

**FACTORS ASSOCIATED WITH MALNUTRITION AMONG CHILDREN AGED BELOW 5 YEARS  
AT KINONI HEALTH CENTRE IV, RWAMPARA DISTRICT.  
A CROSS-SECTIONAL SURVEY**

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Page | 1 **ABSTRACT**

**Background.**

Malnutrition refers to deficiencies or excesses or imbalances in a person's intake of energy and low nutrients.

**Study objective**

The specific objectives were to assess the knowledge of caretakers on malnutrition among children, to examine the social demographic factors and determine the economic factors associated with malnutrition among children below 5 years at Kinoni health center IV, Rwampara district.

**Methodology**

The cross-sectional study of 62 respondents was used for the study. The questionnaires were used to collect data and were analyzed using tally, the data collected was also analyzed using tables and pie charts.

**Results**

The majority of respondents were females, residing in the rural areas by 72%. Most of which, believed that malnutrition was common between the ages 4-5 years. Moreover, they knew that deworming prevents malnutrition. 34.5% had poor knowledge on when to breastfeed the child and 19.4% on the importance of colostrum to the new born. Only few 10% stated that they started their supplementary feeds for children before 6 months, while most claimed that nutrients in breast milk alone is no longer adequate enough for proper child growth. 48.4% replied that poverty leads to inadequate dietary intake, infections, poor hygienic habits and low educational. Many believed that unnecessary high food prices as the highest risk of malnutrition

**Conclusions.**

Many of the respondents' children had good knowledge about malnutrition. Majority were agriculturalists living in the rural areas. Most were from poor families where men made decisions on family income expenditure.

**Recommendations**

Therefore, the study recommends the health workers to continuous health educate the caretakers on how to prevent malnutrition, requirements to make therapeutic food, how to treat malnutrition in children and how to feed children under five when they get malnutrition.

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**Background**

Malnutrition refers to deficiencies' excesses or imbalances in a person's intake of energy and low nutrients. The term malnutrition covers broad groups of conditions, one is undernutrition which includes stunting (low height for age), wasting (low weight for height), underweight (low weight for age) and micronutrient deficiency (lack of important vitamins and minerals). The other is overweight, obesity, and diet-related noncommunicable diseases (such as heart diseases,

stroke, diabetes Mellitus, and cancer) (WHO, 2020). According to Uganda Clinical Guidelines published by the Ministry of Health, malnutrition is mainly classified as complicated SAM, here there is edema of both feet, MUAC less than 115mm, visible wasting and medical complication present. (MOH, 2020) Uncomplicated SAM, is where MUAC is less than 115mm WFH/L less than/ -3Z scores, SAM is where there is very low weight for age and able to RUFT, Moderate Acute Malnutrition (MAM) is where there is low weight for age, MUAC is 115 up to 125mm WFH/L between -3 and -2 z scores or

more (MOH, 2020). The acute form of malnutrition is a state of nutritional deficit brought on by insufficient consumption of protein or energy (Pawar et al, 2023). Children with primary acute malnutrition are common in developing countries as a result of adequate food supply caused by social economic and environmental factors. Secondary acute malnutrition is usually due to an underlying disease causing abnormal nutrient loss, increased energy expenditure, or decreased food intake. Acute malnutrition leads to biochemical changes based on metabolic hormonal and glucose regulatory mechanisms. Most children with primary acute malnutrition can be managed at home with nutrition-specific interests i.e., counseling of parents to ensure household food security. In case of severe acute malnutrition and complications, inpatient treatment is recommended secondary acute malnutrition should be managed by treating the underlying cause (DiPasquale et al, 2020).

The effects of malnutrition under five years include being underweight, stunting, and wasting with or without edema (Govender et al., 2021). Malnutrition is the primary cause of nearly half of all pediatric deaths. It increases the incidence and severity of common diseases, slows recovery, and puts children at higher risk of dying from them. (UNICEF, 2023)

45 million children under the age of five were expected to be wasted worldwide in 2022, out of 149 million children under the age of five. (too small for height) and 38.9m were either round or overweight. Malnutrition accounts for 45% of mortality in children under five, with low- and middle-income nations bearing the brunt of these deaths. (WHO, 2021)

