

**KAMPALA INTERNATIONAL UNIVERSITY WESTERN CAMPUS**

**A STUDY ON FACTORS CONTRIBUTING TO PREVALENCE OF  
MALNUTRITION OF CHILDREN LESS THAN FIVE YEARS OF AGE IN  
KYABUGIMBI SUB-COUNTY, BUSHENYI DISTRICT**

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**A RESEARCH PROPOSAL SUBMITTED TO FACULTY OF CLINICAL MEDICINE AND  
DENTISTRY, IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD  
OF BACHELOR OF MEDICINE AND BACHELOR OF SURGERY AT KAMPALA  
INTERNATIONAL UNIVERSITY WESTERN CAMPUS**

**OCTOBER 2014**

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## **DECLARATION**

I, **SULAIMAN NURUDEEN**, registration number **BMS/0061/112/DF** hereby declare that this research report is the outcome of my independent work. It has not been awarded at any institutional level or produced by any other person or persons to the best of my knowledge.

**Signature .....**

**Date ..... / ..... / 2014**

## **SUPERVISOR'S APPROVAL**

This report entitled a study on factors contributing to the prevalence of malnutrition of children less than five years of age in Kyabugimbi sub-county, Bushenyi District, was done under my supervision and has been submitted to the Faculty of clinical medicine and dentistry for examination with my approval as the supervisor

SIGNATURE: .....

DATE ...../...../ 2014

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## **DEDICATION**

This work is dedicated to all the children of the world.

## **ACKNOWLEDGEMENT**

Firstly, I want to thank the Almighty God for His grace and mercy for seeing me this far and keeping me alive. It is by His grace that I am who I am.

Next, I want to thank my parents for their love and support all through my life. Without you, all this could not have been possible. I pray to the almighty to grant you long life to reap the fruit of your labor-ameen.

I would also like to thank Professor Begumya Ruhonoka for accepting to be my supervisor and also for guiding me through my research and making all the necessary corrections.

I would like to thank all my friends for their support.

I would also like to thank all staff and students of Kampala international university.

## **LIST OF ABBREVIATIONS**

- W.H.O.	-	World Health Organization
- M.O.H.	-	Ministry of Health
- P.E.M.	-	Protein-energy Malnutrition
-UNICEF	-	United Nations International Education Fund

## **ABSTRACT**

This research study is aimed at revealing the possible factors related to the etiology of malnutrition of children less than five years of age in Kyabugimbi sub-county, Bushenyi district. This research will involve reading through available literature on malnutrition and collection of baseline information on the study area through focused interviews and questionnaire.

As part of the research study, a lot of information and knowledge is required on malnutrition as a subject whereby the global and national situations are analyzed on the effects of malnutrition to young children from available resources.

In order to facilitate the success of the study a budget totaling 413,800 Ugx is proposed for the study.

## CHAPTER ONE 1.0

### INTRODUCTION 1.1

#### BACKGROUND INFORMATION OF THE PROBLEM.

Malnutrition can be defined as the cellular imbalance between the supply of nutrients and energy and the bodies demand for them to ensure normal growth, maintenance of body functions -*W.H.O. report 2000*. Most causes of malnutrition are preventable and more than 80% of childhood infections are associated with malnutrition. Early identification of children at risk is crucial in averting mortality and management of malnutrition involves designing a comprehensive treatment, counseling and follow-up plan. The following are associated with increased the risk of developing malnutrition: Non-breastfed infants /early weaning, orphaned infants, frequent deliveries, large family size, refugees and children in war-torn areas, natural disasters, children born to teenage mothers or uneducated mothers, alcoholic parents especially mothers, HIV-infected children and those with frequent infections e.g. diarrhea, malaria etc. Most statements about World nutrition problems indicate that the fundamental causes of malnutrition are insufficient supply of necessary foods and uneven distribution of food that is available coupled with ignorance- *Michael C.Latham,1970, Human nutrition in Tropical Africa*. Malnutrition can either be under nutrition (wasting) or over nutrition (obesity). The risk of over nutrition is also increased by being more than of 20% overweight, consuming a diet heavy in fat and salt and taking high doses of nicotinic acid ( Niacin), vitamin B6, vitamin A and iron or other trace minerals. Some children with malnutrition recover completely while others have many health problems throughout their life including mental retardation and inability to absorb nutrients through the intestinal tract *M.O.H. report 2005*. Robbed off of their mental as well as physical potential, malnourished children who live past their childhood, face diminished future. They will become adults with lower physical and intellectual abilities, lower level of productivity and higher levels of chronic illness and disability, often in societies with little economic capacity for even minimal therapeutic and rehabilitative measures. Malnutrition is largely a silent and invisible emergency exacting a terrible toll on children and their families. This is the result of multiple causes including:

Common and preventable infections, inadequate care, unsafe water and lack of food. At its most basic level, malnutrition is a consequence of diseases and inadequate dietary intake, which usually occur in a debilitating and often lethal combination. But many more elements like social, political, economic and cultural are involved beyond physiological causes. Also discrimination and violence against women are contributing factors to malnutrition-Bellamy 1998.

## **1.2 PROBLEM STATEMENT.**

The course of all forms of malnutrition from Marasmus to obesity and mixed form of Marasmic kwashiorkor is always complex, and this is certainly so with malnutrition in young children in developing tropical regions. This understanding is fundamental because in different parts of the World, the same type of malnutrition may occur with different causative factors being responsible. It is necessary to know the detailed causes of malnutrition in a particular region because without this knowledge, it is not possible to plan and to carry out a preventative program relevant to local circumstances. Although the World produces enough food to feed its population, an estimated 800 million people are chronically malnourished while 1.2 million suffer from food shortages and more than 2 billion suffer from micro-nutrients deficiency related disease and disorders. W.H.O states that 150 million children under five years in developing countries are malnourished and an additional 200 million have stunted growth. About 183 million children weigh less than they should for their age. In one study children who were severally overweight were found to be eight (8) times more likely to die within the following year than children of normal weight of their age. It is also estimated that 51% of the children under age of five years in developing countries are anemic. Over 20% of children in United States live in poverty while in United Kingdom, the children in poor families face health risks like anemia, low birth weight, premature birth, dental diseases, diabetes, obesity and hypertension etc. In Africa, one (1) out of every three (3) children is underweight and in several countries of the continent, the nutritional status of children is worsening. In Uganda, nutritional status of children less than five years has deteriorated with 34% estimated to be stunted and 25% underweight in 1995. The most pressing form of malnutrition in Uganda is P.E.M, which

largely affect infants. Malnutrition rates are highest in the Northern, Western, Eastern, and Central regions. It is a surprise that Western region is among those regions with a high malnutrition index despite the fact it is the region which produces a greater number of food produce for the country. Stunting was highest among the 12-23 months of age groups (44.8%). A statistically significance difference was found between boys and girls with regard to stunting. These results clearly show that malnutrition is still a serious public Health problem in Uganda and require great attention. Some districts are perennially affected by food shortages and some of the intervention measures could be- according to United Press International report for E.A.O. Food and agricultural Organization, it says that the Government should increase agriculture production and reduce hunger and poverty through economic growth , investment in agriculture ,political stability, internal peace, law systems, rural infrastructure , better education for children and improving the situation of women, education wise and economically. Breast – feeding a baby for at least six (6) months is considered the best way to prevent early childhood malnutrition.1.3

