PREVALENCE AND FACTORS ASSOCIATED WITH MALNUTRITION AMONG CHILDREN AGED 6-59 MONTHS RECEIVING CARE AT TORORO GENERAL HOSPITAL, TORORO DISTRICT. A DESCRIPTIVE CROSS-SECTIONAL STUDY.

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ABSTRACT
Background
Globally, 149.2 million children under the age of 5 years of age were stunted,
45.4 million Wasted, and 38.9 million overweight. In Uganda, an estimated 250,000 children are suffering from severe acute malnutrition which affects their gross well-being and life span.
The purpose of the study was to establish the prevalence and factors associated with malnutrition of children aged 6-59 months receiving care at Tororo General Hospital, Tororo district.

Methodology
The study used a descriptive cross-sectional study design that used quantitative data collection methods. A stratified sampling method was used to select 30 respondents who responded to semi-structured questionnaires. Data was analyzed and presented using Microsoft Excel 2013 that presented it in the form of frequency tables, pie charts, and graphs.

Results
The prevalence of malnutrition was 30% and was associated with being female children, birth weights of less than 2500grams (55.6%), 2nd – 5th birth order (66.7%), mothers aged 18 – 24 years (44.5%), their mothers having no formal education (44.5%), weaning children before 6 months (88.9%), being more than 5 households residents (44.5%), having one meal per day (55.6%), mother not receiving husband's support (66.7%), not having latrine at home (55.6%), poor solid waste management (66.7%) and child having had severe sickness in the past one year (77.8%).

Conclusion
The prevalence of malnutrition among children was high at 30% and it was associated with a variety of factors such as low birth weight, young maternal age, childhood illness, low maternal education, poor breastfeeding practices, and poor hygiene.

Recommendation
Therefore, strategies should be put into practice to empower communities and mothers on how to improve the feeding behaviors of children as well as sanitation to aid in preventing these occurrences.

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BACKGROUND

Nearly half of all deaths in children under 5 years are attributable to undernutrition, nutrition puts children at greater risk of dying from common infections, increases the frequency and severity of such infections, and delays recovery. The interaction between undernutrition and infection can create a potentially lethal cycle of worsening illness and deteriorating nutritional status. Poor nutrition in the first 1,000 days of a child's life can also lead to stunted growth, which is associated with impaired cognitive ability and reduced school and work performance (UNICEF, 2021).

Globally in 2020, 149.2 million representing 22.0% of children under 5 years were estimated to be stunted, 45.4 million were estimated to be wasted, and 38.9 million representing 5.7% were overweight or obese (WHO, 2021).Around 45% of deaths among children under 5 years of age are linked to malnutrition. These occur in low-income and middle-income countries (Tilahun & Assefa, 2017). At the same time, in these same countries, rates of childhood overweight and obesity are rising (WHO, 2021).Africa still experiences a malnutrition burden among children aged under 5 years(Global Nutritional Report, 2014). The average prevalence of overweight is 5.3% which is lower than the global average of 5.7%. The

prevalence of stunting is 30.7% higher than the global average of 22.0% (Global Nutritional Report, 2014).

Sub-Saharan Africa bears one of the highest burdens of malnutrition (Agho, et al.2019). In 2016, more than a third of stunted children (38%) and more than a quarter of wasted (27%) children lived in sub-Saharan Africa. However, a more detailed look into the distribution of undernutrition within sub-Saharan Africa shows that Eastern Africa (36.7%) has a higher prevalence of stunting compared to Western Africa (21.4%), central Africa (32.5%) and Southern Africa (28.1%).

Almost 3 in 10 (29%) Ugandan children aged 6-59 months are stunted, 4% are wasted and another 4% are overweight while 1 in 10 (11%) children are underweight. In the Bukedi region, 22.8% of the children between 0-59 months are stunted and 2.8% are wasted (UDHS, 2016).

Poor or wealthy, children are malnourished for similar reasons like women getting pregnant when young and having low birth-weight babies, repeated childhood infections such as diarrhea, low breastfeeding rates, and poverty to mention but a few. The problem of malnutrition in Tororo hasn't been tackled well enough hence the reason am taking up this study to establish the prevalence and factors associated with malnutrition of children aged 6-59 months in Tororo General Hospital, Tororo District.

