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Unveiling Influential Factors of Malnutrition in Children Under Two Years: A Study in Kashenyi, Bushenyi District

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ABSTRACT

Malnutrition remains a pressing global health concern, particularly in developing nations like those in Sub-Saharan Africa. In Uganda, alarming statistics reveal that 38% of children suffer from stunting, 6% from wasting, and 16% from being underweight. Notably, the northern region sees 40% affected, while the southwestern region grapples with a staggering 50% of malnourished children. This study centered on unraveling the influencers of malnutrition among children under two years old in Kashenyi, Bushenyi District. Employing a community-based cross-sectional design, the research adopted a quantitative approach for data collection and analysis. The study focused on 100 children from over 250 households within Kashenyi parish. Analysis, conducted using the Statistical Package for Social Scientists (SPSS, Version 20.0), revealed a 20% prevalence of malnutrition among children in Kashenyi Parish, Bushenyi District. The study identified several statistically significant factors associated with malnutrition in these children, including the child's age, gender, birth order, mother's age, occupation, education level, marital status, as well as aspects such as breastfeeding, infections, and immunization. Recommendations arising from this research emphasize the critical need for educational interventions targeting mothers. These programs could significantly enhance nutritional practices for vulnerable infants, effectively mitigating the impact of malnutrition. Such initiatives, however, must be accompanied by robust monitoring and evaluation mechanisms to ensure their efficacy and impact.

Keywords: Malnutrition, Underweight, Breastfeeding, Children, Immunization.

INTRODUCTION

Malnutrition is a deficiency, excess, or imbalance in a person's intake of energy and/or nutrients to ensure growth and maintain specific functions. It covers both obesity and undernutrition (wasting, stunting, underweight, and micronutrient deficiency) [1, 2]. Child malnutrition was an important indicator for monitoring progress towards the achievement of the Millennium Development Goal (MDG). However, nutrition indicators for young children and their mothers have not improved much over the past years, with some indicators showing a worsening trend with 45% of children under 2 years old in Uganda being short for their age (stunted) in 1995. 10 years later, the prevalence of stunted under-5 (most especially those under two years of age) had fallen to only 39% [3]. Thus, stunting is the most common malnutrition condition with the highest prevalence (38.5 %) in Nakaseke and Nakasongola followed by wasting (16.5 %) and underweight (13.5 %), respectively [4]. It therefore remains a significant cause of mortality and is a development issue in the region. Due to the many causes, children become malnourished if they suffer from diseases that cause undernutrition like

diarrhea, or if they are unable to eat sufficient nutritious food [5-9]. Malnutrition is one of the most important public health problems in developing countries especially in Sub-Saharan Africa [10, 11]. Among children, appropriate nutrition affects brain development. A diet in excess or lacking essential nutrients is likely to have mental adverse effects [12-14]. Although the country has made tremendous progress in economic growth and poverty reduction over the past 20 years, its progress in reducing malnutrition remains very slow [15]. Stunting indicates chronic malnutrition; the stunting prevalence rate of 39% means that about 2.3 million young children in Uganda today are chronically malnourished. As noted, the meager improvements in ensuring the nutritional well-being of Ugandan children stand in stark contrast to the large gains in economic growth and poverty reduction over this period [3]. Malnutrition also covers two broad groups of conditions that is over-nutrition obesity and undernutrition (wasting/stunting and undernutrition) [1]. These two causes often occur together and result from multiple underlying factors including inadequate access to food and health services [16-18]. Other basic causes include poverty, illiteracy, and social norms [19]. Undernutrition can increase the risk of anemia in children and adults [20-23]. Research indicates that malnutrition has devastating effects on human performance, health, and survival and a global analysis demonstrated that child malnutrition is the leading cause of the global burden of disease [24]. Malnutrition also affects the economic situation of Uganda as a Cost of Hunger Africa study, revealed that Uganda loses 5% of its GDP through the problem of malnutrition [25]. One out of six children in developing countries shows signs of being underweight, this points out a total number of 100 million children in the developing world [26]. According to WHO [1], it is estimated that there are 178 million children who are malnourished across the globe, and at any given moment, 20 million are suffering from the most severe form of malnutrition.