### **1.3 STUDY JUSTIFICATION**

The need to carry out the study was due to prevalence of malnutrition among the under five years of age children despite the efforts made to prevent and control it by the Governments. In the study area alone, deaths arising from malnutrition related increased. Prevalence rate is 8%.Study may assist the Government, Local Non- Governmental and other interested stakeholders in formulation of intervention measures on hunger and poverty reduction and health education strategies pertaining to nutritional problems in the study area. Despite the fact, that climatic conditions are conducive for growth of a variety of food crops and at high rate of income from matooke farming , still malnutrition related problems are prevalent in the area. The study will serve as a partial fulfillment for the award of a Bachelor of Medicine and Bachelor of Surgery.

### **1.4 BROAD OBJECTIVE.**

To determine factors contributing to malnutrition among children less than five years of age in Kyabugimbi sub-county, Bushenyi district.

## **1.5 MAIN STUDY VARIABLE.**

1. Social demographic information
2. Weaning age
3. Traditional belief and practices
4. Locally available foods
5. Community knowledge of malnutrition

## **1.6 INDEPENDENT VARIABLES**

1. Tribe
2. Level of education
3. Religion
4. Sex

## **1.7 SPECIFIC OBJECTIVES**

1. To determine the social, Economic and Demographic Information of the Respondents.
2. To establish the traditional belief, various pattern of breastfeeding, and practice that influence feeding of children less than five years of age.
3. To establish the availability of foods and the community knowledge of malnutrition as a problem to children before the weaning age.

## **1.8 RESEARCH QUESTIONS**

What possible factors contribute to causes of malnutrition in children less than five (5) years of age in Kyabugimbi sub-county, Bushenyi District?

## **CHAPTER TWO 2.0: LITERATURE REVIEW.**

Malnutrition has been long recognized as a consequence of poverty but also affects some industrialized countries with widening income disparities coupled with reduction in social protection- *UNICEF- report 1998*. In most regions of the World, there are large numbers of different ethnic, religious, dietary and social economic sub groups all with their nutritional problems. Our Foods choices are influenced by our culture, religion, family background, moral beliefs, and availability of food, food intolerance and allergies and cost of food. Seventy five percent (75%) of the world poor and hungry people live in rural areas in poor countries. Hunger and malnutrition kill six (6) million children every year, many of these children die from handful of treatable infections including diarrhea, pneumonia, malaria and measles. They would have survived if their body and immune systems had not been weaned by hunger and malnutrition. Good nutrition leads to immune system, increases school attendance, reduces maternal mortality, empowers women and lowers the incidence of diseases. Malnutrition alters people's behavior, weakens bodies and immune system. Some 2.2 million children die from diarrhea and dehydration as a result of persistent diarrhea that often is aggravated by malnutrition. Anemia is also a contributing a factor, if not a principal cause of all post partum conditions in Africa and Asia, accounting for 20- 23%. The issue goes beyond child survival, motivation, and morbidity. Malnutrition dull motivation and curiosity and reduces play and exploratory activities. These effects in turn, impair mental and cognitive development by reducing the amount of interaction children have, both with their environment and with those who provide care. In Infancy and early childhood, iron deficiency anemia can delay psychomotor development and impair cognitive difficulties in maintaining attention and impairs visual stimuli and good school achievements. Low birth weight have IQ's that average 5 points below those of healthy children while children who were breast fed have IQ's that are 8 points lower than the breastfed children- *UNICEF: report 1998.2.1*

## **EARLY CHILDHOOD DEVELOPMENT.**

Every child is born with an immense potentiality to the society. This can be achieved by ensuring care and attention to the children starting from conception throughout childhood and most importantly during the first five (5) years of life. This is the most important time for acquiring maturity and proper learning. During this period, children will achieve intelligence, personality, morals and can be socially acceptable persons. Without proper growth and development of brain, good development of a child cannot be expected. Therefore mother and child care must be established with adequate nutrition and health care as it poses a significance impact on the development of a child in ensuring brain development and most of which occurs during mid- gestation to first three(3) years of life. So adequate nutrition and care of pregnant mothers in respect of intake of iodized salt , prevention and correction of anemia, exclusive breastfeeding for the first 6(six) months of life and ideal complementary feeding afterwards can ensure optimum brain growth and ultimately child development. If a baby becomes malnourished, it's brain become smaller because of reduced dendritic growth, reduced myelination and reduced production of grail cells- *Abid Hussain Mollar, 2005, Early child development*

### **2.2 GOOD NUTRITION:**

Good nutrition is the cornerstone, the very foundation upon which sound social economic development is achieved. It is the best investments the Governments can make because the greater the balanced diet their population have access to, the better country's gross domestic product. It has been universally recognized that good nutrition starts while the baby is still in its mother's womb. Malnutrition suffered in-utero can lead to predisposition to non-communicable diseases like hypertension, coronary heart disease and diabetes in later life- *Curtis Abraham, 2005, Daily Nation*. Under nutrition is characterized by the inadequate supply of breast milk or early cessation of breastfeeding or inadequate supply of alternative foods suitable for the child. Over nutrition is a problem of eating too much of food whose obvious features

are increased weight and fatness leading to obesity. In Africa obesity is considered to add prestige to an individual. Over feeding of infants and young children may lead to production or increased number of fat cells in the body which may predispose the individual to obesity- *Michael C.Latham ,1970, Human Nutrition in Tropical Africa.*

### **2.3 CAUSES OF MALNUTRITION**

At its most basic level, malnutrition is a consequence of diseases and inadequate dietary intake, which usually occur in a deliberating and often lethal combination. But many more elements like social, political, economic, and cultural are involved beyond physical elements. Discrimination and violence against women are also major causes of malnutrition in our society. Women are the principal providers of nourishment during the most crucial periods of children development, but the caring practices vital to children 's nutrition well being invariably suffer when the division of labor and resources in the family and communities favor men and, women and girls face discrimination in education and employment. Lack of access to good education and correct information are also causes of malnutrition. Malnutrition takes a variety of forms that often appear in combination and contribute to each other, such as P.E.M, Iodine deficiency disorder and vitamin A, to name just a few. Too much overfeeding will also be on the receiving end as one will be diabetic.

