding their children, despite breastfeeding being economic choice knowing options and educating mothers about benefits of breast milk can help them initiate early and continue to breast feed their children more successfully (Kye, 2014).

Education

According to (2011, UDHS) mother's education is one of the most important factors strongest for explaining the variability on duration of breastfeeding. The median duration of any breastfeeding varies somewhat by background characteristics. It is longer among rural children (19.7 months) and among children in Karamoja (23.0 months). Women with secondary and higher education breastfeed for about three months less than women who have no education (18.1 months versus 21.4 months). Similarly, children in the highest wealth quintile have a lower median duration of any breastfeeding (17.2 months) than those in the lowest quintile (20.5 months).

In contrast above findings according (WHO, 1995) under-educated, impoverished Women tend to follow traditional ideas and practices, and are less confident in engaging in social interactions where more modern concepts and practices are promoted. Due to under-education, they are less likely to learn from educational materials typically displayed at health centers and used in health related community educational activities, including those concerned with appropriate child care and feeding practices.

Maternal age

There is strong relationship between breast feeding and age of mothers. Young mother are less likely to breast feed than old mothers. However, the distinction in breast feeding rate over the 30-34 age groups is less noticeable. In 2010 Only 6.1% of mothers under 20 years of age were breastfeeding less than three months, compare to 36% of mother aged above 40 years. As many searchers found older women breast feed long duration and this likely that older women have higher experience in child feeding than young ones as they know the benefits of breast milk (NHS- Scotland, 2010).

A study conducted in Brazil (2010)revealed that the mothers who are aged; twenty- five to twenty-nine years are more probable to practice exclusive breastfeeding compare to young mothers.

Parity

Several studies show that there is association between number of children a mother has and duration of exclusive breastfeeding. A study done in Phillipine indicate that women with high parity breastfeed their children longer duration. This is most likely that they are usually less likely to involve informal sector (Aye, 2000).

According to the result of a study done in Brazil by Atieno, women with more than one child were more likely to practice breastfeeding than those who had one child (Ochole, 2008).

Occupation of mother

The work status of women causes a major difference in the duration of breast-feeding since it requires leaving the infant at home during working hours. Therefore, duration of breast-feeding is shorter among working (Aye, 2000).

Maternal fulltime employment has been indicated to decrease breastfeeding in terms of time mother spends away from child (Heck, 2007). Also mothers who have low- status occupations might have more difficulty to express breast milk at workplace and those who work hazardous occupations might be concerned to affect the breast milk with their exposure.

Failure to provide breastfeeding facilities at work-place, short or no maternity leave and economic necessity to return to work-place by the mother affect practice and maintenance of breast feeding among working mothers (Stanfeild, et al, 2007).

Ochole (2008) mentioned that there is association between practice of exclusive breastfeeding and maternal workload both at home and workplace.

Bangladesh qualitative study that was investigating breast feeding failures indicated that, too much housework or pressure at workplace was hindrance to exclusive breastfeeding.

In most of African countries breastfeeding is only culturally appropriate feed for infant, especially in rural areas where poverty and poor living condition make risk to feed babies in a bottle (Wood et al, 2008).

Religion and cultural beliefs

Although Breast feeding is universal in Uganda, but exclusive breast feeding & appropriate weaning practice rates are not satisfactory, Various Socio cultural factors influence these practices, which vary from region to region (Lawrence, 2011)

Strong cultural & religious support for breastfeeding but Insecurity about breast milk adequacy most mothers breastfeed for more than one year and they belief that breast milk is inadequate; some beliefs and practices in the society (first milk is not good or there is no secretion of milk in first three days, breast milk is spoiled if in breast for more than 3 hours, colostrums has no value since it has been in breast before baby was born or and colostrums is not considered as milk) result in discarding colostrums and promoting pre-lacteal feeds and such practices increase the risk of infections and deprive the valuable benefit of colostrums feeding to the vulnerable neonates (Nankunda et al., 1990). This issue becomes an area of concern since large number of babies born in Uganda is low birth weight and prone malnutrition and other infection due to these cultural beliefs. According to UDHS (2011) data only less than 30% of women initiate breast feeding within one hour of delivery and continue to exclusively breast feed.

Smaller scale studies or surveys indicate that early introduction of liquids, in particular water or other drinks - traditional herbals- is more common among mothers. Late initiating of breast feeding is also noted. For instance, (Engebretsen et al) reported that breast feeding was practiced 99% in Mbale district but only 6% of mothers exclusively breast feed to up to 3 and 6 months respectively, and 57% of children was with pre-lacteal feeds and introduction of other foods before six months of age is generally accepted norm.

In some countries breastfeeding is heavily influenced by gender where sex of child affects sex of the child affects the duration and initiation of breast feeding. Due to cultural and religion practices male child is breastfed longer duration than female child because of son preference (Al-Shoshan, 2007).

2.3. Health service factors influencing exclusive breastfeeding

Type of delivery

Globally, studies show that there is decreased breastfeeding initiation and continuation with cesarean birth (Sutherland et al, 2011). According to Ahluwalia et al (2012) breastfeeding duration to four weeks was less in induced vaginal delivery compared to the spontaneous vaginal delivery.

Similarly in Jordan, women who had caesarian delivery are more likely not to practice full breastfeeding compare to those who had vaginal delivery (khassawneh et al, 2006).

Antenatal care service attendance

Antenatal BF education is defined as breast feeding information being imparted during the pregnancy in a variety of forms. During antenatal care health provides always give mothers advice on benefits breast feeding and encourage them to breastfeed.

Several studies antenatal breastfeeding education increase breastfeeding initiation and duration

The attitude and beliefs of the health professionals influence the women's knowledge and attitude towards breast feeding during ANC visits (Aye, 2000).

According to Lumbiganon et al, (20120) peer counseling, lactation counseling and formula breastfeeding education during pregnancy increase breast feeding duration.

According to (MOH, 2007) report on infant and young child feeding mothers who receive antenatal breastfeeding education are more likely to initiate breastfeeding early and pro-long the duration of breast feeding.

Place of delivery

Utilization of health care services has an important effect on duration of breast-feeding. Practice of health workers at different health facilities can influence the women's decision to breastfeed. Advice and health education by health workers on breast-feeding as well as their encouragement helps enhance the women for successful initiation of breast-feeding and its continuation till the optimum period (Jahangeer et al, 2009).

Maternity and post-partum care

Success full early initiation of breast feeding has strong relationship with duration of breastfeeding length. Mothers who receive support from health provider on breast feeding during postnatal care and initiate their breast feeding within first hour of birth when their reflexes and their sensitivity to tactile stimuli of the areola and nipple is strong, have higher chance of continuing breastfeeding for longer duration compare to those who do not receive support (Akre, 1999).

There are many maternity care related supports that improve breastfeeding such as developing written policy for facility, provider all staff with education and training on breastfeeding, maintaining skin to skin contact between mother and infant after birth, encouraging early breastfeeding initiation and supporting cue-based feeding (CDC, 2013).

Failure to immediate contact of mother and baby after birth and opportunity for suckling breast soon after delivery can be associated with failure of mother to decide to breastfeed for long

(Paget Stanfeild et al, 2006). Health worker have ability to influence strongly women's breastfeeding decision and her ability to continue breastfeeding (AAP, 2010).

When the early initiation of breastfeeding is delayed till the measurement of weight, cleaning of the baby long compare to those who immediately put skin- to kin- with the mother or places to breastfeed within the first hour after delivery (Ngatia et al, 2008).