Specific objectives

To determine the prevalence of malnutrition in children aged 6-59 months receiving care at Tororo General Hospital, Tororo district.

To determine the factors associated with malnutrition in children aged 6-59 months receiving care at Tororo General Hospital, Tororo district.

METHODOLOGY

Study Design and rationale

This study is a hospital-based survey and the researcher used both quantitative and cross-sectional data collection methods. The researcher believes that this study design will enable him to get the required data for the study feasibly.

Study setting and rationale

The study was done at Tororo General Hospital located in Tororo town, Tororo district, in Uganda. Tororo District is bordered by Mbale District to the north, Manafwa District to the northeast, Kenya to the east, Busia District to the south, Bugiri District to the southwest, and Butaleja District to the northwest. Tororo, the largest town in the district and the location of the district headquarters, is approximately 230 kilometers (140 mi), east of Kampala, the capital and largest city of Uganda.

Tororo district has a population of 597,500 per UBOS 2020 of which 291,300(48.8%) are males and 306,200(51.2%) are females with an urban population of 83,600(14%) and a rural population of 513,900(88%). It has a population density of 501.3/km2 and a 2.5% annual population change between 2014 and 2020.

A news report on NBS live at 9 on January 17, 2020, reported that 3 out of 10 homesteads in Tororo District have people suffering from malnutrition hence the reason why I conducted this study in Tororo.

Study population

This study targeted all children aged between 6-59 months receiving care at Tororo general hospital.

Sample size determination

According to the guidelines of UNMEB, a sample size minimum of 30 participants is adequate for the diploma level of research. The researcher selected a sample of 30 children aged between 6 and 59 months receiving care at Tororo General Hospital and believes this size is representative enough.

A sample size of 30 respondents was used. This was based on Simen's formulae of 1962 with a precision of 5% and with a confidence level of 95%

It is given by;

$n = N/(1+N(e^2))$

Where N is the accessible population, which is 33
$n = 33/(1+33(0.05^2))$

$n = 30$

Therefore, a sample size of 30 respondents was used

Sampling procedure

The researcher used a stratified random sampling method to obtain respondents for this study. The population was divided into a stratum and then a sample was drawn and the percentage of the strata was the same as that in the population.

Inclusion criteria

The study included all children aged between 6-59 months whose parents and caretakers agreed to consent to receiving care at Tororo General Hospital. Parents and caretakers of children who did not give consent were excluded.

Definitions of variables

Independent variables (factors associated with malnutrition).

Include; child-related factors (birth weight, sex of child, age of child, & birth order).

Maternal-related factors (maternal age, maternal occupation, maternal education level, maternal breastfeeding practices, & maternal weight & height).

Socio-economic factors (poverty, family size, & household food security & insecurity).

Environmental factors (hygiene & sanitation, & poor quality cooking fuel). Other factors (religion & area of residence).

Dependent variables (prevalence of malnutrition)

Child malnutrition status of children aged 6-59 months (stunting, wasting, and underweight).

Research instruments

Data was collected using structured questionnaires bearing multiple-choice responses and open and closed-ended questions. This tool was used to conduct interviews after being pre-tested in a pilot study among a few individuals of similar caliber to check its validity.

Data collection procedures

Self- Self-administered questionnaires were filled out by the respondents who could read, write, and understand English while for those who couldn't read, write, and understand English, the questionnaire was read out in the local language and the responses by the respondents were filled in the questionnaire. Six respondents were sampled per day during the data collection for five days making a total of 30 respondents.

Data management

Data coding was done by formulating a questionnaire that enabled all answers to be assigned a number to prepare them for data entry. Collected quantitative data were checked for any mistakes and corrected and then the data was kept in a secure place to avoid damage or access by unauthorized people.

Data analysis

Manual tallying of data was done and later the data was entered, cleaned, and analyzed using Microsoft Excel 2013 computer software. Results will be summarized in frequencies and percentages and presented in tables, pie charts, and graphs.

Ethical considerations

The research proposal was approved by the Supervisor and Research Coordinator of Mildmay Institute of health sciences. Thereafter, an introductory letter was obtained from the School to introduce the researcher to the study area.

This study was conducted after approval and when permission was granted. Maximum confidentiality was observed during the study and only numbers instead of names were used to identify the respondents. Respondents participated after signing a consent form.