### **2.4 PREVENTION OF MALNUTRITION**

Malnutrition perpetuates poverty, blunts the intellect and saps the productivity of one it touches. The quality of food and feeding habits play important roles in health outcomes. A family's nutrition security depends not only on wholesome food but also food availability, preparation and feeding of micro nutrients, basic health services, safe water supply, sanitation and good hygiene. Breast-feeding at birth, exclusive breast feeding from birth to six months and continued for 2 years or longer with age appropriate

complementary feeding to sustain growth and development is of utmost importance. Reducing malnutrition should be urgent global priority; inaction is scandalous affront to the human right to survival.

## **2.5 SOME OF THE PRACTICAL SOLUTIONS TO NUTRITION PROBLEMS:**

1. Improved nutritional knowledge through nutrition education.
2. Increased and improved food production to ensure sufficient supply during all seasons.
3. Better agricultural methods will provide a wide range of foods required by the body.
4. Improved food distribution.
5. Better methods of food storage.
6. Increased awareness about nutrition and its devastating effects on individuals and the country's economy.

## **CHAPTER THREE**

## **CHAPTER FOUR: STUDY METHODOLOGY**

### **3.1 STUDY DESIGN**

A cross sectional descriptive study was done. Non probability convenient sampling techniques and structured questionnaire used to collect relevant information. However, the questionnaire was administered to the target population in such a way that it helped in collecting adequate information. The collected data was used to describe the data i.e. mean and standard deviation for numeric variables and frequencies along with percentages for categorical variables.

### **3.2 STUDY AREA**

Kyabugimbi town was purposely selected for convenience of the study. It has a total population of about 20,058 persons and the Health centre four (4) hospital was used as the sub –location from where the research was carried out.

### **3.3 BACKGROUND INFORMATION OF THE STUDY AREA**

#### **-position and size**

Kyabugimbi sub-county is located in Bushenyi district in Western Uganda. It is composed of eight (8) parishes and 98 villages. It lies between latitude -0.473, longitude 30.269 and at an altitude of 1707.

#### **-population**

Kyabugimbi has a total population of about 20,058 persons distributed within many households. There are about 60 under five years of age in the district. The study in this case was of children of below five years of age and their parents or guardians as their respondents.

#### **-geographical and climatic conditions**

Climatic conditions are moderate and the soils are reasonably fertile.

#### **-agricultural activities**

The main cash crop normally grown is coffee while food crops include matooke, sweet potato, yellow bananas and vegetables.

#### **-health facilities**

There are ten (10) Health centre 2 (HCII) hospitals, Three (3) Health centre (HCIII) hospitals and One Health centre (IV) hospitals in the sub-county.

### **-water resources**

The District has the following sources of water: Taps, Wells, Protected springs, unprotected springs and Roof catchments.

### **3.4 SAMPLE SIZE DETERMINATION**

The sample size was determined using the D.W. Morgan table (1970). from the specified study population. The population of under five was 60 and the sample size is 52.

Table for Determining Sample Size for a Given Population									
N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	246
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	351
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	191	1200	291	6000	361
45	40	180	118	400	196	1300	297	7000	364
50	44	190	123	420	201	1400	302	8000	367
55	48	200	127	440	205	1500	306	9000	368
60	52	210	132	460	210	1600	310	10000	373
65	56	220	136	480	214	1700	313	15000	375
70	59	230	140	500	217	1800	317	20000	377
75	63	240	144	550	225	1900	320	30000	379
80	66	250	148	600	234	2000	322	40000	380
85	70	260	152	650	242	2200	327	50000	381
90	73	270	155	700	248	2400	331	75000	382
95	76	270	159	750	256	2600	335	100000	384

Note: "N" is population size  
"S" is sample size.

Source: Krejcie & Morgan, 1970

### **3.5 INCLUSION CRITERIA**

All households with children less than five years of age. Parents or caretakers of children aged 15 years and above and of sound mind who have resided there for more than six months.

### **3.6 EXCLUSION CRITERIA**

All households without children less than five years of age. Those who decline to participate in the study.

### **3.7 STUDY TOOLS/ INSTRUMENTS**

Structured questionnaires, Observing checklist and writhing materials (pencils & pens)

### **3.8 DATA COLLECTION PROCEDURE**

Questionnaires were used to collect data. The interviewer introduced himself and explained the objectives of the study to the participants and obtained a written consent from the respondents to voluntarily participate in the study.

### **3.9 DATA PROCESSING AND ANALYSIS**

This was done in the neighboring Bushenyi district. The data collected from the questionnaires was analyzed by use of tallying and excel spread sheets. Data presentation was done using simple percentage methods, chart and tables.

### **3.10 ETHINICAL CONSIDERATION**

Community leaders, local elders and respondents were assured of confidentiality of the information obtained.

### **3.11 STUDY LIMITATION**

Too much rain

Time was short

Financial constraints

Language barrier

I used 50 as sample size instead of 52

### **3.12 PLANS FOR DISSEMINATION OF DATA**

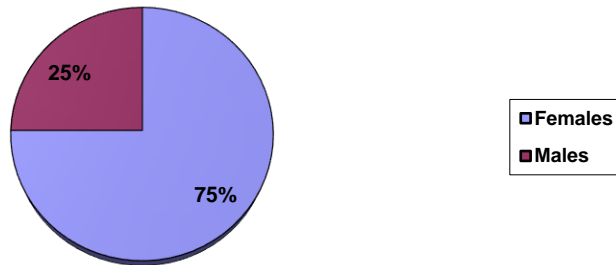
Copies of the research report were submitted to the faculty of clinical medicine and dentistry of Kampala International University (KIU) and the E-library of KIU western campus.

## CHAPTER 4

### 4.0 STUDY FINDINGS

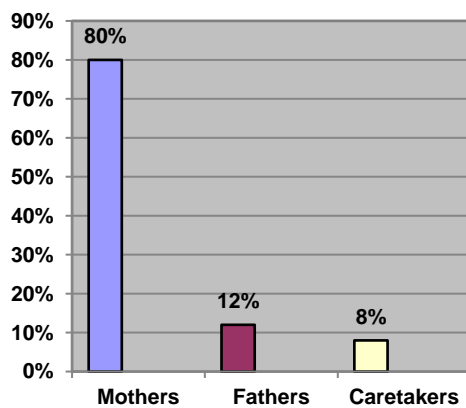
#### 4.1 SOCIAL DEMOGRAPHIC INFORMATION

**FIGURE 4.1: SEX OF RESPONDENTS**



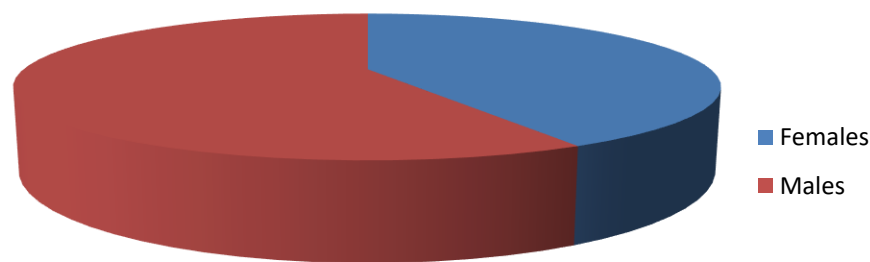
Majority (75%) of the respondents were females while the rest of the respondents (25%) were males