In East Africa, around 4 out of 10 children, or 35% of the population, suffer from stunting, while 3.5% of children below the age of five struggle with body wasting. Uganda is one of the nations in the eastern part of Africa with the highest rates of undernutrition; almost 3 out of 10 children under the age of five are stunted, and 3.5% of all children in Uganda less than the age of five suffer from body wasting. (WHO, 2021)

The western region of Uganda has persistently registered the highest levels of childhood malnutrition yet this is the region with plentiful food production and is sometimes referred to as the food basket (Bukusuba et al, 2017) of the country. In the Ankole region of south west Uganda children under five years, 29.3% were stunted, similar to the national average 29% but the Buhwenju district had stunting levels of 51.5% (Kikafunda et al, 2014). This study aimed to determine the factors associated with malnutrition among children below five years old at Kinoni Health Center IV Rwampara district.

## METHODOLOGY.

### Study design

The study was a descriptive cross-sectional study that focused on caretakers with children under five years suffering from malnutrition attending to pediatric ward Kinoni Health Center IV Rwampara district. A cross-sectional study design was used because it was cheap and less time-consuming as it was a one-time activity. The quantitative study design is best for data collection from a large number of respondents.

### Study area

The study was conducted at Kinoni Health IV which is a 120-bed capacity health center located along the Mbarara Kabale highway at Kinoni town council in Rwampara district. The hospital provides health care to the population of Rwampara district as well as neighboring communities. It provides services ranging from preventive, curative and rehabilitative health care to patients in the surrounding communities.

Rwampara district is located in Ankole sub-region, Western Uganda with coordinates (0°49'60"S and 30°25'0"E in DMS), with a total area of approximately 1846.4sq km. It has a population of approximately 127,724 people as per the results of the National Population and Housing Census of 2014 and a population of 21198 children less than 5 years (16.5%) It is bordered by Mbarara and Isingiro districts in the East, Ntungamo district in the west, Shema district in the north. Rwampara district is inhabited majorly by the Banyankole. The area has reached fertile soils which have attracted more people to the area to do farming thus prompting me to do my research from this area.

### Study population

The study population was the caretakers of children under five years who were admitted with malnutrition at the pediatric ward Kinoni Health Center IV Rwampara district

### Sample size determination

The sample size was determined using the Kish Leslie formula.

$$N = \frac{Z^2 PQ}{d^2}$$

Where;

n is the desired sample size

Z is the standard normal deviation (1.96) corresponding to 95% confidence level

P is the proportion in the population estimated to have particular characteristics, which is the percentage of children aged 0-5 years who have malnutrition (20%).

$$Q = 1 - P$$

d is the degree of accuracy desired (0.1)

$$\text{Therefore; } n = \frac{(1.96 \times 1.96 \times 0.2(1-0.2))}{(0.1 \times 0.1)}$$

$$= \frac{(3.8416 \times 0.2 \times (1-0.2))}{0.01}, = 62$$

$$n = 62 \text{ respondents}$$

### Sampling technique.

A simple random probability sampling technique was used to select caretakers to participate in the study; this

gave all the caretakers with children under five admitted with malnutrition equal chances of being selected to participate in the study.

### **Sampling procedure.**

The researcher identified all the caretakers with children below five years admitted with malnutrition. Here simple random sampling was used, which involved selecting the researcher identified all the caretakers with children below five years admitted with malnutrition. Here simple random sampling was used, it involved selecting respondents from the study population by chance, and the lottery technique was used where yes and no were written separately on small papers, folded, put and mixed in a small box. Then caretakers picked one at a time, whoever picked yes participated in the study  
The procedure was done until 62 respondents were achieved.

### **Data collection method**

Data was collected from the respondents using the questionnaire. The sample of caretakers with children suffering from malnutrition were given questionnaires which they answered and the questionnaires were collected back from them. Those who were unable to read or write were helped by translating the questions and having their answers written in their stead. This method was simple and cheap as many questionnaires were administered to many respondents simultaneously. Also record keeping and retrieval was easy.

### **Data collection tool**

The tool to be used were questionnaires which included questions about the caretakers' knowledge, practices and socioeconomic factors about nutrition among children under five years. It also included questions about the social demographic factors. The respondent's questions were simplified to the easiest language so that caretakers could easily understand and interpret the questions very well

### **Data collection procedure**

Data was collected from a sample of caretakers of children who were admitted with malnutrition at Kinoni Health Center IV Rwampara district. The caretakers were explained to and their consent was sought using both informed and oral consent after which they were allowed to fill out the questionnaires and for the respondents who were unable to read or write, they were helped by the researcher to help them understand better the questions and write down their answers.