RESULTS

Characteristics of study respondents

A total of 18(60%) were female, 11(36.7%) had children of 5th birth order and 12(40%) had given birth to children of birth weight less than 2500g. Maternal characteristics of the majority were, 13(43.3%) were aged 18 – 24 years, 18(60%) had underweight BMI, 18(60% had no formal education, 12(40%) were Catholics, 13(43.3%) were single, 16(53.4%) were engaged in trading, 21(70%) did not clean the breasts before breastfeeding the child, 16(53.3%) breastfeed the child less than 8 times daily and 56.7% weaned the child after 6 months. Most of the respondents, 14(46.7%) had more than 5 household residents, 25(83.3%) obtained food by buying it, 13(43.3%) had one meal per day, and 16(53.3%) were supported by their husbands. Details of these characteristics of the study population are presented in Table 1

Table 1(a): Characteristics study participants

Variable	Category	Frequency	Percentage (%)
Age of child (months)	6 – 20 21 – 34 35 – 48 49 – 60	5 14 7 4	16.7 46.7 23.3 13.3
Sex of child	Male Female	12 18	40 60
Birth order of child	1st 2nd – 5th $>5^{th}$	9 10 11	30 33.3 36.7
Birth weight	<2500g 2500 – 3500g >3500g	12 11 7	40 36.7 23.3
Maternal age (years)	18 – 24 25 – 31 32 -38 39 – 45	13 8 5 4	43.3 26.7 16.7 13.3
BMI	Obese Normal Under weight Over weight	5 7 18	16.7 23.3 60
Education level	No formal education Primary SecondaryTertiary	18 8 1 3	60 26.7 3.3 10
Religion	Catholic ProtestantsIslam	12 11 7	40 36.7 23.3
Marital status	Single Married Separated	13 10 7	43.3 33.3 23.3
Occupation	FarmingTrading Public servant	7 16 7	23.3 53.4 23.3

Table 1(b) Characteristics of study participant

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Cleaning of breasts before breastfeeding the child	Yes No	9 21	30 70
Frequency of breast feeding daily	<8 times >8 times Does not breastfeed	16 3 11	53.3 10 36.7
Age of weaning the child	Before 6 months After 6 months	13 17	43.3 56.7
Number of household residents	3 4 5	3 6 7	10 20 23.3
	Above 5	14	46.7
Source of food stuffs	Buying Home garden	5 25	16.7 83.3
Numbers of meals taken	1 2 More than 2	13 6 11	43.3 20 36.7
Husbands' support	Yes No	16 14	53.3 46.7
Presence of latrine at home	Yes No	11 19	36.7 63.3
Washing hands after visiting the latrine	Yes No	8 22	26.7 73.3
Rubbish pit	Yes No	7 23	23.3 76.7
Ensuring that children's hands are washed before eating foods	Yes No	10 20	33.3 66.7
Residence	Town Village	3 27	10 90
Childhood severe illness in the last 1 years	Yes No	15 15	50 50

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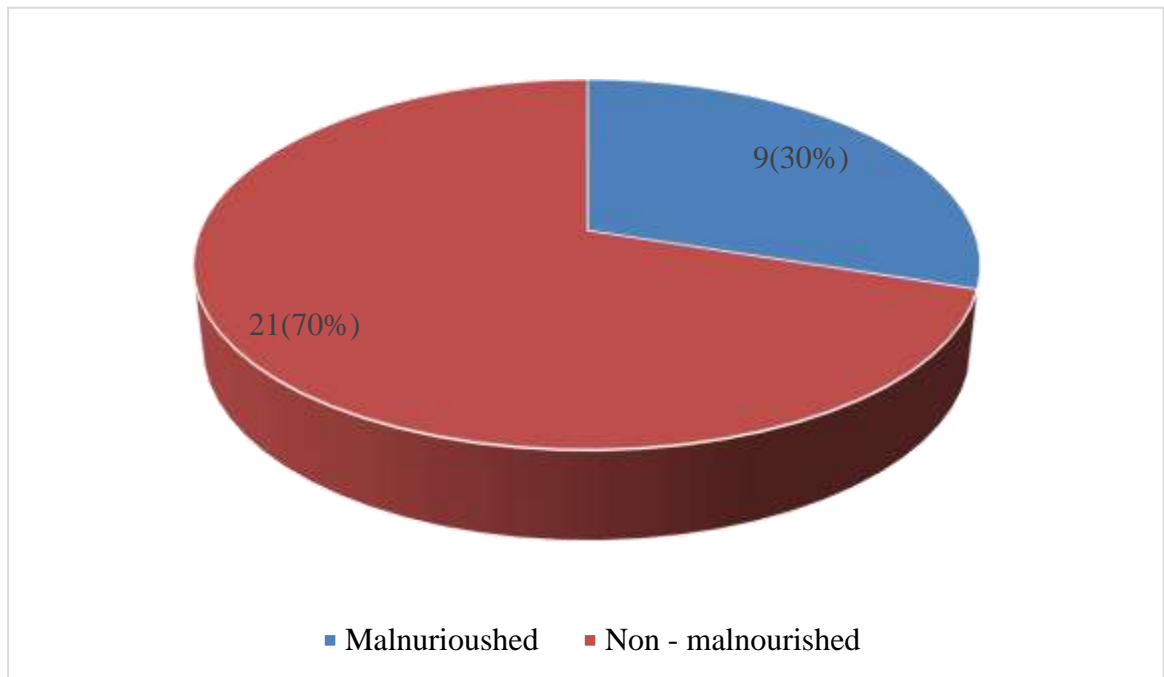
Figure 1: Prevalence of malnutrition among children aged 6-59 monthsreceiving care at Tororo general hospital.