**FIGURE 4.2: RESPONDENTS RELATIONSHIP WITH THE CHILD.**



Majority (80%) of the respondent were mothers, 12% were fathers to the children while caretakers were only 8%

**Figure 4.3: SEX OF THE CHILD**



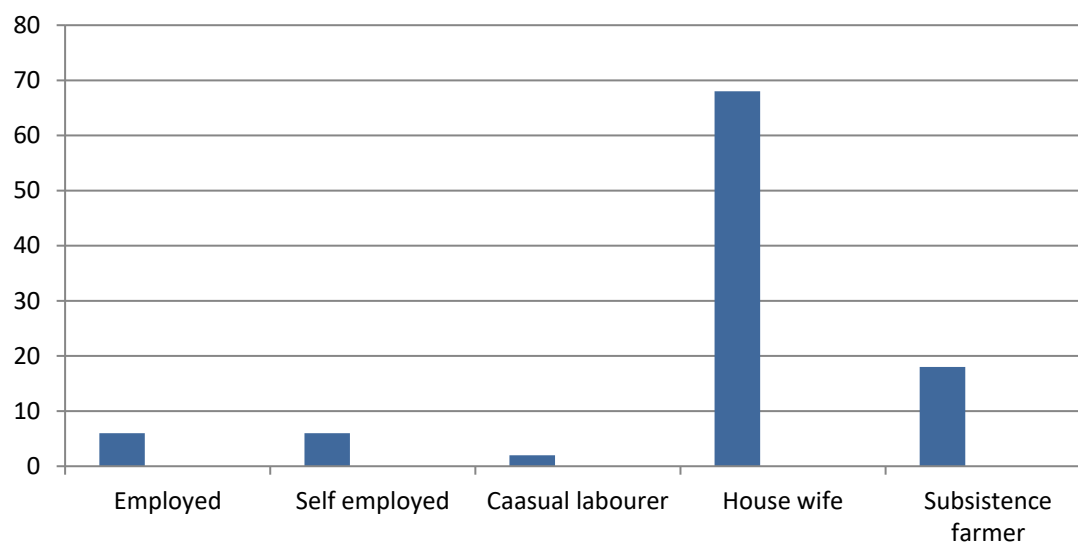
Majority (58%) of the children were males while 42% were female.

**Figure 4.4: AGE GROUP OF THECHILD IN MONTHS**



Majority (32%) of the children were in age group (0-12) months while 8% of the children were in age group (49-60) months.

**Figure 4.5: OCCUPATION OF THE RESPONDENTS**



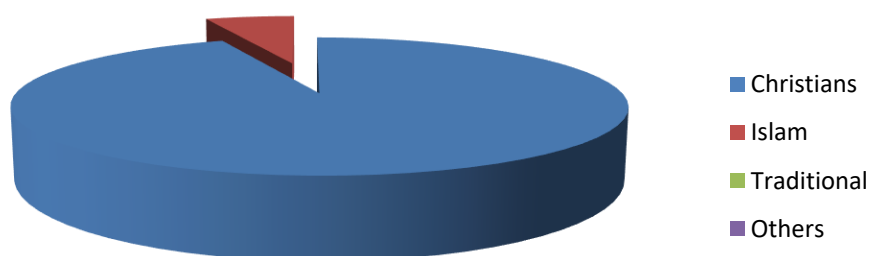
Majority (68%) of the respondents were housewives, 18% were subsistence farmers and 6% were self employed while only 2% were casual laborers.

**Table 4.1: AGE GROUP OF THE RESPONDENTS IN YEARS**

AGE GROUP(YEARS)	TOTAL	NO. PERCENTAGES (%)
10-20	12	24%
21-30	23	46%
31-40	13	26%
41-50	2	4%
50 and Above	0	0%
TOTAL	50	100%

Majorities (46%) were between 21-30 years, 26% were between 31-40 years and 24% were between 10-20 years while only 4% were in age group 41-50 years.

**Figure 4.6: RELIGION OF THE RESPONDENTS**

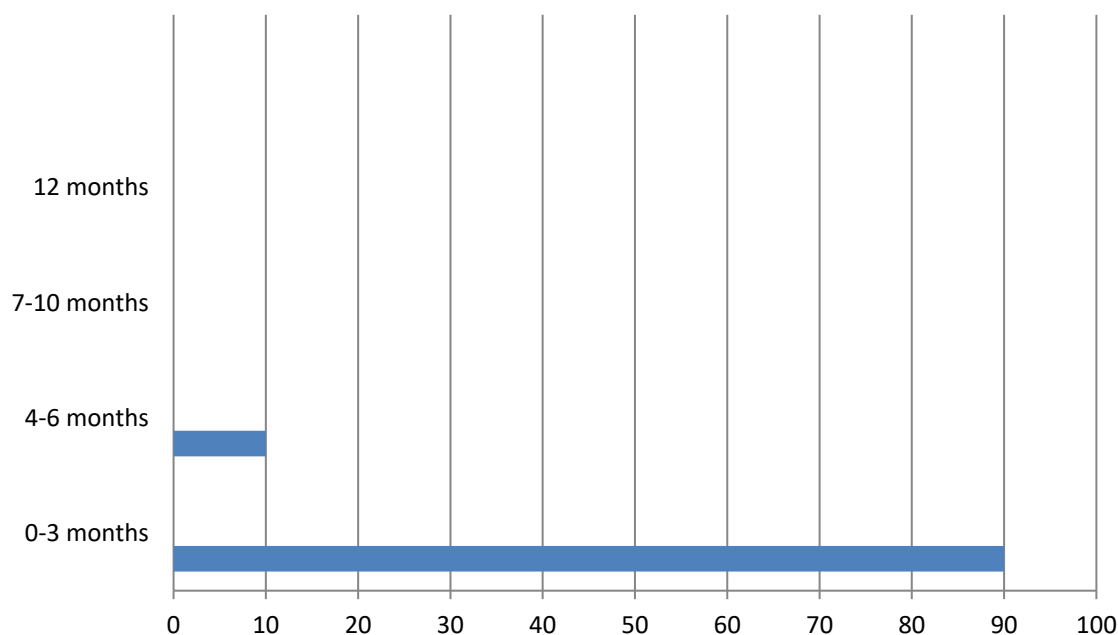


Majority (94%) of the respondents were Christians while 6% were Muslims

**Table 4.2: EDUCATION LEVEL ATTAINED BY RESPONDENTS**

EDUCATIONAL LEVEL	NO. OF RESPONDENTS	PERCENTAGE (%)
College and above	3	6%
Secondary school	23	46%
Primary school	15	30%
Never Gone To School	9	18%
TOTAL	50	100%

Majority (46%) of the respondents had attained secondary school, 30% attended primary school, 18% never had any formal education while only 6% had attended college and above education.