Data was collected from 62 samples of caretakers. Five caretakers were questioned a day. Data was collected from Monday to Friday. The answered questions were collected, counted and prepared for analysis and interpretation.

### **Study variables**

These included dependent and independent variables

### **Dependent variables**

The dependent variables of this study included the social economic, maternal and child factors towards malnutrition and the management of malnutrition among children under five years.

### **Independent variables**

The independent variables of this study included poverty, occupation of caretakers, caretakers' status, food security, birth interval and together with the education levels of caretakers of children under five years.

### **Quality control**

Questionnaires were pre-tested and reversed by the researcher. The collected data was analyzed and interpreted by the researcher

### **Inclusion criteria**

All the caretakers of children under five years of age admitted at Kinoni Health Center IV were eligible for the study.

### **Exclusion criteria**

Caretakers whose children were above five years of age

### **Data analysis and presentation**

Hand sorting and tallying according to the themes developed from the objectives and literature review were used to analyze the information in the questionnaires. Charts and/or graphs were used to present the analyzed results and this was done by the researcher. Data was recorded, categorized and analyzed manually. Data was statistically analyzed and presented in frequency tables, pie charts and bar graphs. This method gave time to the researcher to look at mistakes of different data collection tools and presenting data in frequency tables, pie charts and bar graphs will statistically review the distribution of different variables.

### **Ethical Consideration**

An introductory letter allowing the researcher to collect data from the respondents was issued to the researcher from Medicare Health Professionals College which was approved by the school, and then to the in charge of the health facility where the research was conducted. Participants were given details about the ongoing program to help them easily analyze and know what they were answering. And use of consent forms wasn't done to attain respondent's consent and only the respondents who consented were the only ones who participated in the study. This helped to prevent bias in the responses that were given. Ethical issues like confidentiality, clients' and caretakers' privacy, autonomy, and not harm were

followed during the research by not sharing their information, names, and other things with other people without their permission, seeking both oral and informed consent from the respondents and using screens or private

rooms to talk to the respondents and explain to them the aims of the study so that they were aware that it won't cause any harm to them

## RESULTS

### Demographic data of the respondents.

**Table 1: Showing characteristics of respondents by demographic data (n=62)**

CHARACTERISTIC	VARIABLES	FREQUENCY	PERCENTAGES (%)
AGE	<20	9	14.5
	20-24	29	46.8
	25-29	10	16.1
	30-34	8	13
	35-39	2	3.2
	40-44	1	1.6
	>45	3	4.8
SEX	Male	20	32.3
	Female	42	67.7
EDUCATION LEVEL	Primary	29	46.8
	Secondary	24	39.2
	Tertiary	9	14
OCCUPATION	Farmers	28	43.2
	Shop keeper	12	19.4
	Government worker	6	9.7
	Unemployed	14	22.5
	???	2	6.2

Majority of respondents 29(46.8%) were aged to 24 years, 10(16.1%) aged between 25 to 29 years, 9(14.5%) below 20years 8(13%) aged between 30 to 34, 3(4.8%) aged above 45 years, 2(3.2%) between 35 to 39 years while the least 1(1.6%) were aged between 40 to 44 years, majority 42(67.7%) of the respondents were females while the least 20(32.3%) were males, majority 29(46.8%) studied

primary, 24(39.2%) studied secondary while the least 9(14%) had Tertiary education. Majority of the respondents 28(43.2%) were farmers, 14(22.5%) were unemployed, 12(19.4%) were shop keepers while the least 6(9.7%) were government workers.