Poor post natal care practice that separates the mother and new born on the bases that mother needs rest or feeding the baby fruit choice or breast milk substitute like formula milk in the neonatal ward discourages mother focus and continuity of breastfeeding the baby after leaving the health facility (CDC, 2013).

Advice on breast-feeding

Duration of breast-feeding also depends on whether the woman receives advice on breast-feeding from health worker or not.

Usually, women who delivered at home or in a traditional form are given advice on advantages of breast-feeding by traditional birth attendants (TBA). They are also encouraged to breastfeed for a long time because the traditional birth attendants live in the same or immediate vicinity of their residence. As a result, frequent visits and prolonged health care at post-partum period by TBA leads to longer duration Iskandar et al (1990). There is evidence that rooming/bedding in is important for the purposes of practicing breastfeeding on demand, bonding, and the baby's temperature control (WHO, 2008). It was found that in some of the health

Proper support encouragement for mother can help mother initiation and continuity of exclusive breast feeding; mothers who are living in area where breast feeding is encouraged can easily access facts about benefits of exclusive breast feeding and support in the form of lactation consulting can help mothers overcome hurdles to breastfeeding (Kye, 2014)

Breastfeeding knowledge

Knowledge about breast feeding Breastfeeding is a learned skill, like learning to cook; it requires patience and practice. While mother and her baby are still learning, she may become frustrated and experience some discomfort, but it will get better. More time may be needed in some situations, such as after a premature or cesarean birth, or when the baby has a health problem (U.S. Department of Health and Human Service, 2011).

According to (giugliant et al, 1995) study on maternal knowledge on breast feeding, mothers who received prenatal orientation on breastfeeding had better knowledge on breast feeding than those who received postnatal orientation.

Spouse and family support

Paternal knowledge and social support may also affect the decision whether to breast feed or not (Hech et al, 2006).

Partner and family members can support breast feeding relationship by being kind, show their appreciation on work that is put into breastfeeding and make sure mother to get good rest, enough drinks and help around the housework and care for other children at home (U.S. Department of Health and Human Services, 2011).

According study from New Zealand show the attitude of father or partner is one of the key influencer of mother's choice of infant feeding method (Annette, 2002).

There many studies indicating that women whose partners preferred for breastfeeding were ten times more likely to breastfeed than those whose partner s' were not sure about important of breast milk.

On the other hand newly delivered and young mother can get great source of support from other breastfeeding mothers who offer tips on how to breastfeed and encourage mother to initiate

breastfeeding early and continue breastfeeding up to two years of age(U.S. Department of Health and Human Services, 2011).

Women's decision- making is highly associated with their social networks. It can be either a barrier to breastfeeding practice or encouragement to breast feed. for most of the new mother preferred source of child rearing information is other mothers and advice from family and friends is cited as mostly reason for decision about infant breastfeeding (King, 2002).

2.4. Health status of mother and infant influence on breastfeeding practice

Child's health status

Many researches show that twins and infants weight less than 2500g and babies who are admitted to neonatal care units are less likely to be breastfed for first four weeks (King, 2002).

Infant's Immaturity, birth injuries, infections like pneumonia and meningitis and congenital abnormalities highly affect early initiation of breastfeeding (Stanfeild et al, 2006).

An HIV- infected mother can pass the infection to the infant during pregnancy, delivery and through breastfeeding. The risk of HIV transmission through breastfeeding can be reduced by Antiretroviral (ARV) drug intervention to either the mother or HIV- exposed infant. Together, breastfeeding and ARV interventions have the potential to significantly improve infants' chances of surviving while remaining HIV uninfected (Saka, 2012).

According to WHO report (2013) recommendations breastfeeding HIV- infected mother should receive ARVs and should follow WHO guideline for breastfeeding and complementary feeding.

According to research conducted by Ministry of Health (MOH) 130'000 of new infections occurred in early 2007 and 80% of these infection occurred through mother to child transmission (MTCT).

HIV infection mother has 15 to 25 percent risk of transmission of infection to their child through breastfeeding and poses to both parents and health providers (UDHS, 2011). HIV transmission through breastfeeding is raised by issues like maternal low immunity, high viral load breast conditions (cracked nipple and mastitis), and mouth sores in the infant, prolonged breastfeeding more than one year and mixed feeding before six month (MOH, 2010).

WHO recommended that HIV- infected mothers received ARV treatment and exclusively breastfeed for 6 month and continues breastfeeding with complementary feeds up to one year of age and gradually stops breastfeeding when provision of nutritional adequate and safe diet is able. But if ARVs are not available and if there is breast condition and mouth sores in the infant, health providers counsel mother to avoid breastfeeding (WHO, 2010).

Maternal health status

According to study done in New Zealand the main reason for stopping breastfeeding is postpartum breast problems like nipple sores and suckling and attachment difficulties (King, 2002).

Maternal health factors include Engorgement, cracked nipples, mastitis and abscess, inverted or flat nipple make difficult mother to breastfeed and result to most of mother stopping breastfeeding immediately after initiation or cause not to breastfeed breast feed at all (wood et al, 2008).

Maternal nutrition status

During pregnancy and lactation nutritional needs of women are greater than any other time. Food need for growth of fetus and food required for production of milk must come from maternal

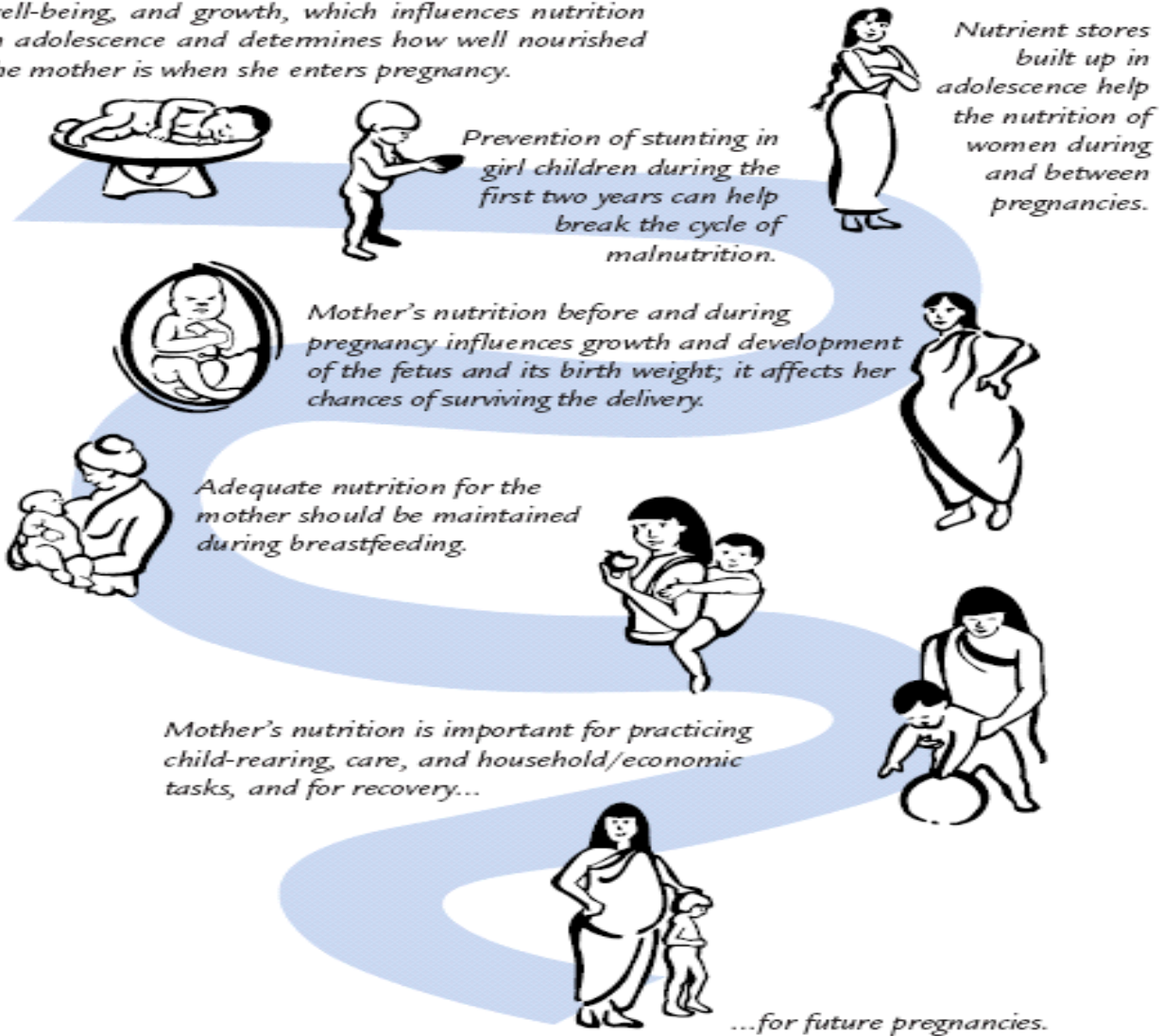
blood system to babies' blood through placenta. Child born to malnourished mothers have higher chance of having low birth weight and difficult in breastfeeding (wood et al, 2008).