Prevalence of malnutrition among children aged 6-59 months receiving care at Tororo general hospital

A total of 9(30%) the respondents were malnourished. Results are presented inFigure 1.

Factors associated with malnutrition among children aged 6-59 months receiving care at Tororo general hospital, Tororo district.

Child related, maternal related, socio-economic and environmental factors were assessed and results are presented as follows.

Child related factors associated with malnutrition of children aged 6-59 months receiving care at Tororo general hospital, Tororo district.

Among the malnourished children; Most of the respondents 4(44.5%) were aged21 – 34 months while the least 1(11.1%) were aged 6 – 20 years. Majority of the respondents, 5(55.6%) were female while minority 4(44.4%) were male. Majority of the respondents 6(66.7%) had children of 2nd – 5th order while minority 1(11.1%) were above the fifth birth order. Most of the respondents 5(55.6%) children were born with birth weight of less than 2500grams while theleast 1(11.1%) were born with birth order more than 3500g. Details are presented in table 2.

Table 2: Child related factors associated with malnutrition n=30

Variable	Malnourished (n = 9)	Non-Malnourished (n = 21)
Age of child (months)		
6 – 20	1(11.1%)	4(19%)
21 – 34	4(44.5%)	10(47.6%)
35 – 48	2(22.2%)	5(23.8%)
49 – 59	2(22.2%)	2(9.5%)
Sex of child		
Male	4(44.4%)	8(38.1%)
Female	5(55.6%)	13(61.9%)
Birth order of child		
1st	2(22.2%)	7(33.3%)
2nd – 5th	6(66.7%)	4(19.0%)
>5th	1(11.1%)	10(47.6%)
Birth weight		
<2500g	5(55.6%)	7(33.3%)
2500 – 3500g	3(33.3%)	8(38.1%)
>3500g	1(11.1%)	6(28.6%)

Maternal related factors associated with malnutrition of children aged 6-59 months receiving care at Tororo general hospital, Tororo district.

Among the malnourished children, most of the respondents 4(44.5%) were aged 18 – 24 years while the least 1(11.1%) were aged 31 – 38 years. Majority of the respondents 5(55.6%) were underweight while minority 1(11.1%) were obese. Most of the respondents 4(44.5%) had no formal education while the least 1(11.1%) had tertiary education. Majority of the respondents 5(55.6%) were Catholic while minority 1(11.1%) were Muslims. Most of the respondents 4(44.5%) were single while the least 2(22.2%) had separated. Most of the respondents 5(55.6%) were engaged in trading while the least 1(11.1%) were engaged in farming. Majority of the respondents 7(77.8%) did not clean the breasts before breastfeeding the child while minority 2(22.2%) cleaned the breast before breastfeeding the child. Most of the respondents' breast feed the child less than 8 times daily while the least 4(44.4%) did not breast feed. Majority of the respondents 8(88.9%) weaned the children before 6 months while the minority 1(11.1%) weaned the children after 6 months. Details are presented in table 3.