**Figure 4.7: WEANING AGE (IN MONTHS)**

Majority (90%) of the children were weaned at the age of 0-3 months compared to 10% who were weaned at the age of 4-6 months.

**Table 4.3: KIND OF FOOD GIVEN TO THE CHILD DURING THE PREVIOUS MEAL.**

KIND OF FOOD	NO. OF FREQUENCY	PERCENTAGE (%)
MASHED BANANAS (MATOOKE)	28	39%
FRUIT JUICE	4	6%
BEANS	18	25%
PORRIDGE (OBUSHERA)	22	30%
CANNED FOODS	0	0%
OTHERS	0	0%

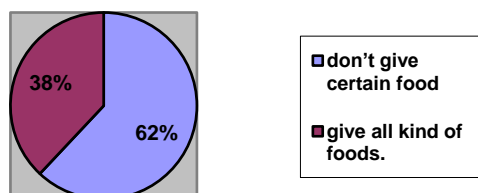
Majority (39%) of the respondents gave mashed banana (matooke), 30% gave porridge, 25% gave beans, while 6% gave fruit juice.

**Figure 4.8: NUMBER OF TIMES THE CHILD IS FED DURING THE DAY UP TO THE TIME OF GOING TO SLEEP AT NIGHT.**



Majority (66%) of the respondent fed their children three times in a day, 16% fed their children twice, 10% fed their children once while 8% fed their children about four times a day.

**Figure 4.9: TRADITIONAL BELIEF AND PRACTICES: WHETHER THERE ARE FOODS WHICH ARE NOT GIVEN TO CHILDREN UNDER FIVE YEARS.**



Majority of the respondents (62%) do not give certain foods while 38% give all kind of foods.

**Table 4.4: TYPES OF FOODS WHICH ARE NOT GIVEN TO CHILDREN WHO ARE UNDER FIVE YEARS OF AGE.**

TYPES OF FOODS	NO. OF FREQUENCES	PERCENTAGES (%)
EGGS	10	32%
BEANS	2	6%
MEAT	13	43%
AVOCADO	2	6%
RIPE BANANAS	1	3%
VEGETABLES	0	0%
MAIZE	3	10%
TOTAL	31	100%

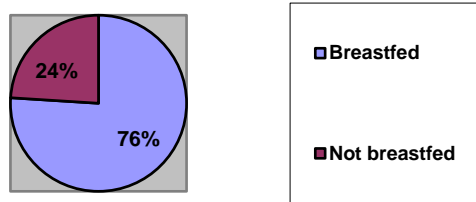
Majority (43%) of the respondents did not feed children with meat, 32% did not feed their children with eggs, 6% did not feed their children with beans while 3% did not feed them with ripe bananas.

**Table 4.5: REASONS FOR NOT GIVING CERTAIN FOODS TO THE UNDER FIVE YEARS CHILDREN.**

REASONS	FREQUENCY	PERCENTAGE
TABOOS	0	0%
FOOD IS EXPENSIVE	31	100%
NOT AVAILABLE	0	0%
OTHERS		0%

All of the respondents (100%) of the respondents did not give certain foods because they could not afford it.

**Figure 4.10: BREAST FEEDING: WHETHER THE CHILD WAS BREASTFED OR NOT**



Majority (76%) of the children were breastfed while 24% were not breastfed.

**Table 4.6: REASONS FOR NOT BREASTFEEDING**

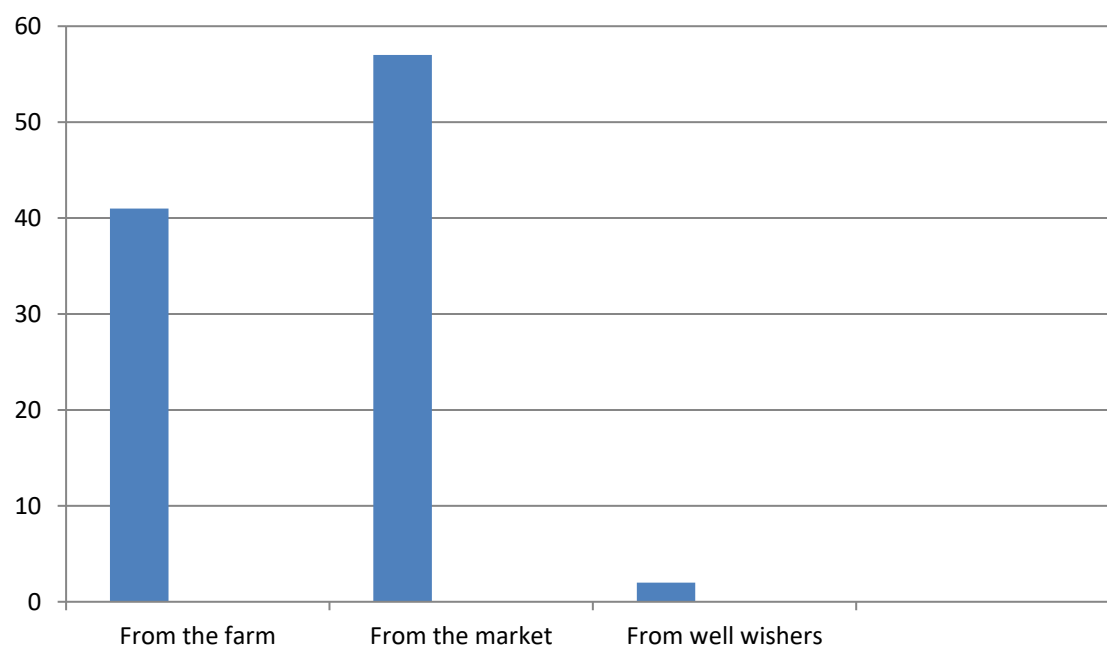
REASONS	FREQUENCY	PERCENTAGES (%)
Lack of time	0	0%
Child can feed on other foods	7	58%
Maternal health problems	0	0%
Child refusal to suck	3	25%
Mother is pregnant	2	17%
Total	12	100%

Majority of the children (58%) were currently not being breastfed because they could feed on other foods, 25% because they refused to suckle and 17% because the mother is carrying another pregnancy.

**Table 4.7: DURATION OF BREASTFEEDING**

TIME IN MONTHS	NO. OF RESPONDENTS	PERCENTAGE %
0-3	0	5 %
0-6	1	2%
0-24	1	22%
0-36	11	74%
0-48	37	2%
TOTAL	50	100 %

Majority of the children (74%) were fed for about 36 months, 22% for about 24 months, 5% for about 3 months, 2% for about 48 months while only 2% were fed for about 3 months.

