

# Male involvement and perception towards prevention of malnutrition of children less than 5 years in Ishaka division Bushenyi-district

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## ABSTRACT

This study was undertaken to assess male involvement and perception towards prevention of malnutrition of children less than 5 years in Ishaka Division Bushenyi district. The study design was a cross-sectional descriptive study, carried out in Ishaka division found in Bushenyi district involving 85 males with children below five years and residents of Ishaka Division, selected by simple random sampling. The study showed that there was poor male involvement 32(37%) towards prevention of malnutrition, with majority 28(52.8%) saying it was the duty of women to feed children. The study showed a poor perception of participants towards prevention of malnutrition, majority 29(54.7%) of those who had not been fully involved in child nutrition said it was not necessary to give children special attention for their nutrition needs, the study established that knowing signs of malnutrition in children was a significant factor for males to be involved in prevention of malnutrition for their children with an odds ratio of 0.22(0.09-11.0 and a p-value of 0.003. The result showed that culture was not a significant factor in influencing male involvement in child nutrition, with an odds ratio 3.47(0.14-12.10 and a p-value of 0.128. In conclusion, there was a poor male involvement and perception towards prevention of malnutrition in under five children.

**Keywords:** Male involvement, Child malnutrition prevention, Perception of child nutrition, Under-five nutrition, Ishaka Division study

## INTRODUCTION

Globally, male involvement in child nutrition remains a significant challenge, with a 2020 UNICEF report revealing that over 80 million men were not actively participating in child nutrition efforts at home [1]. This lack of engagement corresponded with approximately 15 million cases of malnutrition reported in 2018. Countries such as Bangladesh (47%), Nepal (44%), Liberia (38%), and Sierra Leone (37.5%) were among the most affected [2]. In Sub-Saharan Africa, studies have highlighted how control over resources often positions men as key decision-makers in healthcare and nutrition matters [3]. For instance, research in Tanzania emphasized the father's role in providing psychosocial support and resources during the weaning period, contributing significantly to family well-being [4].

The importance of male involvement is further underscored by Uganda's Ministry of Health (MOH) policy guidelines, which advocate for fathers to support and promote young child feeding practices for optimal nutritional outcomes [5]. A study in Uganda revealed that involving fathers in maternal and child health (MCH) initiatives improved breastfeeding and child feeding practices, highlighting the need to enhance fathers' knowledge in these areas [6]. Similarly, Nakibuuka Z. et al., [7]

found that while most mothers in Masaka and Rakai peri-urban centers received support from men, malnutrition, including stunted growth and underweight in children, persisted, indicating the complexity of the issue. Despite evidence showing that men play a crucial role in influencing young child feeding practices, there is limited research in Uganda on male involvement in child nutrition. The Uganda Demographic Health Survey (UDHS) 2018 reported that only 31% of children were fed according to recommended practices, a decrease from 39% in previous years [8]. This highlights the need for structures that actively involve men, as their support is essential for improving child nutritional outcomes [9]. However, most nutrition programs continue to focus primarily on women, particularly expectant and lactating mothers, often overlooking the role of fathers [10].

Given that decision-making within households greatly influences child nutrition practices, this study seeks to address the gap by assessing male involvement and perceptions toward preventing malnutrition in children under five years. The focus is on Ishaka Division, Bushenyi District, with the aim of generating insights to inform interventions that enhance male participation in child nutrition efforts.

## METHODOLOGY

### Study Design

The study design was a cross-sectional descriptive study. It has been selected because it allows studying matters under question from a given point in time.

### Study area

The study was carried out in Ishaka division found in Bushenyi district in western Uganda. It is located 58 km away from Mbarara the nearest town, and it is located along Mbarara-Kasese highway, 90km to Kasese town and about 125km to Mpondwe, the boarder of Uganda with Democratic Republic of Congo (DRC), and approximately 350km away from Kampala, the capital city of Uganda. The major population is mostly peasants and the major economic activity around is trading with many food selling joints that serve the university students and administrators with food. And geographically, it is a hilly area with many swamps.

### Study Population

The target population for this study was males with children below five years and residents of Ishaka Division. These respondents were selected to provide information necessary for the study.

### Inclusion criteria

The study considered all males with children below five years residing in Ishaka division and they those who will accept to participate in the study.

### Exclusion criteria

The study will exclude all men whose children are above five years. Those men who reside outside Ishaka division was excluded from study.