Lactation period is when women's body needs to replace lost blood during delivery therefore, mother requires after birth to eat more than usual, and include foods which are rich in iron and vitamin A (WHO, 2010). Maternal nutritional needs increase during lactation period and mothers' malnutrition retardate health of both mother and infant. Anemia contributes 20-23% of postpartum maternal death in each year among many African countries (MAAIF, 2003). Mother's nutrition during lactation period determines children lifelong nutrition status and general health and it leads malnutrition cycle in the society as shown in figure below.

Figure 3: How maternal and child nutrition are linked

How Maternal and Child Nutrition Are Linked

Birth weight is closely associated with child survival, well-being, and growth, which influences nutrition in adolescence and determines how well nourished the mother is when she enters pregnancy.



Source: Adapted from ACC/SCN News 1994.

Protein, calories and fluid intake increase is recommended for women during lactation. The average protein content of breast milk of women is 1.3g\dl. An average milk volume of 850ml during the lactation from birth to six months, increase the protein allowance of women from 45g per day to 70g per day (Joshi, 2010). On an average lactation women secretes about 800-850ml

of milk, the calorific value of this is 500-600 calories (about 65 calories per 100ml milk) and metabolism of milk production requires 200-400 calories in view of total of these amounts, the mother requires adequate stores requiring during lactation period (Joshi, 2010). Water and beverage such as juice, tea and milk help in providing the fluid necessary to produce milk their requirements increase twice during lactation (WHO, 2010).

Conclusion

From this comprehensive review of literature it is apparent that breast feeding is essential as health promotion strategy. Infant feeding affects both the mother and the child. Feeding practices affect the child's nutritional status, which in turn affects the risk of death. The duration and intensity of breastfeeding affect the mother's period of postpartum infertility, and hence the length of the birth interval and fertility levels. However exclusive breast feeding is very weak in Uganda and other sub-Saharan countries. This study will add to the body of knowledge, which will help in reinforcing improving message of exclusive breast feeding practices and it would also provide a bases for exploration of key health issues through qualitative approach in future.

CHAPTER THREE: METHODOLOGY

3.0. Introduction

This section presents under study area different methodology used in carrying out study. It describes methodology used in investigating factors influencing exclusive breast feeding among mothers in Kisenyi village – Rubaga division Kampala. Which include; study design, source of data, study population, inclusion and exclusion criteria, and study sample size determination, sampling procedure, study variables, data collection tools, quality control measures, ethical consideration, and limitation to the study.

3.1. Study design

This is descriptive study cross-sectional design that employs both qualitative and quantitative method of data collection. Cross- sectional was chosen to ensure accuracy and validity of findings and to be able to carry out the study within limited time allocated.

3.2. Data sources

Breastfeeding mothers were primary source of study who were interviewed by researcher with the help of research assistance and secondary source was publications, magazines; reports and text books where the researcher was consulting written information in the library which was later analyzed in line with the study topic to strengthen the research study.

3.3 Area of study

This study was conducted in Kisenyi parish which is located Kampala Central Division. Kisenyi is located middle of four main roads i.e Namirembe road in the North, Mengo hill road in the Sought, Mwanga 11 road in the East and Katwe and Mengo area.

3.4 Target population

All mothers of between 16 to 45 years age who are living in Kisenyi Rubaga Division Kampala-Uganda are eligible to participate in the study. The research studies this category of respondents because they are women of reproductive age

Study population

All mothers of infants (0– 24 months) who consent to participate in the study and who were mentally sound were the primary target respondents in Kisenyi village – Rubaga division Kampala in order to minimize recall (memory) bias.

3.5. Selection of criteria

3.5.1. Inclusion criteria

All mothers of infants age of (0-24 months) who are currently living in kisenyi who give consent to participate the research was selected to respond.

3.5.2. Exclusion criteria

Those who are not in a sound state of mind, those who cannot communicate properly and those who refuse to give consent to participate the research will be excluded in participating study.

3.6 Determination of sample size

Sample size for mother infant (0-24month) who have participated the interview were determined by using the Kish and Leslie formula,

$$n = \frac{Z^2 PQ}{e^2}$$

Where;

N is required sample size.

P is estimated proportion of the exclusively breast feeding women in Kisenyi which is 63%.

Z is the confidence interval at 95% (standard value of 1.69).

E is the marginal error at 5% (Standard of 0.05)

Q is deference of P from 1(1-0.63=0.37)

$$n=1.96^2 \times 0.63 \times 0.37 / (0.05)^2$$

$$=358$$

Additional of 10% non-response

393 mothers of infant from kisenyi village participated in this study and have answered the questionnaire.

3.7. Sampling procedures

Multistage sampling procedure was be used by combining the following sampling method; Stratified sampling procedure was be employed by dividing Kisenyi into six zones (stratum). Then sample random method was be done to identify the study area where pieces of paper will be written the names of the zones of Kisenyi, was shuffle it and select four zone out of six to represent Kisenyi area.

Also after that household will be selected randomly from any side by tossing a pen and looking where the pointer was direct and inter the house to interview house was selected until my sample size will be obtained.

3.8. Study variables

3.8.1. Dependent variable

Dependent variable of the study is status of breast feeding among mothers in kisenyi village Rubaga division Kampala.

3.8.2 Independent variable

The study independent variables are categories into main three following categories;

Socio-demographic

- Education level
- Family structure
- Age
- marital status
- Birth order
- Occupation
- Religion and cultural beliefs
- Spouse and family support

Health service factors

- Place of delivery.
- Antenatal care and post natal care service attendance

- Maternity and post-partum care
- Mode of delivery
- Advice on breast feeding

Individual health factors

- Maternal nutrition
- Childs health status
- Mothers health status

3.9 Data collection techniques

Questionnaire and interviews was be main data collection techniques for the study by the researcher and researcher assistance in Local languages.