In Africa, malnutrition is worsened by the presence of diarrhea and the mortality rate has increased from 4.3 in the late 19th century to currently 7 times higher than that in Europe. Sub-Saharan Africa alone, accounts for more than 90% mortality in children under 2 years [27]. Despite the availability of favorable natural resource capacity and a variety of nutritional supplements in the country, malnutrition has remained an important health and welfare problem, especially among children under two years old in Uganda [28]. Therefore, this research study aimed to determine the factors influencing malnutrition among children under two years old in Kashenyi Parish, Bushenyi District-Western Uganda.

METHODOLOGY

Study Design

A descriptive cross-sectional study was used to ascertain the factors influencing malnutrition among <2 Years children in Kashenyi Parish-Bushenyi district. This study was quantitative and a questionnaire was used to collect data.

Area of Study

The study was carried out in selected villages of Kashenyi Parish. The parish lies 06kms from Kampala International University, Western Campus, approximately 330 kilometers (214 miles) by road southwest of Kampala and approximately 70 kilometers (40 miles) by road west of Mbarara, the largest city in the sub-region. Kashenyi Parish comprises of 6 villages which include Kashenyi, Ihoza, Kyandago, Lutoto, Ryashana, and Ntaza with a total population of around 2,400 and around 500 Households.

Study Population

The study population comprised of children under two years of age who were in different households of selected villages of Kashenyi.

Inclusion criteria

Children under two years of age in households in Kashenyi whose parents or caregivers consent to participate in the study.

Exclusion criteria

Children above two years of age in households in Kashenyi.

Children under two years of age in households in Kashenyi whose parents or caregivers did not consent to participate in the study.

Sample Size Determination

This was determined using the formula according to Brown, (2004) [29]

$$n = \frac{4p(1-p)}{e^2}$$

Where n = sample size

e = allowable error and in this case 10% (0.1) was taken

4 = is a constant derived from the formula

P = prevalence of malnutrition in Uganda which is estimated at 43.5% (0.435)

Therefore;

$$n = \frac{4 \times 0.201(1-0.221)}{(0.08)^2}$$

$$n = \frac{(4 \times 0.201) \times 0.779)}{0.0064}$$

n =100

Sampling Technique

Participants were enrolled consecutively based on the inclusion criteria. The households in the selected villages were purposively visited and heads of the households were informed of the study objectives and their consent sought. Children who met the inclusion criteria were enrolled in the study anthropometric measurements were taken and the questionnaire was administered to the parents.

Data Collection Instrument

The prevalence of malnutrition was collected using Anthropometric measurements (weighing scale for weight, tape for height/length, and MUAC Tape for mid-upper arm circumference). Data on child and maternal factors were collected using a self-administered questionnaire.

Training of Data Collection Team

The data collection team comprised of two diploma students of clinical medicine (research assistants) who could speak the local language and interpret the questionnaire accordingly. The assistants were trained for three days on the administration of questionnaires and how to take anthropometric measurements.

Data Analysis

Data was analyzed using Statistical Package for Social Scientists (SPSS) version 20 to obtain frequencies and percentages and regression analysis for the p-values and risk estimates of the significance and association of the determinant to the prevailing distribution of malnutrition among under-two in Kashenyi parish. Typing was done using appropriate computer packages such as Microsoft Office Word for the results that enabled formatting and drawing of charts and tables. The findings were presented as frequencies, percentages, and cross-tabulations on graphs and charts. Percentages for the prevalence and additional p-values and odds ratios with their confidence interval were used for the maternal and child factors. Data was presented in the form of tables and graphs. Descriptive statistics were used where percentages for each response were calculated to give the lesson learned and conclusion from the response.

Ethical Consideration

A letter of data collection addressed to the District Health Officer for permission was collected from the Faculty of Clinical Medicine & Dentistry. After the permission was granted, the letter was taken to the LC1 who gave further permission for household visits to collect data. After explaining the purpose of the study to each study participant in the households, informed consent was obtained from the participants before participating in the study.

RESULTS

Prevalence of Malnutrition among Children under two years in Kashenyi Parish -Bushenyi District

Table 1 below indicates that the prevalence of malnutrition among children under two years in Kashenyi Parish-Bushenyi District was 20%. 13 children (13%) had Mid Upper Arm Circumference of 11.5cm-12.5cm, 7% were Less than 11.5cm. 80% of the children had BMI of 18-25 while 20% of the children had BMI less than 18.