### Knowledge of caretakers on malnutrition among children aged below five years

**Table 2: showing knowledge of respondents by what malnutrition is (n=62)**

DEFINITIONS	FREQUENCY	PERCENTAGE %
Is a condition that results from eating a diet in which nutrients are not enough to meet the child's needs to maintain health	40	64.5
Is a condition that results from eating a diet in which nutrients are not enough	14	22.6
Is a condition which results from witchcraft	8	12.9
<b>TOTAL</b>	<b>62</b>	<b>100</b>

The majority of respondents 40(64.5%) said that malnutrition results from eating diet which does not contain all food nutrients to reach the body of child's

demand, 14(22.6%) said that malnutrition results from eating a diet in which nutrients are not enough while 8(12.9%) said that malnutrition results from witchcraft,

**Table 3: showing response whether diarrheal diseases lead to malnutrition (n=62)**

RESPONSES	FREQUENCY	PERCENTAGE (%)
Yes	40	64.5
No	22	35.5
<b>Total</b>	<b>62</b>	<b>100</b>

Most of the respondents 40(64.5%) replied that diarrheal diseases cause malnutrition among children under 5 years and 22(35.5%) replied that diarrheal diseases do not cause malnutrition.

**Table 4: Distribution of respondents regarding the knowledge if they know that deworming protects the child from malnutrition (n=62).**

RESPONSES	FREQUENCY	PERCENTAGE %
Yes	51	82
No	11	18
Total	62	100

Majority of the respondent 51(82%) knew that deworming protects malnutrition while the least 11(18%) didn't know.

**Table 5: showing when respondents breast feed the child (n=62)**

WHEN TO BREAST FEED THE CHILD	FREQUENCY	PERCENTAGE (%)
On demand	40	64.5
When hungry	22	35.5
Total	62	100

Majority 40(64.5%) of the respondents replied that breastfeeding is done on demand while the 22(35.5%) said it's done when the child is hungry.

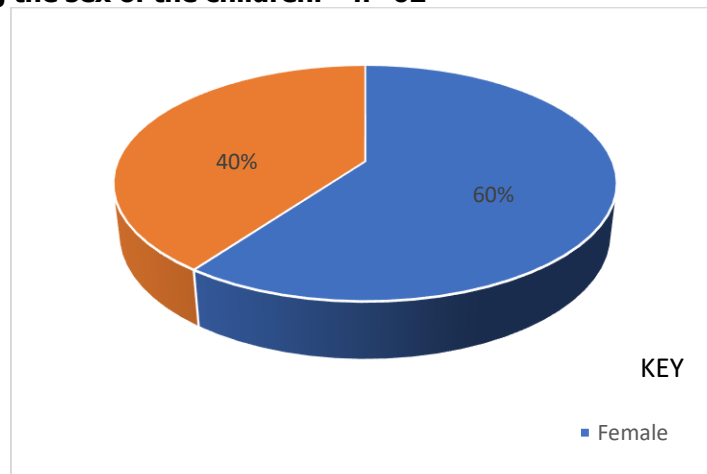
**Table 6: showing response on the importance of colostrum to the new born ( n=62)**

IMPORTANCE OF COLOSTRUM TO THE NEW BORN	FREQUENCY	PERCENTAGE
It is an important source of nutrients that promotes growth and fights diseases in the new born	35	56.5
It is an important source of nutrients for the new born	17	27.4
It gives energy to the new born	10	16.1
Total	62	100

Majority of the respondents 35 (56.5%) knew that it promotes growth and fights diseases in the new born, 17(27.4%) knew that it's an important source of nutrients for the new born while the least 10(16.1%) knew that colostrum gives energy to the new born.

**Social demographic factors associated with under nutrition among the under five children**

**Figure 2: Showing the sex of the children. n=62**



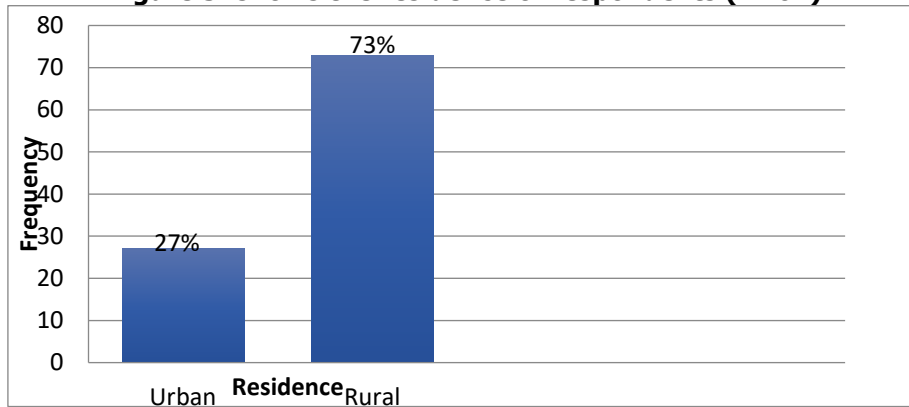
Majority, 37(60%) of the respondent's children, were females and only 25(40%) of them were males.