3.10 Data collection tools

A composite of semi-structured and structure questionnaire written in local languages (Somali, Luganda and Kiswahili) will be main instrument used for data collection in this study and questionnaires will be administered by the researcher to mothers to make them easy to understand. The research interviewed key informant persons in the community women leader of kisenyi society and obtained detailed information about factors influencing exclusive breastfeeding among mothers.

3.11 Data analysis

Both manually and relevant computer software will be used to analyze data (SPSS)version 16. Data was corded and cleaned from missing values. A Univariate statistical analysis was used to

obtain Summary, frequency and percentages describe the study population. And bivariate analytical statistics were used to assess the relationship between the dependent variable and dependent variable. In the study, the dependent variable is categorical while the independent variables are continues. Chi-square test (95% confidence interval) was used to compare differences between the categorical frequencies. $P < 0.05$ level of significance was used for analysis.. Analysis results were presented using tables, bar charts, pie charts and figures of statistics for easy interpretation of the findings.

3.12 Data quality control

Quality control aims ensuring acceptable level of validity and reliability of study through proper control of extraneous variables that may affect the dependent variable and confound the result of the study. Randomization was used in order to create equivalent representative samples that essentially similar in all the relevant variables that could influence the dependent variable. Data collection tools were pretested on a sample of 15 mothers who were not included in the study sample for the clarity of the tool prior the study so as to maintain validity and reliability. for proper data management.

Research assistance who can translate clearly English to Luganda, Somali, and Kiswahili language was trained and deployed before the study begin. The questionnaire was written in English and was translated to local languages to avoid miss understanding of questions and it was administered by researcher and research assistance. Data completeness has been checked, coding, double entry and cleaning of data have also been done

3.13 Ethical consideration

The research proposal was summated to university research committee and they have approved it (appendix B). The permission to carry out research on the research area has received from the local authority of kisenyi Rubaga division Kampala (appendix C). Informed consent was obtained from all the study participants (appendix A) and it was attached to the questionnaire, and permission was also obtained from the local administrative. Confidentiality and privacy of the respondents was upheld by using codes. Study being cross-sectional in nature no experimentation or intervention took place.

3.14 limitation of the study

This study had number of limitations. The study Sample was only those leaving in Kisenyi which may not be representative for whole population of breastfeeding mothers. The respondents in regards to infant feeding practice could have been a result of social responsibility. This was overcome by explaining the purpose of the study clearly to study participants and by assuring them that no matter the type of infant feeding a mother practiced, no negative results will befall her as a result of her practice. More over recall bias as to what mother could have fed the baby throughout infancy period. However, this limitation was over by reducing time to two years and all mothers were able to recall well what the baby was fed from birth to time the data was collected.

CHAPTER FOUR: PRESENTATION OF RESULTS

4.1 Introduction

This chapter presents the findings of the study using descriptive statistics and cross tabulations. The data was collected from the residents of Kisenyi. The results will be presented and analyzed in the order of demographic statistics and results of specific objectives of the research study.

4.2 Socio-demographic characteristics of the study population

Table 1: Socio-demographic characteristics of the sample population (N=393)

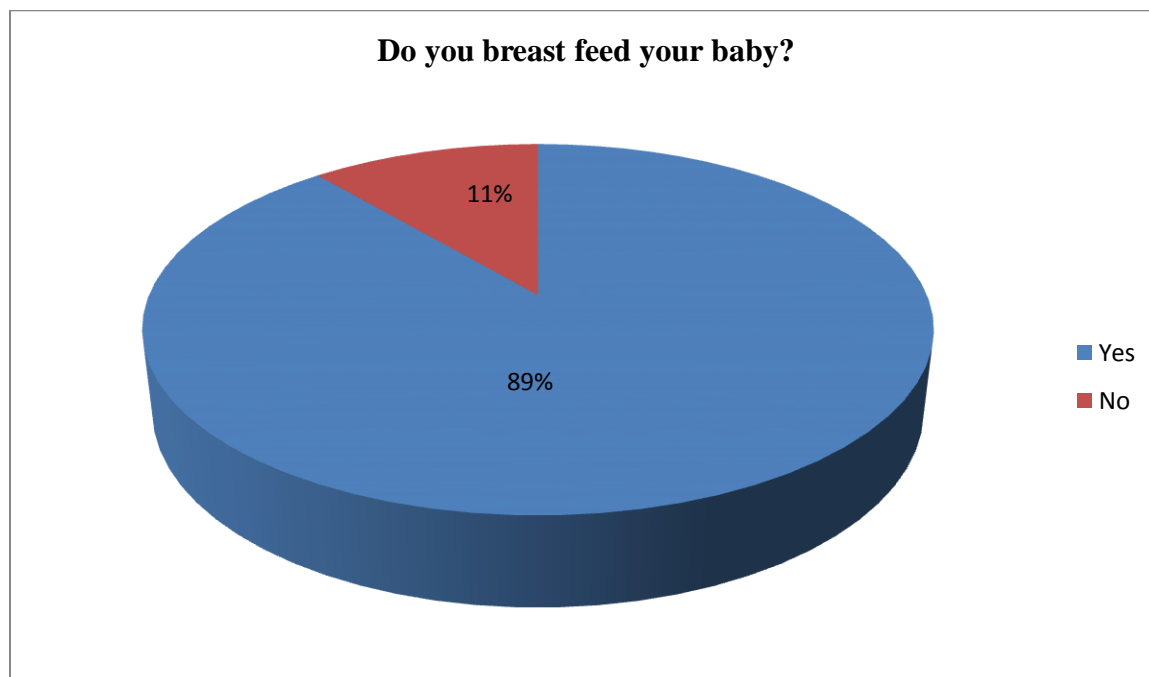
Variable		Frequency (n)	Percentage (%)
Age (Years)	15-25	188	47.8
	26-35	150	38.2
	>36	55	14.0
Marital status	Single	91	23.2
	Married	250	63.6
	Divorced/separated	45	11.5
	Widows	7	1.7
Religion	Christians	240	61.1
	Muslims	153	38.9
Nationality	Ugandan	259	66.0
	Somali	106	27.0
	Congolese	9	2.3
	Kenyan	8	2.0
	Sudanese	11	2.7
Level of education	Primary	200	51.0
	Secondary	149	38.0
	Tertiary	28	7.1
	None	16	3.9
Occupational	House wife	122	31.0

Employed	165	42.0
Unemployed	71	18.0
Business woman	35	9.0

The table above shows the demographic statistics of the study population. Majority of the study participants were youths. The 393 respondents 47.8% (188) were below 25 years old, 38.2% (150) were 26-35 years in age and only 14% (55) were above 36 years. Most of the mothers (63.6%) reported to be married which means that most mothers are living with their partners and engaged in some form of relationship yet only 23.2% were single and 11.5% were separated or divorced with 1.7% (7) who were widows. This indicates that the proportion of single parents was rather high in Kisenyi. There were more Christians (61.1%) than Muslims (38.9%). Majority of mothers who participated in the study were Ugandans and Somalis although there were also Kenyan, Congolese and Sudanese less than 7%. Most of the mothers had at least gone through formal education although there were 3.9% who reported to have never gone to school. The 393 respondents 51% (200) had gone to primary level, 38% (149) were secondary level and only 7.1% (28) reached up to tertiary education. Majority of the mothers were employed (for those employed somewhere) 42% , followed by (31%) those who were house wives who stayed at home most of their time, 18% were unemployed and 9% were engaged in some business