Table 3: Maternal related factors associated with malnutrition

Variable	Malnourished(= 9)	Non– Malnourished(n = 21)
Maternal age years)		
18 – 24	4(44.5%)	9(42.9%)
25 – 31	2(22.2%)	6(28.6%)
32 -38	1(11.1%)	4(19%)
39 – 45	2(22.2%)	2(9.5%)
BMI		
Obese	1(11.1%)	4(19%)
Normal	2(22.2%)	5(23.8%)
Under weight	5(55.6%)	12(57.2%)
Education level		
No formal education	4(44.5%)	14(66.7%)
Primary	3(33.3%)	5(23.8%)
Secondary	1(11.1%)	0(0)
Tertiary	1(11.1%)	2(9.5%)
Religion		
Catholic	5(55.6%).	7(33.3%)
Protestants	3(33.3%)	8(38.1%)
Islam	1(11.1%)	6(28.6%)
Marital status		
Single	4(44.5%)	9(42.9%)
Married	3(33.3%)	7(33.3%)
Separated	2(22.2%)	5(23.8%)
Occupation		
Farming	1(11.1%)	6(28.6%)
Trading	5(55.6%)	11(52.4%)
Public servant	3(33.3%)	4(19%)
Cleaning of breasts before breastfeeding the child		
Yes	2(22.2%)	7(33.3%)
No	7(77.8%)	14(66.7%)
Frequency of breast feeding daily		
<8 times	5(55.6%)	11(52.4%)
>8 times	0	3(14.3%)
Does not breast feed	4(44.4%)	7(33.3%)
Age of weaning the child		
Before 6 months	8(88.9%)	5(23.8%)
After 6 months	1(11.1%)	16(76.2%)

Socio – economic factors associated with malnutrition of children aged 6-59 months receiving care at Tororo general hospital, Tororo district.

Those with malnourished children, most respondents 4(44.5%) had more than5 households residents while the least 1(11.1%) had 3 household residents. Mostof the respondents 8(88.9%) obtained food from home garden while the least 1(11.1%) obtained food by buying. Majority of the respondents 5(55.6%) had one meal per day while minority 1(11.1%) had more than two meals per day. Most of the respondents 6(66.7%) did not receive husband's support while the least 3(33.3%) received husband's support. These are illustrated in table 4.

Table 4: Socio- economic factors associated with malnutrition n=30

Variable	Malnourished(n = 9)	Non – Malnourished(n = 21)
Number of households residents	1(11.1%)	2(9.5%)
3	2(22.2%)	4(19%)
4	2(22.2%)	5(23.8%)
5	4(44.5%)	10(47.6%)
Above 5		
Source of food stuffs		
Buying	1(11.1%)	4(19%)
Home garden	8(88.9%)	17(81%)
Numbers of meals taken		
1	5(55.6%)	419%)
2	3(33.3%)	3(14.3%)
More than 2	1(11.1%)	10(47.6%)
Husbands' support		
Yes	3(33.3%)	13(61.9%)
No	6(66.7%)	8(38.1%)

Environmental factors associated with malnutrition of children aged 6-59 months receiving care at Tororo general hospital, Tororo district.

Among those with malnutrition, most of the respondents, 5(55.6%) did not havea latrine at home while the least 4(44.4%) had a latrine at home. Majority of therespondents, 7(77.8%) did not wash hands after visiting the latrine whileminority 2(22.2%) washed hands after visiting the latrine. Most of the

respondents 6(66.7%) did not have rubbish pits while the least 3(33.3%) had rubbish pit at home. More than a half of the respondents 5(55.6%) ensured that children's hands are washed before eating food while less than a half 4(44.4%)did not ensure that children's hands are washed before eating food. Majority ofthe respondents, 8(88.9%) were village residents while minority 1(11.1%) weretown residents. Most of the respondents, 7(77.8%) reported that their children had severe illness in the last 1 year while the least 2(22.2%) reported absence of childhood severe illness in the last 1 years. Results are presented in table 5.