**Table 7: Showing the age groups in which under nutrition is thought to be common (n=62)**

Age group	Frequency	Percentage
<12 months	5	8.1
1 year	10	16.1
2 years	20	32.2
3 years	5	8.1
4- <5 years	22	35.5
TOTAL	62	100

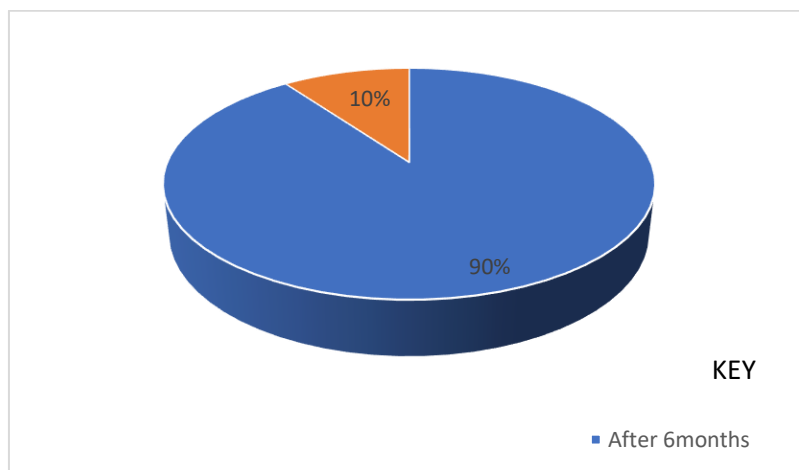
Majority 22(35.5%) of the respondents thought that malnutrition was common among children aged 4- <5 years, 20(32.2%) among 2 years, 10(16.1%) among 1 year and 5(8.1%) among children aged < 12months and those aged 3 years.

**Figure 3: shows the residence of respondents (n=62)**



Majority, 45(72.6%) of the respondents, resided in rural areas and the minority, 17(27.4%) of them, resided in urban areas.

**Figure 4: Showing at what age respondents started supplementary feeds for the child (n=62)**



Most 56(90%) of the respondents replied that they started their supplementary feeds for their children after 6 months, the rest 6 (10%) replied that they started their supplementary feeds for their children before 6 months.



**Economic factors associated with malnutrition under 5 years.**

**Table 8: distribution of respondents on the effects of poverty on malnutrition.**

Effects of poverty on malnutrition	Frequency	Percentage %
It offered little or no opportunity to provide good quality food and general health service.	15	24.2
It leads to inadequate dietary intake, infections, poor hygienic habits and environment and low education status.	30	48.4
Poverty leads to failure to get family planning and failure to improve sanitary facility.	7	11.3
Limited time to care for children since the main source of income for most families were working as casual on day to day basis	10	16.1
<b>Total</b>	<b>62</b>	<b>100</b>

Majority 30(48.4%) said that poverty leads to inadequate dietary intake, infections, poor hygienic habits and environment and low education status, 15(24.2%) replied that poverty leads to little or no opportunity to provide good quality food and general health services, 10(16.1%)

replied that poverty leads to limited time to care for children since the main source of income for most families were working as casual on day to day basis while 7(11.3%) replied that poverty leads to failure to get family planning and failure to improve sanitary facility

**Table 9: showing the high-risk factors to malnutrition (n=62).**

Risk factors of malnutrition	Frequency	Percentage %
Unnecessary high food prices	30	48.4
Inability to access affordable food	20	32.3
lack of safe and clean water for drinking plus water for irrigation purposes which affected farming and food insecurity especially in locations with low rainfall	12	19.4
<b>Total</b>	<b>62</b>	<b>100</b>

Most of the respondents 30(48.4%) replied that unnecessary high food prices as the highest risk of malnutrition, 20(32.3%) replied that lack of safe and clean water for drinking plus water for irrigation purposes which affected farming and food insecurity especially in

locations with low rainfall while the least 12(19.4%) said that lack of safe and clean water for drinking plus water for irrigation purposes which affected farming and food insecurity especially in locations with low rainfall.