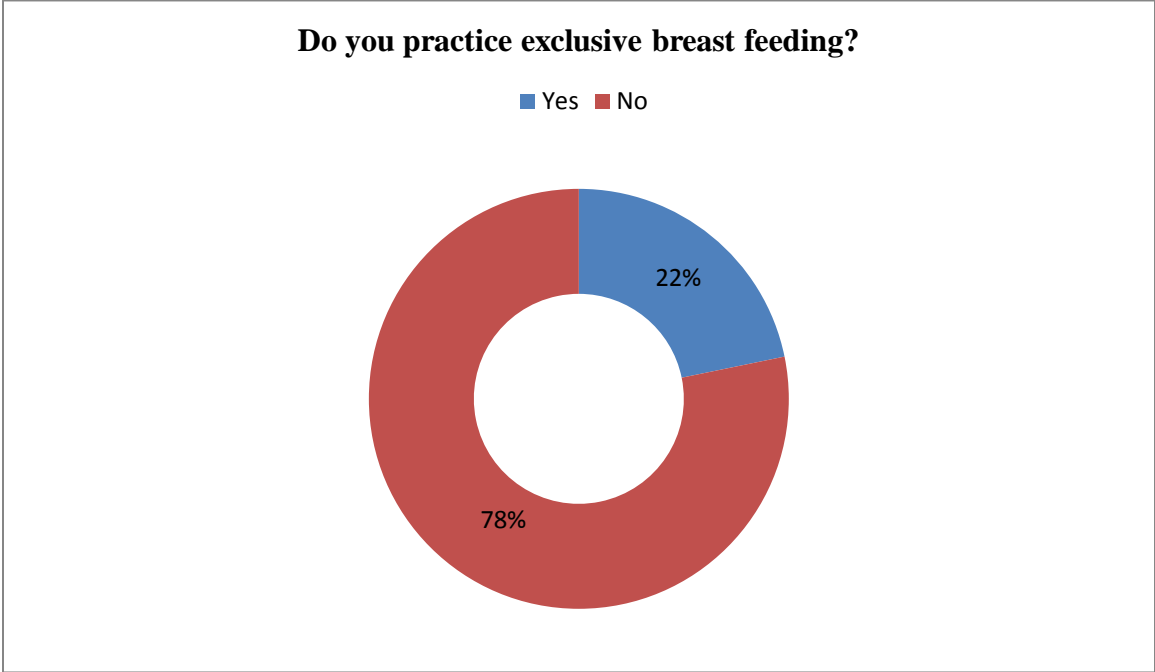
4.3 Proportion of mothers who exclusively breast feed in Kisenyi village

Figure 4: The proportion of mothers who reported to be breast feeding their babies



The proportion of mothers who reported to be breast feeding their babies was found to be high 349 (89%) as compared to those who reported not to 44 (11%). However, among those who reported to breast feed, mothers were asked whether they practiced exclusive breast feeding for the first six months of the babies' lives. The resulted are presented in Figure 2 below.

Figure 5: The proportion of mothers who reported to practice exclusive breast feeding for the first six months of the baby’s life



The proportion of mothers who reported to practice exclusive breast feeding was found to be low 76 (22%) while 273 (78%) did not. Although the number of mothers who reported to breast feed their babies was reported to be high in figure 1, the proportion of mothers practicing exclusive breast feeding was reported to be low as shown in figure 2.

Table 2: Breast feeding practices of mothers in Kisenyi

Variable		Frequency (n)	Percentage (%)
Number of times of breast feeding per day	1-6 times	195	56.0
	6-8 times	91	26.1
	8-12 times	63	17.9
Total		349	100.0
Duration of each breast feeding session	<10 minutes	25	7.2
	10-20 minutes	133	38.1
	20-30 minutes	143	41.0
	>30 minutes	48	13.7
Total		349	100.0
Duration for continued breast feeding	<6 months	61	17.5
	6-12 months	184	52.7
	12-24 months	92	26.4
	>24 months	12	3.4
Total		349	100.0
Do you breast feed from your work place	Yes	42	21
	No	158	79
Total		200	100.0

Majority of the mothers who reported to breast feed, would breast feed their babies for 1-8 times a day and for most mothers, breast feeding sessions would be 10-30 minutes. This indicates adequate breast feeding time for the babies. Majority of mothers would want to breast feed for 6-12 months which is lower than the recommended 24 months. Only 3.4% of mothers would want to continue breast feeding for more than 24 months. Compare to the 200 mothers who reported to be working (employed and business women), only 21% reported that they are able to breast feed

their babies from their work stations. This means that most working mothers are not able to breast their babies from their work stations.

4.4 Association between socio-demographic factors and exclusive breast feeding status among mothers in Kisenyi village

Table 3: A cross-tabulation between socio-demographic factors and exclusive breast feeding among mothers

Do you practice exclusive breast feeding?						
Variable		Yes	No	X²	(d.f)	P-value
Age (years)	15-25	38	150	9.440	2	0.024*
	26-35	30	120			
	>36	8	47			
Marital status	Single	15	76	3.678	3	0.298
	Married	55	195			
	Divorced/ separated	5	40			
	Widowed	1	6			
Religion	Christians	46	194	0.012	1	0.914
	Muslims	30	123			
Nationality	Ugandan	52	207	3.168	4	0.530
	Somali	21	85			
	Congolese	-	9			
	Kenyan	2	6			
	Sudanese	1	10			
Level of education	Primary	45	156	7.779	3	0.027*
	Secondary	23	126			
	Tertiary	5	23			
	None	3	13			
Occupation	Housewife	24	98			
	Employed	28	137			

Unemployed	16	55	11.345	3	0.018*
Business woman	8	27			

(* statistically significant factor $p < 0.05$)

This study finds that Factors such age of the mother ($p=0.024$) found to have a statistically significant association with exclusive breast feeding among the mothers ($p < 0.05$). This shows that age influences the decision of mother to exclusively breastfeed their children. As well marital status ($p=0.027$) of the mother was revealed to be a statistically significant and could have relationship with exclusive breastfeeding practice among mothers. in addition mother's occupational status ($p=0.018$) was found to have a statistically significant association with exclusive breast feeding among the mothers ($p < 0.05$) and could influence the decision of mother to exclusively breast feed their babies. Other factors such as religion, nationality and level of education did not show any statistical significance with exclusive breast feeding ($p > 0.0$).

4.5 Health care service factors and exclusive breast feeding among mothers in kisenyi village

Table 4: A cross-tabulation between health care service factors and exclusive breast feeding among mothers

Variable		Do you practice exclusive breast feeding?				
		Yes	No	X ²	(d.f)	P-value
Did you attend breast feeding antenatal classes?	Yes	61	250	0.073	1	0.788
	No	15	67			
Have you received breast feeding education?	Yes	29	143	7.204	1	0.027*
	No	47	174			
Place of delivery	Home	23	65	3.364	2	0.018*
	Health facility	51	243			
	Traditional Birth Attendant	2	9			
Type of delivery	Normal delivery	41	190	0.908	1	0.341
	Caesarian Section	35	127			

Post Natal services attended	Parenting education	29	128			
	Immunization	20	74			
	Family planning	15	66	0.341	3	0.952
	Nutrition and child growth	12	49			
Source of breast feeding information	Nurses	25	104			
	Midwives	40	176			
	Physician	6	14	1.590	3	0.662
	Health educator	5	23			

(* statistically significant factor)

The research findings revealed that factors such as receiving breast feeding education and place of delivery were found to have a statistically significant association ($p < 0.05$) with breast feeding. These factors influence the decision of mothers to exclusively breast feed their babies. Other factors such as attending antenatal breast feeding classes, type of delivery, post natal services and source of breast feeding information did not show any statistically significant association with breast feeding. Therefore, they might necessary influence exclusive breast feeding among mothers.