Table 5: Environmental factors associated with malnutrition n=30

Variable	Malnourished(n = 9)	Non – Malnourished(n = 21)
Presence of latrine at home		
Yes	4(44.4%)	7(33.3%)
No	5(55.6%)	14(66.7%)
Washing hands after visiting the		
latrine	2(22.2%)	6(28.6%)
Yes	7(77.8%)	15(71.4%)
No		
Rubbish pit		
Yes	3(33.3%)	4(19%)
No	6(66.7%)	17(81%)
Ensuring that children's hands are washed before eating foods		
Yes	5(55.6%)	5(23.8%)
No	4(44.4%)	16(76.2%)
Residence		
Town	1(11.1%)	2(9.5%)
Village	8(88.9%)	19(90.5%)
Childhood severe illness in the last		
1 years		
Yes	7(77.8%)	8(38.1%)
No	2(22.2%)	13(61.9%)

Summary of the results

The prevalence of malnutrition among children was high at 30% and it was associated with a variety of factors such as low birth weight, young maternal age, childhood illness, low maternal education, poor breastfeeding practices and poor hygiene.

DISCUSSION

Prevalence of malnutrition

The prevalence of malnutrition was high (30%) among the study sample. This was probably because the study was conduct in the region with highest malnutrition cases in the country. This agrees with the Uganda's national prevalence of stunting which is at 29%, (UDHS, 2016). The findings are contrary to a study by Bogere (2017) done in Isaka which found out that the prevalence of malnutrition was lower at 14.7% and that of a study by Jela (2016) who found the prevalence of malnutrition at 14.8%.

Child related factors associated with malnutrition

The study findings revealed that malnutrition was prevalent (44.5%) among children aged 21 – 34 months. This might be because at this age group children are completely being withheld from breast milk to complementary feeds which is a period of general transition. This transition could affect the feeding behaviors of children. This is almost consistent with a UDHS (2016) which revealed that the prevalence of stunting among children increases in the first year of age and peaks at 37% among children age 18-35 months. On the contrary, a study by Habassa (2015) found out that children aged 39–59 months were less likely to be underweight than those aged below twelve months.

Study findings revealed that majority (66.7%) of malnourished children were of the 2nd – 5th birth order. This might be because of limited care and attention mothers pay to these children compared to first born thus putting them at risk of malnutrition. Similarly, a study by Mwopelwa, (2019) children of high birth order are likely to fare worse than their lower birth order counterparts and also a study by Dhingra et al, (2021) which revealed that second or higher-order children often lag behind firstborns in height and weight outcomes.

According to study findings most (55.6%) of the malnourished children were born with birth weights less than 2500g. this might be because low birth weights are associated with many infant illnesses that affect the growth curves of the affected children hence malnutrition. The findings are in agreement with a study by Tekile et al, (2019) which found out that children who were smaller at birth were more likely to be stunted and underweighted and also a study by Jahanihashemi et al, (2017) who found out that children born with low birth weight had more

prevalence of stunting compared to those with higher birth weight.

Maternal related factors associated with malnutrition

Young maternal age among of 18 – 24 years was associated with childhood malnutrition. This is probably because young mothers do not want to breast feed their children in desire to maintain their body image which predispose their children to malnutrition. The findings are in agreement with studies by Nankinga et al, (2019) and Wemakor et al, (2018) who found out that young maternal age was associated with childhood malnutrition.

Majority of the respondents (55.6%) were underweight had malnourished children. This could reflect challenges provision and intake of feeds at home thereby making children co- infected with malnutrition. In line with the findings, a study by Tekile et al, (2019) found out that BMI less than 18.5 (underweight) were more likely to have stunted, underweighted and wasted children as compared to overweight mothers.

According to study findings most of the respondents (44.5%) who no formal education had malnourished children. This might be because low education levels among mothers affects their knowledge on child feeding and balanced diet thereby predisposing their children to malnutrition. This is consistent with a study by Tekile et al, (2019) which revealed that children whose mothers had primary and above educational level were significantly less likely to be stunted and underweighted as compared to children whose mothers had never attended formal education.

The study findings showed that most of the respondents 4(44.5%) who were single had children with malnutrition. This might be because single mothers frequently suffer from financial constraints that create hardships in obtaining food and medical services for their children leading to malnutrition.

Study results revealed that most of the respondents (55.5%) breast feed the child less than 8 times daily lead to malnutrition. This was because children were

receiving less among of food than their body requirement. Similarly, a study by Yadav et al, (2015) revealed that breastfeeding practice was found to have significant effects on malnutrition.