Table 1 shows the Prevalence of Malnutrition among Children under two years in Kashenyi Parish -Bushenyi District

Variables	Frequency (n=100)	Percentage (%)
Nutrition status		
Malnourished	20	20.0
Normal	80	80.0
Mid Upper Arm Circumference		
Less than 11.5cm	7	7.0
11.5cm-12.5cm	13	13.0
More than 12.5cm (Normal)	80	80.0
Body Mass Index		
Less than 18 (Undernourished)	20	20.0
18-25(Normal)	80	80.0
Above 25	0	0.0

Mother or Caretaker Characteristics of Children Under Two Years in Kashenyi Parish -Bushenyi District

Results in Table 2 show that most 50 (50.0%) mothers were aged between 30 and 40 years while the least 7 (7.0%) were below 18 years of age. On occupation, most mothers 25 (25.0%) were business women while the least 14 (14.0%) were students. Most 38 (38%) mothers, had attained secondary level of education while the least 29 (29%) attained post-secondary level. Most mothers 41 (41%) were catholic by religion while the least 4(4%) were Pentecostal. The majority of the mothers, 73 (73%) were married while the least 6 (6%) were widowed. Most mothers 70(70%) were of the Banyankore tribe while the least 2 (2%) were Baganda. Most 60(60%) mothers had 1 – 3 children while the least 1(1%) had more than 10 children. Most 40(40%) mothers were breastfeeding for more than 10 months while the least 4(4%) were breastfeeding between 2 to 4 months.

Table 2: Shows characteristics of mothers of children under two years in Kashenyi Parish -Bushenyi District

Variable	Frequency (n=100)	Percentage (%)
Age		
<18 years	7	7.0
18-29 years	26	26.0
30-40 years	50	50.0
<40 years	17	17.0
Mother's occupation		
Student	14	14.0
Business woman	25	25.0
Peasant	22	22.0
House wife	15	15.0
Civil servant	24	24.0
Parents' religion		
Catholic	41	41.0
Protestant	29	29.0
Muslim	11	11.0
SDA	15	15.0
Pentecostal	4	4.0
Education level		
Primary level	34	34.0
Secondary level	38	38.0

Post-secondary level	29	29.0
Marital status		
Single	21	21.0
Married	73	73.0
Widow	6	6.0
Tribe		
Munyankole	70	70.0
Mukiga	11	11.0
Mutooro	12	12.0
Mukonjo	5	5.0
Baganda	2	2.0
Number of children		
1 – 3	60	60
4 _ 6	33	33
7 – 9	6	6
>10	1	1
Period of breast feeding		
2 – 4months	4	4
5 – 7months	26	26
8 – 10 months	30	30
>10months	40	40

Characteristics of Children under two years in Kashenyi Parish -Bushenyi District

Findings in Table 3 below indicate that the majority 55(55%) of the children were below 6 months while the least 14 (14%) were between 12 and 24 months of age. The majority 62(62%) of the children were females while 38 (38%) were males. Most 43 (43%) of the children were first-born children while the least, 12 (12%) were third-born children. Most children had a birth weight below 2.5 kg while the least, 19 (19%) weighed more than 4kg at birth. Most 62(62%) of the children belonged to a birth interval of 2 years while the least 1(1%) had a birth interval of less than 6 months.

Table 3: shows the socio-demographic characteristics of children under two years in Kashenyi Parish -Bushenyi District

Variable	Frequency (n=100)	Percentage (%)
Age of the child		
<6 months	55	55
6 months -12 months	31	31
12-24 months	14	14
Gender		
Male	38	38
Female	62	62
Birth order		
First born	43	43
Second born	19	19
Third born	12	12
Fourth born	26	26
Birth weight		
<2.5 kg	46	46
2.5 Kg -4 Kg	35	35
>4 Kg	19	19
Birth interval		
After 2 years	62	62
After 1 year	33	33
After 6 months	4	4
Before 6months	1	1

Factors contributing to malnutrition among children under two years in Kashenyi Parish -Bushenyi District

Socio-demographic factors associated with malnutrition among children under two years in Kashenyi Parish -Bushenyi District

According to findings in Table 4 below, the age of a child, gender, and birth order were found to be statistically significantly associated with malnutrition in children under two years in the model at 5% level. Children aged between 12-24 months (OR=5.74: 95%CI, 1.13 -24.85: P=0.003) and children below 6 months (OR=2.96: 95%CI, 10.96-11.28: P=0.058) were 5.7 times and 3 times more likely to be malnourished compared children between 6 months -12 months respectively. Male children were 3 times more likely to become malnourished compared to girls (OR=3.39: 95%CI, 1.4-21.05: P=0.032). Fourth born and above children were 6.9 times more associated with malnutrition compared to first-born children (OR=6.9: 95%CI, 0.95-28.22: P=0.002). Birth weight was found not to be statistically significantly associated with malnutrition in children in this study.