4.6 Health status of mothers and exclusive breastfeeding among mothers in kisenyi village

Table 5: A cross-tabulation between health status factors and exclusive breast feeding among mothers

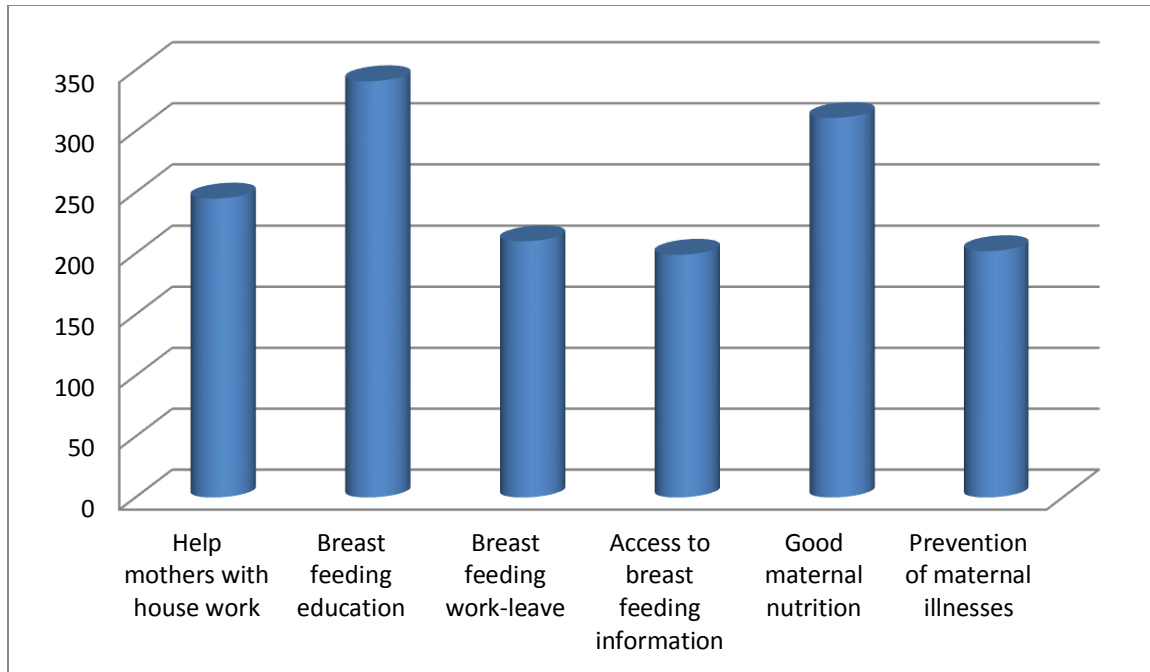
		Do you practice exclusive breast feeding?				
		Yes	No	X ²	(d.f)	P-value
Mother suffered any illness recently?	Yes	29	156			

	No	47	161	3.006	1	0.038*
Child suffered any illness recently?	Yes	43	170			
	No	33	147	0.215	1	0.643
Any breast feeding difficulties?	Yes	6	38			
	No	7	279	1.033	1	0.310
Mothers feeding	Mainly carbohydrates	2	23			
	Mainly proteins	11	28	5.680	3	0.013*
	Balanced diet	28	95			
	Malnourished	35	171			
Fluid intake	Juice	18	62			
	Tea and coffee	32	124			
	Porridge	9	30	2.841	4	0.585
	Only water	10	60			
	Milk	7	41			

(* statistically significant factor $p < 0.05$)

The table above shows that the mother having suffered an illness ($p=0.038$) and the mother's feeding ($p=0.013$) were found to have a statistically significant association with exclusive breast feeding. Such factors would influence the ability of mothers to exclusively breast their babies. The baby's illness, breast feeding difficulties and fluid intake of the mother did not show any statistically significant association with exclusive breast feeding ($p > 0.05$).

Figure 6: A graph showing the suggestions by the respondents on how to improve exclusive breast feeding practices among mothers



The suggestions included; helping mothers with house work (245), providing breast feeding education (341), giving mothers breast feeding work-leave (210), increasing access to breast feeding information (199), mothers should have good maternal nutrition (311) and prevention of maternal illnesses (202).

CHAPTER FIVE: DISCUSSION OF RESULTS

5.1 Introduction

This chapter presents the discussion of the results of the findings from the study in comparison with prior related studies and literature.

5.2 Proportion of mothers who exclusively breast feed in Kisenyi village

Although the proportion of mothers who breast feed their babies found by this study was high at 89%, the proportion of those who actually practice exclusive breast feeding for the first six months of the baby's life is very low at 22%. This is consistent with other studies done in Uganda which showed that the proportion of mothers practicing exclusive breast feeding is low country wide at 60% (Save the Children, 2012). The difference in the prevalence exclusive breast feeding was due to limited sensitization among mothers in Kisenyi as compared to that done in other parts of the country. The high national prevalence of exclusive breast feeding among mothers in Uganda; where Uganda is ranked number one in the East-African region in exclusive breast feeding beating Burundi, Rwanda, Tanzania and Kenya has been mainly due to intensive sensitization campaigns on breast feeding (UNICEF, 2013). Most mothers would like to breast their babies for different reasons but mainly due to the benefits associated with breast feeding for both the mother as well as the baby; however, not all mothers feed their babies with breast milk for at least the first six months due to a number of restraining factors. HIV/AIDS positive mothers are out rightly advised not to breast their babies at all so as to reduce risk of transmitting HIV to babies. Therefore, such mothers will not be engaged in exclusive breast feeding at all.

5.3 Socio-demographic factors and exclusive breast feeding among mothers in kisenyi village

Younger mothers between the age group of 15-35 years old who are youthful were more likely to exclusively breast feed their babies. This is mainly due to the fact that mothers within this age group are still energetic and possibly having their first children at this age. Older mother, who had a number of children, might have gotten fed up with breast feeding due to the time and commitment involved with her previous children. However, according to other studies done elsewhere, older mothers (36-45 years old) were found to have better breast feeding practices including exclusive breast feeding than younger mothers (Janice, 2012). This was because older mother have breast feeding experience with their older children and know the related benefits of exclusive breast feeding. The difference between the two studies was due to demographic differences in the study population where by the former study involved very few mothers above 35 years old and therefore, their age could not clearly reflect its effect on exclusive breast feeding when compared to the later study which was mainly conducted among older mothers.

The mother's level of education empowers her with relevant knowledge and awareness of the importance of breast feeding both to the mother and the baby. Mothers who have gone through formal education to higher levels are more likely to practice exclusive breast feeding due to scientific knowledge as regards breast feeding that is imparted into them during their academic years (UDHS, 2011). Therefore, they can apply such knowledge when their get babies unlike mothers who have low levels of formal education as well as those who never got any kind of formal education. In contrast above findings according (WHO, 2001) under-educated, impoverished Women tend to follow traditional ideas and practices, and are less confident in engaging in social interactions where more modern concepts and practices are promoted. Due to

under-education, they are less likely to learn from educational materials typically displayed at health centers and used in health related community educational activities, including those concerned with appropriate child care and feeding practices.

Although most cultures and religions in Uganda do not oppose the practice of breast feeding yet alone exclusive breast feeding at that, some cultural beliefs hinder mothers from exclusively breast feeding their babies. This is in agreement with other studies which showed that beliefs such as breast milk getting spoilt when it spends more than three hours in the mothers breasts and that the first milk after birth is bad hinder mothers from breast feeding their babies within the first two hours after birth as well as exclusively breast feeding the baby thereon after (Ozelci, 2001).