**Table 10: showing occupational status of the respondents (n=62).**

Occupational status	Frequency	Percentage %
Agricultural work	30	48.4
Formal employment	20	32.3
self-employment	12	19.3
<b>Total</b>	<b>62</b>	<b>100</b>

Majority of the respondents 30(48.4%) were agricultural workers, 20(32.3%) were formally employed while the least 12(19.3%) were self employed

**Table 11: showing the one who decides on how to spend family income (n=62)**

Respondents	Frequency	Percentage %
Husband	50	80.6
Mother	12	19.4
<b>Total</b>	<b>62</b>	<b>100</b>

The majority of the respondents who decide on how to spend family income were males 50 (80.6%) and the least were females with 12(19.4%).

## DISCUSSION

### Knowledge of caretakers regarding malnutrition among children under 5 years.

The study showed that majority 40(64.5%) of the caretakers replied that malnutrition is a condition that results from eating a diet in which nutrients are not enough to meet the child's needs to maintain health while the least 8(12.9%) said that it is a condition which results from witchcraft. This is probably due to higher education levels and high sensitization among the caretakers.

The study also showed that 40(64.5%) of the caretakers knew that diarrheal diseases cause malnutrition among children under 5 years while 22 (35.5%) of the caretakers don't know that diarrheal diseases cause malnutrition among children below 5 years. This is probably due to adequate sensitization on malnutrition and its dangers among the caretakers This is not in conjunction with the study done by Raji et al., (2020) which showed that 93.9% knew that diarrheal diseases cause malnutrition among the under 5 years.

The study also showed that 51 (82%) of the caretakers knew that deworming children protects them from getting malnutrition while 11(18%) don't know. This may be due to the old aged caretakers who have enough experience on the importance of deworming children and when to deworm them This is not in agreement with the study conducted by Raji et al., (2020) though in high percentage which showed that 64% knew that deworming protects children under 5years while 36% don't know.

A study also showed that 35 (56.6%) knew the importance of colostrum to the new born whereas 10(16.1%) don't know the importance of colostrum to the new born. This is probably because most caretakers were health educated on the importance of colostrum to the new born during the health education talk at the hospital. this is higher than those in the study done by Fadare et al 2019 which showed that 38% of the caretakers knew the importance of colostrum to the new born.

### Social Demographic Factors

The study showed that 37(60%) of the children with malnutrition were females whereas 25(40%) were males. This is probably due to cultural beliefs were most mothers give less time to the girl child as compared to the boy child thus making more girls at risk of malnutrition. This is slightly higher than those in the study carried out by Ahmed et al., (2020) which showed that 52.22% were females and 47.78% were females.

This study showed that malnutrition is most common in age group aged 4 to 5 years with 22(35.5%) and least among age group of 3 years that is 5(8.1%). This is probably due to fact that children aged between 4 to 5years enjoy feeding on supplementary feeds which are less nutritious compared to breast milk that is most preferred by children aged 3 years. This s in line with the study done by Ahmad et al., 2020 though slightly higher

were 18.78% for age between 4 to 5 years and 19.18% for at 2 years

The study also showed that 45(72.6%) of the children with malnutrition lived in rural areas while 17(27.4%) lived in urban areas. This is probably due to most caretakers being farmers thus move to villages to do farming. This is in line with study done by Ahmad et al., (2020) which showed that 42.13% of children were inhabited in urban areas whereas 57.87% were inhabited in rural areas

The study showed that 56(90%) of the respondents started supplementary feeds for their children after 6months while 6(10%) started them before 6months. this is probably due to caretakers having no any breast problems that would limit them from breast-feeding their children up to 6 months. This is in disagreement with the study done by Itaka et al., 2020 which showed that 73.6% of children were started on supplementary feeds after 6 months while 19.1% started supplementary feeding before 6 months.

### The economic factors associated with malnutrition in under 5 years of age

The study showed that 30 (48.4%) knew that poverty leads to inadequate dietary intake, infections, poor hygienic habits and environment and low education status whereas 7(11.3%) said that poverty leads to failure to get family planning and failure to improve sanitary facility this is probably due to low education levels and failure to get jobs. This is not in line with the study done Ahmad et al., (2020) which showed that 74.89% poor families caused food shortages and incomplete immunisation. The difference in results may be due to differences in education levels of respondents.