**Figure 4.11: SOURCES OF FOODS IN THE COMMUNITY**

Majority of the respondents (57%) buy food from the market while 41% get food from their farms, while 2% get their food from well-wishers.

**Table 4.8: TYPES OF FOOD ITEMS THE RESPONDENTS WERE CURRENTLY HAVING IN THEIR HOUSES.**

TYPES OF FOOD	FREQUENCY	PERCENTAGES %
Vegetables	25	50%
Beans	10	20%
Bananas	50	100%
Potatoes	10	20%
Meat	0	0 %
Avocado	20	40%

All the respondents (100%) had bananas (matooke) at their homes, 50% had vegetables, 20% had beans and potatoes while none of the respondents had meat at home.

**Table 4.9: COMMUNITY KNOWLEDGE WHETHER KNOWS WHAT A BALANCED DIET IS.**

RESPONSE	NO.OF RESPONDENTS	PERCENTAGE ( %)
Knows	32	64%
Do not know	18	36 %
Total	50	100 %

64% of the respondents know what a balanced diet is while 36% do not know what a balanced diet is.

**Table 4.10: WHETHER THOSE WHO RESPONDED POSITIVELY ACTUALLY KNEW WHAT A BALANCED DIET IS.**

RESPONSES	FREQUENCIES	PERCENTAGES
Carbohydrates, vitamins and protein	12	37%
Vitamins	7	22%
Carbohydrates	5	16%
Protein	8	25%
Total	32	100%

Only 37 % of those who responded positively actually knew what a balanced diet is, 22% talked of vitamins, 16% carbohydrates and 25% protein.

**Table 4.11: WHETHER RESPONDENT KNOWS DISORDERS ASSOCIATED WITH LACK OF FOOD.**

RESPONSE	NO. OF RESPONDENTS	PERCENTAGE %
KNOWS	42	84 %
DO NOT KNOW	8	16%
TOTAL	50	100%

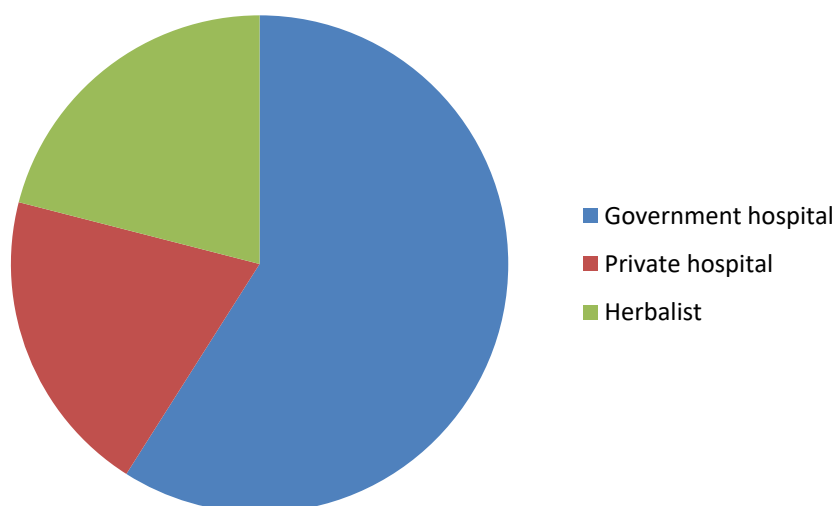
Majority (84%) knew of disorders while 16% did not know of any disorder.

**Table 4.12: DISORDERS THAT ARE KNOWN BY RESPONDENTS**

DISORDER	FREQUENCY	PERCENTAGES %
Kwashiorkor	30	71%
Stunted growth	5	12%
Marasmus	5	12%
Scurvy	2	5%
Others	0	0%
TOTAL	42	100%

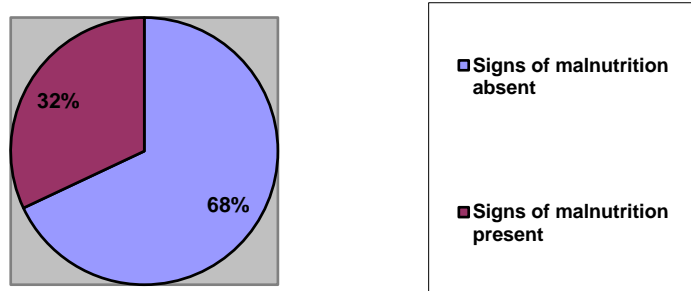
Majority of the respondents (71%) knew of kwashiorkor while 5% knew of scurvy and 12% each knew of stunted growth and marasmus.

**Figure 4.12: WHERE YOU TAKE YOUR FAMILY MEMBERS WHEN SICK**



Majority of the respondents (59%) take their family members to government hospitals, 20% go to private facilities and 21% go to traditional doctors.

**Figure 4.13: PRESENCE OF SIGNS OF MALNUTRITION**



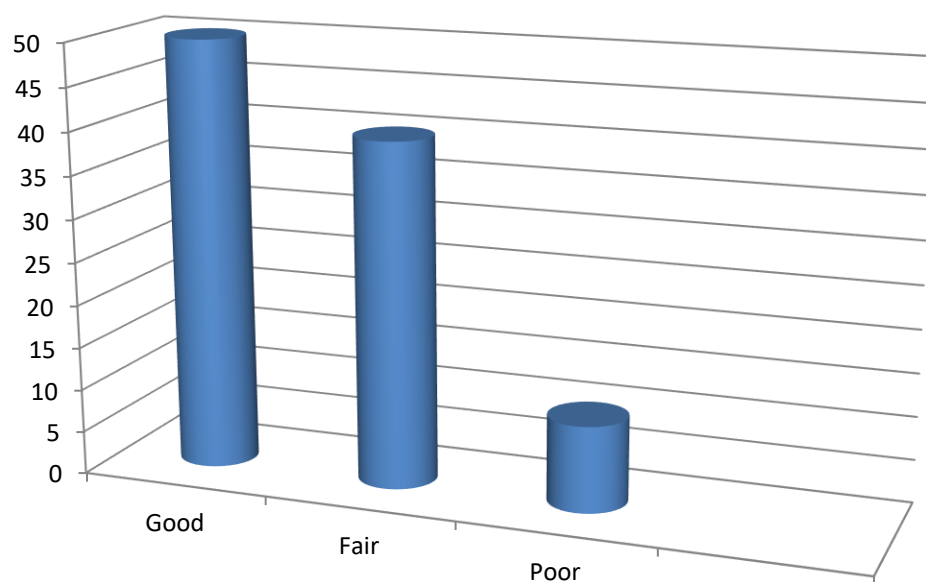
Majority (68%) of children had no signs of malnutrition while 32% had signs of malnutrition.