### Sample size calculation

The sample size was determined using Fishers *et al*, 2003 formula given by the method below,

$$n = z^2pq/d^2$$

Where,

n= minimum sample size

d = margin of error

z=standard normal deviation corresponding to 1.96

p= prevalence (6, Nakiibuka et al, 2016)

q=1-p

Therefore taking

$$p = 6/100 = 0.006$$

$$z = 1.96$$

$$q = 1 - p = 0.994$$

$$d = 5\% \text{ or } 0.05$$

$$n = \frac{1.96^2 \times 0.006 \times 0.994}{0.05^2}$$

n = 85. And for more accuracy on getting a correct number of respondents from each village, 85 respondents was recruited into the study.

### Sampling Procedures

Five out of the sixteen villages in Ishaka division was systematically sampled by arranging the names of the villages in an alphabetical order. Thereafter, two villages was jumped after every one picked. A simple random sampling was applied to the clustered villages in order to get 17 respondents from each village to make a total of 85 respondents.

### Study variables

Under the study, the dependent variable is child nutrition, the independent variables are male perception and involvement while confounding factors was knowledge and attitude of males towards nutrition, the outcome was outcomes was either good nutrituin of mal-nutrition.

### Data Collection technique

In this study, the questionnaire was used. The reasons for adopting a questionnaire is because it is cheap and easy to administer, preserved confidentiality and would be completed at respondent's convenience. The researcher personally distributed the questionnaires by simple random selection of respondents and ensured accuracy of information.

### Plan for data analysis

From the field, data was arranged, edited, coded and computed using SPSS and presented in frequency tables which made it easy to interpret the results. Likert scale was used to obtain data from participants which will then categorized to decide whether the level of knowledge was high or low, the attitude was good or poor and the practice good or poor.

### Quality control issues

A pretested semi-structured questionnaire was used in the study. Pretesting of the questionnaire was done at the division headquarters after which that village will not be recruited into the study. The researcher will train the research assistant who was used in the field.

### Ethical issues

The research was purely for academic purposes. To build the confidence of the respondents, the researcher will obtain an introduction letter from the teaching institution, which was submitted to the management of the area of study to be granted permission to carry out research within the area. The researcher will then request for from the town clerk Ishaka division to address potential respondents who was informed of their voluntary participation and their consents be obtained.

**RESULTS****Social demographic characteristics.****Table 1: showing social demographics of participants:**

Variable	Frequency (n=85)	Percentage
<b>Age</b>		
18-30	21	24.7
31-40	28	32.9
More than 40 years	36	42.4
<b>Marital status</b>		
Married	72	84.7
Divorced	09	10.6
Widowed	04	4.7
<b>Religion</b>		
Christianity	70	82.4
Islam	15	17.6
<b>Education</b>		
Primary	45	53.0
Secondary	33	38.8
Non education	07	8.2
<b>Occupation</b>		
Employed	18	21.2
Unemployed	13	15.3
Peasant.	54	63.5

The participants were assessed for their age in which majority 36(42.4%) of the participants were more than 40 years of at least 21(24.7%) were between 18 to 30 years. When they were asked about their marital status, the majority 72(84.7%) were married while at least 9(10.6%) were divorced.

The participants were asked about their religion in which majority 70(82.4%) were Christians while

15(17.6%) were Muslims. When the participants were assessed for their education level, majority 45(53% of the participants said they had studied up to primary education, and at least 7(8.2%) had no formal education.

The participants were also assessed for their occupation status, in which majority 54(63.5%) were peasant farmers while 13(15.3%) were unemployed.

**Prevalence of male involvement in nutrition of under five children****Table 2;** showing proportion of male involvement in child nutrition

Male involvement in child nutrition	Frequency	Percentage
Fully involved	32	37.6
Partially involved	47	55.3
Not involved	06	7.1

The participants were asked if they were always involved in nutrition of their under five children, only 32(37%) said they were fully involved, while the majority 47(55.3%) were partially involved, while

6(7.1%) never involved themselves. The study noted that the majority 53(62.4%) were not fully involved in the nutrition of their under five children.

**Factors associated with male involvement in child nutrition**  
**Table 3;** factors associated with male involvement in child nutrition

Assessment Question	Involved n=32		not-fully involved n= 53		Or (95%Ci)	P- Value
	Freq.	%age	Freq.	%age		
Whose duty is child feeding						
Woman	08	25.0	28	52.8	1.21(0.47-4.09)	0.003
Both parents	24	75.0	25	47.2	Ref	
Mention foods for child good health						
ASF and PSF	14	43.8	19	35.8	6.4(1.82-7.15)	0.799
Didn't Know	18	56.3	34	64.2	Ref	
What hinders your participation						
Have no money	16	50.0	29	54.7	1.33(0.03-2.02)	0.002
Didn't Know what exactly to do	16	50.0	24	45.3	Ref	
Willing to learn child nutrition						
True	28	87.5	43	81.1	5.20(1.57-8.40)	0.329
False	04	12.5	10	18.9	Ref	
Culture a hindrance to participation						
True	04	12.5	16	30.2	3.47(0.14-12.10)	0.128
False	28	87.5	37	69.8	ref	

The participants were asked whom they knew was a duty to feed children, majority 28(52.8%) of those who had not been fully involved in nutrition of their under five children said it was the duty of women to feed children while the majority 24(75%) said it was a duty of both parents. The study showed that a male who knew that feeding a child was a duty of the female, was significantly likely not to be involved in nutrition of their under five children, with an odds ratio of 1.21(0.47-4.09 and a p-value of 0.003.