Many working mothers are less likely to practice exclusive breast feeding for their babies if their places of work are not conducive for them to do so during work hours (UNICEF, 2013). As a result working mothers opt to leave their babies at home to feed of other types of baby milks and feeds (Heck, 2007). However, mothers who are typically house-wives are more likely to exclusively breast feed their babies since they are always at home with their babies and the home environment is always conducive enough for them to breast feed at any opportune time when the baby needs to be fed. Therefore, working environment that does not support breast feeding mothers is a hindrance for exclusive breast feeding among working mothers (Stanfeild, et al, 2007).

5.4 Health care service factors and exclusive breast feeding among mothers in Kisenyi village

Mothers who attend antenatal and post-natal care services are taught on how to handle babies including baby's feeding which emphasizes the practice of exclusive breast feeding (Aye, 2000). Such information and knowledge is very important in influencing the mothers decision to exclusively breast feed their babies. In another study by Lumbiganon (2012) has also shown that mothers who receive lactation and formula breast feeding education are more informed about the importance of exclusive breast feeding which influences a positive attitude towards the practice. Therefore, antenatal and post-natal breast feeding education encourages mothers to quickly initiate and prolong breast feeding.

Utilization of maternal health care services including mothers going for delivery at health facilities is a facilitating factor for mothers to exclusively breast feed their babies. Mothers who attended antenatal care are likely to deliver from health centers and therefore to have received breastfeeding education (MOH, 2007). Advice and health education by health workers on breast-feeding as well as their encouragement helps enhance the mother's successful initiation of breast-feeding and its continuation till the optimum period which is recommended up to two years (Jahangeer et al, 2009).

Breast feeding mothers need support from every one round them including their spouses, friends and health workers. This is important in providing health related information that will encourage the mother to breast feed the baby (Hech, 2006).

The ability of the mother to use advice from any source of breast feeding information largely depends on the level of trust and closeness that develops between the mother and that particular

person giving the advice. Most mothers would take the word of the health worker because they trust that health professionals know much about health related issues. However, breast feeding mothers who use Traditional Birth Attendants (TBAs) are also known to strictly follow the advice they get from such people especially following safe delivery from a TBA. This is because TBAs are within the community and the vicinity of the mothers, there is a degree of closeness developed between the mothers and TBA unlike health workers who are staged at the health facility and rarely visit the mothers in their respective households (WHO, 2008). Although both health workers and TBAs advice mothers to breast feed their babies, TBA lack scientific facts as regards exclusive breast feeding and some have cultural beliefs such as colostrums not being good for the baby and breast milk going bad could hinder mothers from exclusive breast feeding, early initiation and prolonged breast feeding of babies(Jahangeer et al, 2009).

5.6 Health status of mothers and exclusive breastfeeding among mothers in Kisenyi village

Nutrition is a very important aspect of every individual's life including mothers as well as their babies. Mothers who are able to have a balanced diet and adequate fluid intakes are able to produce the right amount of breast milk in the right time which facilitates exclusive breast feeding as compared to malnourished mothers (Wood et al, 2008). Malnutrition among breast feeding mothers causes limited breast milk production such that the milk that is produced is not enough to sustain continued lactation by the baby. Therefore, the mother is required to supplement the breast feeding with other types of feeding such as cow and processed milk.

The occurrence of disease such as malaria, engorgement, cracked nipples, mastitis and abscess on the mother interferes with breast feeding practices. In the past HIV positive mothers were strictly advised against breast feeding their babies so as to reduce the risk of mother to child

transmission of HIV through breast milk. However, with the availability and consistent use of ARVs for both the mother and baby can reduce the risk of HIV-transmission from mother to child. Hence HIV-positive mothers can exclusively breast-feed their babies and continue breast feeding with complimentary feeds up to one year of age and gradually wean the baby with the provision of nutritional diet (WHO, 2010). On the other hand, also illnesses such as malaria, pneumonia, mouth sores and meningitis that might occur among babies could result into the baby refusing to breast feed; requiring other feeding mechanisms such as the use of nasal-gastric tube where other types of feeds other than breast milk are given to the baby through the tube. These illnesses either on the side of the mother or baby directly interfere with exclusive breast feeding.

CHAPTER SIX: CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction

This chapter presents the conclusions that have been obtained from the study and gives feasible recommendations for all stakeholders concerned with breast feeding.

6.2 Conclusions

Although the proportion of mothers who claim to breast feed their babies is high at 89%, those who exclusively breast feed their babies in Kisenyi is very low at 22% which is much lower than the national prevalence of 60%. This low level of exclusive breast feeding if not mitigated is most likely to result into infant malnutrition and related consequences.

Older mothers are more likely to exclusively breast feed their babies due to experience with previous children than younger first time mothers. Higher levels of formal education improve mothers' knowledge and awareness of the importance of exclusive breast feeding. Working mothers are deterred by work conditions from exclusive breast feeding and prefer to leave their babies at home.

The utilization of maternal health care services including attending antenatal care, delivering from the health facility and post-natal care services are all importance sources of breast feeding information where the mother can be advised and encouraged to exclusively breast their babies.

Malnutrition among mothers results into limited breast milk production and therefore, access to a balanced diet is important in facilitating mothers to exclusively breast feed their babies. Diseases such as HIV/AIDS that directly hinder mothers from breast feeding as well as other illnesses interfere with exclusive breast feeding.

6.3 Recommendations

To improve exclusive breastfeeding status among mother in kisenyi the following recommendations should be implemented;

This study assessed only some factors that influence exclusive breastfeeding from the mother's perspectives only. Therefore, further research is needed to determine health workers perspective and other factors that may affect breastfeeding identify related factors in order to inform policy markers.

People living with breast feeding mothers including their spouses need to support and encourage them to exclusively breast feed by helping them with household chores for mother to get time for breastfeeding. Partners should be involved in breastfeeding education concerning advantage of exclusive breastfeeding to infants in order to avoid detrimental infant feeding practices which are sometimes enforced as a result of their ignorance on recommended infant feeding.

These finding suggest a need for a more extensive and comprehensive approach of breastfeeding education and especially of exclusive breastfeeding. The important issues brought up by this study related to infant feeding, needs to be taken into account by implementers and policy markers. However, since health workers are sole supporters of infant feeding practices, especially EBF, capacity building should be done to ensure that they have current information and positive attitude towards EBF. The healths workers need to be given continue job training and refresher courses in regards of national and international guidelines to equip them with current knowledge during breastfeeding counseling.

It was reported by some respondents that during their visits at health facilities health education was not given hence lack of the knowledge especially of EBF which can lead to non adherence

to it. Health workers should demonstrate baby attachment to the breast and positioning during breastfeeding as much as they can to reduce breast problem incidences. Kisenyi health centre should organize regular out reaches to communities to teach the mothers and care givers with emphasis on breast feeding practices to increase the level of knowledge and awareness of mothers on the importance of breast feeding for both the mother and the baby. The education may include proper nutrition, having balanced diet and enough fluid intakes for mother which can enable them to produce enough breast milk for their babies.