**Table 4.13: FORMS OF MALNUTRITION NOTICED**

FORMS OF MALNUTRITION	FREQUENCY	PERCENTAGE %
Kwashiorkor	10	29%
Marasmus	7	21%
Stunted growth	15	44%
Others- Anemia	2	6%
-Scurvy	0	0%
-Obesity	0	0%
Total	34	100%

Majority (44%) of the children had stunted growth, 29% had kwashiorkor, 21% had marasmus while 6% had anemia.

**Figure 4.14: GENERAL CONDITION OF THE CHILD**



Majority of the children (50%) were in a state of good general condition, 40% were in fair general condition while 10% were in poor general condition.

**Table 4.14: PERSONAL CLEANLINESS OF CHILDREN UNDER FIVE YEARS**

STATE OF CLEANLINESS	NO OF CHILDREN	PERCENTAGES
CLEAN	23	46%
DIRTY	27	54%
TOTAL	50	100%

Majority of the children (54%) of the children were dirty looking while 46% were clean looking.

## **CHAPTER FIVE**

### **5.0 DISCUSSION**

#### **SOCIAL- DEMOGRAPHIC DATA**

The studies revealed that majority of the respondents were females. This shows that majority of the children were under the care of female parents/ caretakers. Majority (80%) of the respondents were mothers to the children while 32% of the children under the age of five years featured in the age group 0-12 months, this indicates that they require too much care from the parents. Majority of the respondents (68%) were housewives and while 78% were subsistence farmers and this shows the added challenge to the mothers and it is also evident that females were engaged in some economic activities and were not merely housewives. Majority (46%) of respondents were in the group of 20 -30 years. This represents the most energetic and productive age group who are able to work and alleviate malnutrition in the community. In terms of education, majority (46%) of the respondents has attained education level up to secondary school, 30% have attained primary school, 6% attained college education while 18% did not have any formal education. This shows that the education level attained is little to make any development impact in the community and alleviate malnutrition and its consequences.

#### **WEANING AGE**

Majority (90%) of the respondents wean their children at the ages of between 0-3 months. this clearly indicates that weaning starts at a very early age , which is contrary to the government policy , which gives a guideline of 4-6 months.

Majority (39 %) of the respondents had given mashed bananas (matooke) to the children during the previous meal and 30% gave porridge. If no other food were added to the above, then that does not add up to a balanced meal and predisposes the child to malnutrition.

Majority (66%) of the respondents fed their children three times daily, 16% fed their children at least twice daily and only 10% fed their children once a day. This shows that majority of the children had regular and adequate meals in terms of quantity.

#### **TRADITIONAL BELIEF AND PRACTICES.**

It evidenced the there are no traditional beliefs and practices that prohibit the Consumption of certain foods. However some food items (e.g. meat, eggs, beans etc) were not given to children under five years of age because of financial constraints. This ends up making denying the children a complete and balanced diet when taking their meals hence promoting malnutrition.

#### **BREAST-FEEDING PATTERNS.**

Majority (76%) of the children were breastfed while 24% of the children were not breastfed due to factors that include the ability of the child to feed on other foods, refusal to suck or the mother is carrying another pregnancy. This indicates that the breastfeeding patterns are observed along with consumption of other foods. Majority (74%) Respondents breastfeed their children for a duration of at least 36 months and this is good as is consistent with W.H.O. guidelines where breastfeeding is advocated for a minimum of at least 6 months.

#### **AVAILABLE FOODS IN THE COMMUNITY**

Majority of the respondents (57%) buy food from the market while (41%) cultivate their own food food in their farms. This goes to show that majority of the children may get malnourished because of inability of the caregivers to source for food because majority of them are gainfully employed. It also indicates that

there is little minimal cultivation of food crops and hence dependence on supply from them other areas, this makes food expensive as some will go without food as evidenced by about 8% who had no food in their houses and about 14% of the respondents experienced difficulties in feeding their families for the last two months

## **COMMUNITY KNOWLEDGE**

Majority (64%) of the respondents said that they know what a balanced diet is while 36% said that they don't know. Of those who claim to have a knowledge of what a balanced diet is, 63% actually did not know what a balanced diet is. This proves that there is little knowledge of what a balanced diet is all about and this therefore explains the reasons for prevalence of malnutrition in the community. A majority (84%) of the respondent knew some disorders related to lack of food: 71% mentioned Kwashiorkor, 51% scurvy and 12% each knew of stunted growth and marasmus. This shows that they know the disorder but do not know how to prevent them. Majority of the respondents (59%) takes their family members for treatments to government facilities offering health services while 20% go to private clinics while 13% go to a traditional doctor. This indicates lack of adequate health services provision by the government and also ignorance on the part of the respondents in attending a traditional doctors clinic and this goes a long way in contributing to the prevalence of malnutrition in the community.

## **OBSERVATION CHECKLIST**

Observation checklist revealed that 68% of children had one or more signs of Malnutrition. Stunted growth, Marasmus, Kwashiorkor and aneamia ( 44%, 21%, 29%, 6%) respectively were noticed, this is a clear proof about the prevalence of malnutrition in Kyabugimbi Sub county. Majority of the children (50%) were in a state of good nutritional status while 40% were in a state of fair general condition and 10% were in a state of poor general condition, this goes a long way in signaling the prevalence of malnutrition and its consequences.

## **5.2 CONCLUSION**

The study found out that the causes of malnutrition in Kyabugimbi sub-county are early weaning practices, poor breast feeding patterns, lack of balance diet, financial constraints on the part of the care-givers, lack of adequate food in the community and also lack of basic knowledge of what a balanced diet is. The studies also found that majority of the respondents were females and that most of them were housewives but engaged themselves in economic activities like farming. Majority of the respondents were in the age group of 20- 30 years, which is the most energetic and productive age group. Majority wean their children at the age of 4-6 months.

There are no traditional beliefs and practices that prohibit the consumption of foods although particular foods like beans, meat, eggs etc were not fed to children due to financial constraints and majority of the respondents bought food items from the market.

Study concluded that majority of the respondents do not know what a balanced diet is all about. It also found that majority knew some of the disorder that are related to lack of food e.g. kwashiorkor, marasmus stunted growth and scurvy. Study also revealed that majority of the children were dirty, a condition that predisposes them to contracting infections. Finally the study revealed that, there is prevalence of malnutrition in Kyabugimbi sub-county as signs and symptoms of various forms of Malnutrition could be seen among children aged less than five years.

## **5.3 RECOMMENDATIONS**

Government and other stakeholders of the community should initiate sustainable self-help projects aimed at empowering women economically. This will improve the health status of the community by providing

them with job opportunities and reduce their dependence on men for food and other necessities and this will invariably help to reduce malnutrition in the community. Ministry of health, through community health workers should stress the importance of breastfeeding and the most appropriate time to wean children.

Government should lay more emphasis on the education of women.