Table 4 shows socio-demographic factors associated with malnutrition among children under two years in Kashenyi Parish -Bushenyi District

Independent variables	Malnourished (n=20)	Normal (n=80)	OR (95% CI)	P-Values
Age of the child				
<6 months	12 (21.8%)	43 (78.2%)	2.96 (0.96-11.28)	0.058
6 months -12 months	2 (6.4%)	29(93.6%)	Ref	
12-24 months	6 (42.9%)	8 (57.1%)	**5.74 (1.13 -24.85)**	**0.003**
Gender				
Male	12(31.6%)	26(68.3%)	**3.39(1.4-21.05)**	**0.032**
Female	8(12.9%)	54 (87.1%)	ref	
Birth order				
First born	3(7%)	40(93%)	ref	
Second born	2(10.5%)	17(89.5%)	1.51(0.38-48.11)	0.235
Third born	3(25.0%)	9(75.0%)	3.57(0.483-68.49)	0.066
Fourth born and above	12(46.2%)	14(53.8%)	**6.97(0.95-28.22)**	**0.002**
Birth weight				
<2.5 kg	10(21.7%)	18(78.3%)	1.48(0.44-6.42)	0.646
2.5 Kg -4 Kg	6(17.1%)	50(82.9%)	Ref	
>4 Kg	4(21%)	12(79.0%)	1.04(0.67-14.65)	0.9145

Mothers' socio-demographic factors associated with malnutrition among children under two years in Kashenyi Parish -Bushenyi District

In this study, the mother's age, mother's occupation, parents' religion mother's education level, and mother's marital status were found to be statistically significantly associated with malnutrition in children under two years in the model at a 5% level. Children whose mothers were below 18 years of age were 6.7 times more likely to become malnourished compared to those whose mothers were between 30-40 years (OR=6.75: 95%CI, 1.09-41.61: P=0.040). Children of peasants were 4.8 times more likely to become malnourished compared to children of civil servants (OR=4.83: 95%CI, 1.06-31.83: P=0.042). Children to Muslim parents were 11 times more likely to become malnourished compared to children born to catholic parents (OR=11.33: 95%CI, 2.23-68.12: P=0.014). Children whose mothers attained a primary level of education were 10 times more likely to become malnourished compared to children whose mothers attained a secondary level of education

(OR=10.07: 95%CI, 1.30-94.07: P=0.032). Children of single mothers were 17 times more likely to become malnourished compared to children whose mothers were married (OR=16.98: 95%CI, 5.05-71.22: P=0.000). Also, children of widowed mothers were 3.3 times more likely to become malnourished compared to children whose mothers were married.

Table 5: shows mothers' socio-demographic factors associated with malnutrition among children under two years in Kashenyi Parish -Bushenyi District

Independent variables	Malnourished (n=20)	Normal (n=80)	OR (95% CI)	P-Values
Age				
<18 years	3(42.9%)	4(57.1%)	**6.75(1.09-41.61)**	**0.040**
18-29 years	4(15.4.2%)	22(84.6%)	2.14(0.51-8.87)	0.293
30-40 years	10(20.0%)	40(80.0%)	ref	
<40 years	3(17.6%)	14(82.3%)	3.60(0.51-25.00)	0.195
Mother's occupation				
Student	3(21.4%)	11(78.6%)	1.60(0.49-23.36)	0.212
Business woman	4(16.0%)	21(84.0%)	1.40(0.260-11.15)	0.578
Peasant	8(36.4%)	14(63.6%)	**4.83(1.06-31.83)**	**0.042**
House wife	2(13.3%)	13(86.7%)	1.32(0.24-15.26)	0.536
Civil servant	3(12.5%)	21(87.5%)	ref	
Parents' religion				
Catholic	4(9.8%)	37(90.2%)	ref	
Protestant	7(24.1%)	22(75.9%)	2.59(0.84-15.28)	0.081
Muslim	6(54.5%)	5(45.4%)	**11.33(2.23-68.12)**	**0.014**
SDA	2(13.3%)	13(86.7%)	0.72(0.07-7.49)	0.788
Pentecostal	1(25.0%)	3(75.0%)	3.11(0.32-52.69)	0.26
Education level				
Primary level	13(38.2%)	21(61.8%)	**10.07(1.30-94.07)**	**0.032**
Secondary level	2(5.3%)	36(94.7%)	**ref**	
Post-secondary level	5(17.1%)	23(82.1.3%)	3.11(0.132-38.26)	0.575
Marital status				
Single	12(57.1%)	9(42.9%)	**16.98(5.05-71.22)**	**0.000**
Married	6(8.2%)	67(91.8%)	ref	
Widow	2(33.3%)	4(66.7%)	3.31(0.38-48.11)	0.235