References

- Prevalence of exclusive breastfeeding and its predictor's Southwest Ethiopia, 2013 UNICEF-progress for children: a report card on nutrition: number 4, may 2006.
<http://www.unicef.org/progressforchildren/2006/index-breastfeeding.html> (site visited on 12/3/2014)
- Bhavan Singh (2010). On breastfeeding duration, European Journal of scientific research, volume 40 No.3(2010)- <http://www.eurojournals.com/ejsr.htm>. (seen 05-02-2014)
- Nankunda jolly et al (2010). Individual peer counseling to promote exclusive breastfeeding in Uganda, programmes to improve breastfeeding practices.<http://www.who.int/nutrition/publications/infantfeeding/5878/en/index/html>
- UNAIDS report on the Global AIDS epidemic: 2010
www.unaids.org/documents/20101123_GlobalReport_em.pdf. Site visited on 10/2/2014
- World Health Organization: Infant and young child feeding: Model Chapter for textbooks for medical students and allied health professionals. Geneva, WHO: 2009:
<http://www.who.int/nutrition/publications/infantfeeding/9789241597494/en/index.html>. site visited on 16/2/2014
- Salimi lilian (2006). Factors influencing breastfeeding practice in Nigeria. African Journal of Food and Agriculture Nutrition and Development, volume 6 No.2.
- Sophie Atieno Ochola (2008). Evaluation of Two counseling strategies promoting exclusive breastfeeding among HIV- negative mothers in Kibera, Nairobi Kenya.
- WHO (2003). Community- based strategies for breastfeeding promotion and support in developing countries. WHO, Geneva. [http://www.who.int/child- adolescent - health/](http://www.who.int/child-adolescent-health/)

- WHO (2008), indicators for assessing Infant and Young Child Feeding practices. UNICEF, USAID, AED, UCDAVIS, IFPRI (2008).
- Heck (2006). socio-economic factors and breastfeeding initiatives, public health dept: 2006.
- J Hum Lact (201). relationship between breastfeeding practice and level of education. Sage publishers; 2011
- Ministry of health (2011) Uganda Demographic Health Survey.
- Sutter Health (2008), U.S. patent. And trademark
- WHO (2006). *Antiretroviral drugs for treating pregnant women and preventing HIV infection in infants in resource-limited settings*. Geneva.
- The World Health Report: make every mother and child count, WHO, Geneva, 2005.
- J. Ayub, 2012, Medical Collage Abbottabad.
- US dept. of health and human service, 2010, *developing objective for healthy people*.
- Single B (2010); *knowledge, attitude and practice of breast feeding*, Euro Journals publishers.
- UNICEF (2009) *Baby friendly hospital initiative*
- Florence Jairus Saka (2012). *factors influencing exclusive breastfeeding*.

Appendix I: QUESTIONNAIRE

Factors influencing exclusive breast feeding among mothers in Kisenyi village – Rubaga division
Kampala

Interdiction

Respondent no.....

My name is Ubah Mohamed, a student at a international health science university (IHSU). I am carrying out research on factors influencing exclusive breast feeding among mothers in Kisenyi village – Rubaga division Kampala. You have being chosen to participate in this study, and information you will provide will be used to improve health status of children and mothers. The information gathered will be confidential in Uganda. Your name will not be required in the questionnaire. The interview is all about volunteering and you have the right to withdraw from the study ant time you feel like. During the interview you will be asked a series of questions about socio-demographic, health service and maternal factors that might influence breastfeeding status.

Consent form

I Here by affirm that have read the information stated above and I have understood the purpose of this study; therefore I accept to participate in it by providing the required information.

Respondent Signature -----

Date -----

Interviewer’s signature-----

Date -----

Instructions: circle as appropriate

SECTION A; SOCIO DEMOGRAPHIC FACTORS

- What is your age?
 - 15 - 25
 - 26 – 35
 - 36 and above
- What is your religion?
 - Christian
 - Moslem
 - Buddhist
 - Other.....
- What is your tribe?
 - Somali
 - Ugandan
 - Indian
 - Others
- What is your education level?
 - None
 - Primary
 - Secondary
 - Tertiary

What is your occupation?

- Housewife
- Business woman
- Civil servant
- Others -----

A). Do you get breast feeding break from your workplace to go and breastfeed your child?

- 1. Yes
- 2. No

What is your marital status?

- Married
- Single
- Divorced/ separated
- Other specify.....

Age of the child

- 1-4 months
- 4-6 months
- 6 months and above

Sex of the child

- Female
- male

How many children do you have? -----

Who supports you for the housework you when breast feeding our baby?

- Husband
- friends
- Relatives
- House girl/boy
- None

Do you get help for breastfeeding from home?

- Yes
- b) No

. If yes from whom?

- Husband
- Fellow mother
- Friends
- Family doctor

Do you think you're cultural/religion practices affect exclusive breast feeding and its early initiation?

- Yes
- b) No

if yes please mention three ways it does affect breast feeding?

- -----
- -----

SECTIONB: PROPORTION OF MOTHER WHO BREASTFEED THEIR CHILDREN IN KISENYI

A). Do you breast feed your baby?

1. Yes

2. No

B). How many times do you breast feed your child in a day?

- 8-12 times
- 8-6 times
- 0-6 times and above

For how long should each breastfeed last?

- a.30-45 minutes
- b.20-30 minutes
- 10- 20 minutes
- < 10 minutes

For how many months is breastfeeding recommended?

- 24 months
- 12 – 24 months
- 6- 12 months
- < 6 months

How long do you plan to continue to feed your baby only breast milk?

- a) 0-2 month
- b) 3-4 months
- c) 4-6 months
- d) > 6months
- e) No breast feeding

14. Mention two ways you use to know when your baby is ready to breastfeed?

- -----
- -----

13. How will you know your baby is getting enough milk?

- Satisfaction and constant of baby after feeding
- Urine and bowel movement
- Your breast feel soften after feeding the baby
- Steady weight gain after first week of age
- Others

12. C). Which of the following is your feeding practice?

- Breast milk only
- Breast milk with other feeds
- other feeds only

13. If you choice to breast feed please state two reasons for doing so?

- -----
- -----

14. If you choice not to breast feed please state two reasons for doing so?

- -----
- -----

SECTION C; HEALTH SERVICE FACTORS

A). Did you attend breastfeeding antenatal classes during your pregnant?

- Yes
- b) No

B). Have you receive any breast feeding education during Antenatal care?

- Yes
- b) No

A). Where were you delivering from?

- Home
- Health facility
- Neighboring traditional birth attendance
- Others specify -----

Do you your midwife encourage you to breastfeed and inform you about benefits of breastfeeding?

- Yes
- b) No

Please mention three benefits of breastfeeding your baby?

- -----
- -----

b). What type of delivery?

- Normal virginal delivery
- Caesarian section
- Instrumental/assisted

Have you been breastfeeding your child from the first day itself?

- Yes
- b) No

Which of the following post natal services have you attended?

- Parenting education
- Immunization
- Family planning
- Nutrition and child growth monitoring

A).have you ever received any health education material or counseling on breastfeeding?

- Yes
- b) No

B). If yes, from whom?

- Nurses
- midwives
- physician
- health educator
- friends

Section d; maternal health status:

. A).Have you suffered from any illness recently

- Yes
- b) No

b). If yes has it affected the baby's breast feeding pattern?

- Yes
- b) No

Has your child suffered from any illness recently?

- Yes
- b) No

d). if yes has it affected the breast feeding of the child?

- Yes
- b) No

• Do you have any breastfeeding difficulties in establishing?

- a) Yes
- b) No

g) If yes have you had an opportunity to discuss these difficulties with health provider?

What kind of food do you eat during our breastfeeding period?

- carbon hydrates only
- proteins only
- carbon hydrates and protein
- adequate and balanced diet

What kind of fluids do you drink during your breastfeeding period?

- more juice
- more tea and coffee
- borage
- Only water
- Milk

What do you think can be done in order to improve on practice of exclusive breast feeding?