Socio – economic factors associated with malnutrition

The study showed that most of the respondents (44.5%) with more than 5 households' residents had malnourished children. This was probably because many household residents lead to food shortages thereby providing inadequate food to children leading to malnutrition. This agreed with a study by Mwopelwa (2019) who found out that children from larger sized households have lower weight for age and height for age and aremore likely to be malnourished.

Most of the respondents 8(88.9%) obtained food from home garden. This could lead to families depending on one type of food that they grow at home which cannot provide a balanced diet necessary for preventing under-five malnutrition. This is contrary to a study by Chowdhury et al, (2016) which found out that children from food insecure families were more likely to be malnourished.

The current study revealed that malnourished children were belong to majority (55.6%) of respondents who took one meal per day. This meant that these children were subjected to hunger and under-feeding that could have lead to malnutrition.

Most of the respondents (66.7%) who did not receive husband's support had children who were malnourished. This was probably because absence of support from the child's father could lead to shortages of food and finances necessary for caring for the child hence unable to prevent the malnutrition. The findings agreed with a study by Nankinga et al, (2019) which revealed that mothers belong to the low socio economic status without husband's support.

Environmental factors associated with malnutrition

Study results revealed that most of the respondents (55.6%) who did not have a latrine at home were having malnourished children. This suggests that most families were poorly disposing feaces creating risks of diarrhea diseases associated with childhood malnutrition. Similarly, a study by Singh et al, (2019) revealed that open defecation positively influenced to childhood stunting and underweights.

Most of the respondents 6(66.7%) did not have rubbish pits. This could attract flies at home which carry germs that lead to childhood illnesses that are associated with malnutrition. The findings are in line with a study by Singh et al, (2019) who revealed that poor house hold waste management was associated with childhood malnutrition and also a study by Vilcins et al, (2018) who revealed that childhood malnutrition is associated with inadequate local waste disposal.

Most of the respondents, 7(77.8%) reported that their children had severe illness in the last 1 year. Childhood illnesses affect the feeding behavior and

nutrient absorption in the children hence putting them at risk of malnutrition. This concurs with findings of UDHS (2016) which revealed that the occurrence of malnutrition is higher among children with previous severe illness in the past years that those who did not have any severe illness in the past year.

Conclusions

The prevalence of malnutrition among children was high at 30% and it was associated to a variety of factors. These were child's age, 2nd – 5th birth order, low birth weight of less than 2500g, young maternal age, and underweight of mothers, low maternal education, poor breastfeeding practices and being single mothers. Other factors were large household residents, food insecurity, unsupportive husbands and poor hygiene characterized by absence of pit latrine and rubbish pits at home.

Recommendations

To the Ministry of Health

The Ministry of Health should strengthen sensitization programs on child feeding practices such as encouraging of EBF as well as appropriate personal and community hygiene like proper waste disposal.

To Tororo General Hospital

Tororo hospital should offer a comprehensive treatment of childhood illnesses that can address the nutritional demands of children.

Local leaders

Local leaders should encourage families to store adequate food to prevent food scarcity as well as disregard taboos regarding under – five feeding thereby prevents under-five malnutrition.

Local leaders should advocate for proper waste disposal and use of safe water so as to prevent diarrhea diseases that lead to malnutrition.

Health workers

Health workers should encourage and offer family planning to mothers so as to promote child spacing and prevent large number of children hence preventing malnutrition due to poor spacing and higher parity.

Health workers are urged to encourage mothers on how to practice exclusive breastfeeding for six months with appropriate weaning schedules as this will minimize on the risks of malnutrition in the children.

To Mothers

Mothers should store plenty of food during the harvesting seasons so as to avoid food insecurities which are greatly associated with under–five malnutrition.

Implication to nursing practice

Malnutrition among under – five children is attributed to modifiable factors that can be achieved through intensive engagement of nurses through health education and provision of preventive services like community hygiene.

ABBREVIATIONS AND ACRONYMS

BMI: Body Mass Index.

EPRC: Economic Policy Research Centre.

GDP: Gross Domestic Product.

IMAM: Integrated Management of Acute Malnutrition.

MOH: Ministry Of Health.

NNP: National Nutrition Policy.

UDHS Uganda Demographic and Health Survey.

UGX: Uganda Shillings.

UN: United Nations.

UNICEF: United Nations Children's fund.

WBG: World Bank Group.

WHO: World Health Organization

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