Other factors associated with malnutrition among children under two years in Kashenyi Parish -Bushenyi District

Children who had suffered an infection were 6 times more likely to become malnourished compared to children who didn't suffer from an infection (OR=6.39: 95%CI, 2.3-18.05: P=0.001). Unimmunized children were 4 times more likely to become malnourished compared to children who were fully immunized (OR=4.03: 95%CI, 1.25-17.11: P=0.023).

Table 6: shows other factors associated with malnutrition among children under two years in Kashenyi Parish -Bushenyi District

Independent variables	Malnourished (n=20)	Normal (n=80)	OR (95% CI)	P-Values
Child suffered infection of recent				
Yes	15(40.5%)	22(59.5%)	**6.39(2.3-18.05)**	**0.001**
No	5(7.9%)	58(92.1%)	ref	
Immunization status				
Fully immunized	7(12.7%)	48(87.3%)	**ref**	
Partially immunized	7(22.6%)	24(77.4%)	1.71(0.49-6.38)	0.322
Not immunized	6(42.8%)	8(57.2%)	**4.03(1.25-17.11)**	**0.023**

DISCUSSION

Prevalence of malnutrition among children under two years in Kashenyi Parish-Bushenyi District

The findings of this study show that the prevalence of malnutrition among children under two years in Kashenyi Parish - Bushenyi District was 20 children (20%) of which 13 children had Mid Upper Arm Circumference (MUAC) of 11.5cm-12.5cm and 7 had MUAC less than 11.5cm. All the 20 children were undernourished. This prevalence is lower than that reported by UDHS [3] which reported that in Uganda, 33% of children were stunted. More so, this prevalence is much lower compared to high levels of stunting which were recorded in Zambia 59%, Ethiopia 52%, Malawi 49% and Madagascar 49% [30].

Child-related Socio-demographic factors associated with malnutrition among children under two years in Kashenyi Parish -Bushenyi District

In this study, children between 12-24 months were 5.7 times more likely to be malnourished compared to younger children between 6 months and -12 months. This is attributed to the fact that parents give less attention to older children than they give birth to a new child who needs much attention and care. The findings are plausible considering that many of the younger children are still being breastfed and chronic malnutrition sets in only after weaning. Similar findings have been reported in different countries for instance in the Kwara state of Nigeria [31]. Male children were 3 times more likely to become malnourished compared to girls. This is probably due to increased attention paid to female children, unlike the male children. Another explanation could be that the boys are rare at home. They tend to be active, running around in the neighborhood as compared to the female children who probably eat whatever small feeds that their mothers got since they are always with them at home. This study corresponds with a study by Olwedo et al. [32] on the factors associated with malnutrition in internally displaced Persons camps of Northern Uganda who indicated that a male child was nearly two times more likely to suffer from acute malnutrition compared to a female child. Fourth-born and above children were 6.9 times more associated with malnutrition compared to first-born children. This could be due to the fact that intra-household allocation of food and resources decreases with an increasing number of births in the household and as a result, births of higher order might suffer from various health hazards as well as malnutrition. Similar findings were indicated in the study done in Bangladesh using the Demographic and health surveys about the association between the order of birth and chronic malnutrition of children, results indicated that 38.1% of children were stunted and 8.2% of children were fifth or higher-order birth. Third-order, fourth-order, and fifth or higher-order children 24%, 30%, and 72%, respectively, were more likely to be stunted after adjusting for all other variables [33].