Ministry of health, through its workers should educate the community on good nutritional behaviors and what constitutes a balanced diet, how to observe general and personal hygiene.

Ministry of health should liaise with the ministry of agriculture so as to advice the community on better farming methods and the best type of crops that will provide necessary nutrients and help to reduce malnutrition in the community.

The community should be discouraged from over dependence on one type of crop but instead cultivate crops that will provide necessary nutrients.

Government should provide health services which are within reach so that all essential health needs of the community can be accommodated for.

## APPENDIX 1: BUDGET

NO	STATIONARY	QUANTITY	UNIT COST	TOTAL COST (UgX)
1	Ruled paper	1 Ream	15,000.00	15,000.00
	Pens	5 pieces	500.00	2,500.00
	Pencil	5 pieces	300.00	1,500.00
	Duplicating papers	80 copies	100.00	8,000.00
	Erasers	3 pieces	100.00	300.00
	Notebooks	6 pieces	1500.00	9,000.00
	Rulers	3 pieces	1,000.00	3,000.00
	Sharpeners	2 pieces	500.00	1,000.00
SUB-TOTAL				<b>40,300.00</b>
2.	<b>COMPUTER RESEARCH &amp; TYPING</b>			
	Browsing	150 minute	2,000.00	6,000.0
	Printing & typing	150 pages	100.00	15,000.00
	Photocopying	300 pages	100.00	30,000.00
	Sub-total			<b>51,000.00</b>
3	<b>PERSONNEL</b>			
	Training Interviewer	1 Day	1,000.00	10,000.00
	Data collection	10 Days	1,000.00	10,000.00
	Data analysis	4 Days	500.00	2,000.00
	1data clerk	4 Days	5,000.00	20,000.00
	Report writing	7 Days	500.00	3,500.00
	SUB-TOTAL			<b>45,500</b>
4	<b>TRANSPORT</b>			
	Search and supervision	60 days	4,000.00	240,000.00
	Contingencies	15%		37,000.00
	SUB-TOTAL			<b>277,000.00</b>

## APPENDIX 2:

### TIME SCHEDULE (MONTHS AND WEEKS) FROM AUGUST – OCTOBER 2014

MONTHS	AUGUST				AUGUST				SEPTEMBER				OCTOBER											
WEEKS	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4								
Planning phase	X	x	x																					
Literature Review	X	x	x	x	x	x	x	x	x	x	x	x												
Research proposal writing					x	x	x	x	x	x	x	x												
Questionnaire writing									x	x														
Training data clerks																								
Data collection								x	x	x	x													
Data processing											x	x												
Report writing												x	x	x										
Presentation of report													x	x										
Submission of the report															x	x								

### **APPENDIX 3**

#### QUESTIONNAIRE TO DETERMINE FACTORS CONTRIBUTING TO PREVALENCE OF MALNUTRITION AMONG CHILDREN UNDER FIVE (5) YEARS OF AGE IN KYABUGIMBI SUB- COUNTY, BUSHENYI DISTRICT.

DATE.....CLUSTER NO.....

RESPONDENT.....

NOTE: This questionnaire is strictly to be used for learning purpose and shall not be used for any other purpose. Respondents' information will be kept confidential. Names should **NOT** be written on the questionnaire.

#### **PART ONE:** Social demographic information.

1. Sex of the respondent: Male ( )      Female ( )
2. What is your relationship with the child?    Father ( )    Mother ( )    Caretaker ( )
3. Sex of the child: Female ( )    Male ( )
4. What is the age of the child: 0-12 ( )    13-24 ( )    25-36 ( )    37-48 ( )    49-60 ( )
5. What is your occupation?    Employed ( )    Self employed ( )    Casual laborer ( )  
Others (specify).....
6. What is your age? 10-20 ( )    21-30 ( )    31-40 ( )    41-50 ( )    50 and above ( )
7. What is your religion? Christian ( )    Islam ( )    Tradition ( )  
Other (specify).....
8. Which is your highest level of education that you have attained?    College and above ( )  
Secondary school ( )    Primary school ( )    None ( )

#### **PART TWO: WEANING AGE**

9. At what age are the children introduced to other foods apart from mother's milk?  
0-3 months ( )    4-6 months ( )    7-10 months ( )    One year ( )    Over one year ( )

10. Which kind of food did you give to the child during the previous meal? Porridge ( )

Mashed bananas ( ) Fruits ( ) Canned foods ( ) Beans ( )

Others (specify).....

11. How often do you feed the child during the day up to the time of going to sleep during the night?

Once ( ) Twice ( ) Thrice ( ) Four times ( )

### **PART THREE: TRADITIONAL BELIEFS AND PRACTICES**

12. Are there foods that you don't give to the children who under five years? Yes ( ) No ( )

13. If yes, which foods are these? Eggs ( ) Meat ( ) Fruits ( ) Beans ( )

Others (specify).....

14. Why don't you give these foods to the children who are under five years?

They are prohibited by tradition ( ) I can't afford ( ) Not available ( )

Others (specify).....

### **PART FOUR: BREASTFEEDING PATTERNS**

15. Was this child breast fed or is currently breastfeeding? Yes ( ) No ( )

If No, Why? No time to breastfed ( ) Child over breast feeding age ( )

Mothers health problems ( ) Others (Specify).....

16. For how long are children breastfed? 0-3 months ( ) 0-6 months ( ) 0-24 months ( )

0-24 months ( ) 0-36 months ( ) 0-48 months ( )

### **PART FIVE: AVAILABLE FOODS IN THE COMUNUTY.**

17. Where do you get food from? From my farm( ) Buy from the market( )

Given by well-wishers( ) Other sources (specify).....

18. Which type of foods do you currently have? State please.....

19. Have you ever experienced inability in feeding your family for the last two months?

Yes( ) No ( )

If yes, how often? Many times ( ) Once ( )

## **PART SIX: COMMUNITY KNOWLEDGE**

20. Do you know what a balanced diet is? Yes ( ) No ( )

If yes, what is it? Food containing carbohydrates, vitamins and protein ( )

Food containing vitamins( ) Food containing carbohydrates( ) Food containing proteins( )

21. Do you know of any disorder related to food that affects children under five years? Yes( ) No( )

If yes, which ones do you know? Kwashiorkor ( ) Stunted growth ( ) Scurvy ( )

Marasmus ( ) Others (specify).....

22. Where do you take your family members for treatments when sick? Government hospitals ( )

Private clinics ( ) Herbalists ( ) Others (specify).....

### **OBSERVATION CHECKLIST.**

23. Signs of Malnutrition? Present ( ) Absent ( )

24. Forms of malnutrition noticed? Kwashiorkor ( ) Marasmus ( ) Obesity ( )

Others (specify).....

25. States of personal cleanliness of children under five years? Dirty ( ) Clean ( )

26. General condition of the child? Good ( ) Fair ( ) Poor ( )

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