The study also showed that 48.4% of the caretakers were agricultural workers while the least 19.3% of the respondents where self-employed This is probably due to the fact that most caretakers reside in rural areas thus making farming the main source of income.

The study showed that majority 30(48.4%) of the respondents replied that unnecessary high food prices is a highest risk factor for malnutrition while the least 12(19.4%) replied that lack of safe water for drinking plus water for irrigation purposes which affect farming and food insecurity especially in locations with low rainfall. This is due to poverty and low-income jobs that provide less money to buy the foods. This is in slightly higher than that in the study which was done by Agho et al. 2019 where 45% noted that high malnutrition was attributed to the unnecessary high food prices while 34% noted lack of clean and safe water for drinking plus water for irrigation purposes affected farming leading to low food production and food insecurity especially in locations with low rainfall

The study also showed that majority 30(48.4%) of the respondents were agricultural workers while the least 12(19.3%) were self-employed. This is due to low education levels that make people not to qualify for better jobs. This is not in agreement with study done by



Nankinga et al., 2019 which showed that 56% of the respondents were agriculture workers.

The study showed that majority 50(80.6% of the respondents who decide on how to spend family income were males and the least were females with 12 (19.4%). This is due to cultural beliefs where in most families men are the heads of the family thus plan and budget for the family.

## CONCLUSION

The study rated knowledge of the respondents was generally good where majority of respondents agreed that diarrheal diseases can cause malnutrition among children below five and majority of respondents had good knowledge about deworming that prevents diarrhea; the socio demographic factors revealed that females children were more involved than the male children probably due to cultural beliefs among the caretakers and mothers and also the study showed that malnutrition is commonly in 4-5years age group due to low socioeconomic status of caretakers were they can't afford to buy supplementary foods for their children; About the economic factors which was generally poor, less than half of respondents knew that poverty leads to inadequate dietary intake, infections, poor hygienic habits and environment and low education status. Whereas 11.3% said that poverty leads to failure to get family planning and failure to improve sanitary facility. Moreover, most respondents were farmers with men as the head in spending and planning for family money.

## RECOMMENDATIONS

According to the results from this study, there's need for more studies to be conducted to establish the practices of these care takers with children below five years in Rwampara district so that a clear relationship between this prevalence in children and these factors is established for proper preventive measures to be established.

The government together with ministry of health should work hand in hand to ensure that the caretakers of children below five years are well sensitized about malnutrition that is what malnutrition is, its causes, the preventive measures and curative measures since care takers are the first doctors for their children and this will help them know what is expected of them and how to keep their children healthy this finding emphasizes the need for continuous strengthening of interventions on factors associated with malnutrition. Based on the result the following are recommended during child's visit at health institutions during checkups, management and follow up. Awareness creation should be promoted through the strengthened health education on risk factors like promoting good sanitation and avoiding the use of dirty materials to collect water so as to cab infections. Similarly, it would be better if concerned stalk holders work on increasing the knowledge of women and caretakers about malnutrition and its consequences as well

as preventive methods which might be a stepping stone to reduce the prevalence of malnutrition among children under five years.

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## LIST OF ABBREVIATIONS

<b>CBP:</b>	Community-Based Program
<b>CRAMS:</b>	Coronavirus Rapid Mable Survey
<b>DMS:</b>	Degree Minute Seconds
<b>IUGR:</b>	Intra Uterine Growth Restriction
<b>Km</b>	kilometer
<b>M :</b>	Meter
<b>MAM:</b>	Moderate Acute Malnutrition
<b>MUAC:</b>	-Mid Upper Arm Circumference
<b>MWFH:</b>	-mean weight for height
<b>NIDS:</b>	-The Nation Income Dynamic Study
<b>RUFT:</b>	- Ready to Use Therapeutic food
<b>SAM:</b>	-Severe Acute Malnutrition
<b>Sq.</b>	- Square
<b>UAHEB:</b>	-Uganda Allied Health Examination Board
<b>UCG:</b>	-Uganda Clinical Guidelines
<b>UNICEF</b>	-United Nations International Children's Emergency Fund
<b>WFHL:</b>	Weight for height\length
<b>WFP:</b>	- World Food Program
<b>WHO:</b>	-World Health Organization

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## Conflict of interest

The author declares no conflicts of interest

## Author Biography

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