Mothers' socio-demographic factors associated with malnutrition among children under two years in Kashenyi Parish -Bushenyi District

Children whose mothers were below 18 years of age were 6.7 times more likely to become malnourished compared to those whose mothers were between 30-40 years. This is attributed to the fact that younger mothers tend to have less knowledge of child nutrition as they are inexperienced. Similarly, it was found in Bangladesh that children whose mothers were less than 18 years at the time of birth were 1.22 times more likely to be stunted, wasted, and underweight compared to children whose mothers were 18 years and above at birth [33]. In the Ugandan settings some common risk factors for protein-energy malnutrition, that is severely malnourished infants mostly from young mothers, who had low weight at birth with less access to breastfeeding which is essential for the infants' protein intake. Children of peasants were 4.8 times more likely to become malnourished compared to children of civil servants. This is attributed to the fact that such mothers are not financially well off and thus fail to

provide complementary feeds including protein foods. Another study in Uganda revealed that children from mothers who were laborers or farmers and housewives had a greater prevalence of stunting, being underweight, and wasting than those from mothers who worked in offices or were housewives [32]. This is because such mothers rarely get time to take care of their children. They also leave their children at home with other siblings who may neglect to feed them following the right frequency and this sometimes worsens the problem of malnutrition [34]. Children whose mothers attained a primary level of education were 10 times more likely to become malnourished compared to children whose mothers attained a secondary level of education. This could be attributed to the fact that most women with low education spend more time in gardens and feed their children on less nutritious foods. Education also determines her income and this helps mothers to access proper nutrition for the child as well as health services. Several studies have found that a mother's education is associated with good nutrition practices particularly under-two children's nutrition [35]. Median levels of malnutrition across all countries range from 36 percent for children whose mothers had some primary education to 16 percent for children of mothers with secondary or higher education [36]. Children of single mothers were 17 times more likely to become malnourished compared to children whose mothers were married. Also, children of widowed mothers were 3.3 times more likely to become malnourished compared to children whose mothers were married. This is attributed to the fact that unmarried mothers face financial difficulties thus limiting their capacity to provide nutritious food to their children. Similarly, in Ethiopia, it was found that the risk of under-two child malnutrition is higher among unmarried rural and divorced/separated women compared to married ones [37]. Contrary to the above, a study in Zambia revealed that mothers who are married were more likely to have undernourished children unlike those who were unmarried perhaps because of the cost of maintaining families hence sometimes these families fail to produce nutritious supplements to the under-two children [30].

Other factors associated with malnutrition among children under two years in Kashenyi Parish -Bushenyi District

Children who had suffered an infection were 6 times more likely to become malnourished compared to children who didn't suffer from an infection. Infections among children reduce appetite, increase energy and nutrient utilization (e.g. to fight infection), and limit the ability to absorb or retain nutrients. The immunity of the child weakens and diseases like diarrheal can be fatal. Every year about 0.35 million children die of malnutrition and in developing countries, about 0.2 million children under two years of age suffer from dwarfism [38]-[42]. Unimmunized children were 4 times more likely to become malnourished compared to children who were fully immunized. This is because immunization or vaccination is known to significantly increase immunity among children from many childhood killer diseases such as measles, respiratory tract infections, whopping cough, poliomyelitis, and cholera among others, childhood vaccination may protect children's nutritional status and lead to improved child growth in developing countries where most child killer diseases are preventable with vaccination [3]. Similarly, in Ghana, the study found a significantly higher prevalence of malnutrition children among partially immunized and non-immunized children (81.3% and 88.2%) in comparison to fully immunized children (62.1%). This implies that partially and non-immunized children were at higher risk of malnutrition as they were not protected against vaccine-preventable diseases [39], [43].

CONCLUSION

The proportion of malnutrition among children under two years in Kashenyi Parish was 20%. Age of a child, gender, birth order, mother's age, mother's

occupation, parents' religion mother's education level, mother's marital status, breastfeeding, infections, and immunization were found to be statistically significantly associated with malnutrition in children under two years.

Recommendations

There is a need for feeding education to mothers which would help to improve nutrition habits among needy infants mainly to control malnutrition. This should be done under good monitoring and evaluation. Healthy eating is essential for children, mental growth, and lifelong health and well-being. When children are not receiving proper nutrition they are unable to grow well hence becoming stunted. The researcher recommends that more research on malnutrition and associated factors in adults be conducted as most studies are on malnutrition among children.

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