The participants were asked which foods were suitable for the under five children good health, majority of the participants both 18(56.3%) those who had fully been involved and those 34(64.2%) who had not, did not know, the suitable foods for their under five children, the study however showed that not knowing the type of foods for under five child was not a significant factor for male involvement, with an odds ratio of 6.4(1.82-7.15) and p-value of 0.799.

The participants were asked the reasons for not participating in nutrition of their under-five children, the majority of those who had not been fully involved cited lack of money as a major hindrance factor, while

at least 16(50%) said that they didn't know what to do in order to be considered being involved. The study established that shortage of money was a significant factor for males not be involved in child nutrition at an odds ratio of 1.33(0.03-2.02, and p-value 0.002

The participants were asked if they were willing to learn on the nutritional involvement for them under five children, the majority of both those who had been fully involved and those who had not been fully involved in nutrition of their under five children were willing to learn, the study established that willingness to learn on the nutrition of their children insignificantly affected being involved, with an odd ration of 5.20 (1.57-8.40) and a p-value of 0.329

The participants were asked if culture hindered their involvement in nutrition of under five children, majority of both who had been fully involved and those who had not said their cultures didn't hinder their involvement in child nutrition, the study further showed that culture was not a significant factor in influencing male involvement in child nutrition, with an odds ratio 3.47(0.14-12.10 and a p-value of 0.128.

**Perception of males towards child nutrition for under five children.****Table 4** showing males' perception towards child nutrition

Variable Child nutrition	Fully involved (n=32)		Not fully involved (53)		OR (95%CI)	P-value
	Freq.	Percent	Freq.	Percent		
Children need nutritional attention						
<b>True</b>	19	59.4	24	45.3	0.60(0.17-3.54)	0.003
<b>False</b>	13	40.6	29	54.7	Ref	
It's important for males to be involved						
<b>True</b>	17	53.1	22	41.5	0.77(0.44-8.61)	0.037
<b>False</b>	15	46.9	31	58.5	Ref	
Child upbringing is for both parents						
<b>True</b>	22	68.8	34	64.2	0.4(0.35-3.22)	0.001
<b>False</b>	10	31.2	19	35.8	Ref	
Decision making is entirely man's duty						
<b>True</b>	25	78.1	37	69.8	5.2(0.81-8.67)	0.593
<b>False</b>	07	21.9	16	30.2	Ref	
Men who knew signs of malnutrition						
<b>True</b>	18	56.3	25	47.2	0.22(0.09-11.0)	0.003
<b>False</b>	14	43.7	28	52.8	Ref	

The perception of males towards child nutrition was assessed, the males asked if they thought under five children needed any special nutritional attention, majority 19(59.4%) of those who had been fully involved said yes while the majority 29(54.7%) of those who had not been fully involved in child nutrition said it was not necessary, the study indicated that having good attitude on the nutritional attention needed for under five children was a significant factor for males to be involved in child nutrition with an odd ratio of 0.60(0.17-3.54 and p-value of 0.03.

The participants were asked if they thought it being necessary for males to be involved in child nutrition, majority 17(53.1%) of those who had been involved in child nutrition while majority 31(58.5%) of those who had not been fully involved in child nutrition thought it was not important, the study established that males perception on importance of their involvement on child nutrition was not a significant factor for being involved, it indicated an odds ratio of 0.77(0.44-8.61 and a p-value of 0.037.

The participants were asked if they thought child upbringing was a duty of both parents, majority of both males 22(68.8%) who had been involved and those 34(64.2%) who had not fully been involved in

child nutrition, said they knew it was a duty of both parents to take care of their children, the study showed that a male with good perception on their combined efforts to raise children together as both parents was significantly likely to be involved in child nutrition at an odds ratio of 0.4(0.35-3.22 and a p-value of 0.001

The participants were asked about who makes the decisions regarding feeding in the children, majority of both of those 25(78.1%) who had been fully involved in child nutrition and those 37(69.8%) who had not been fully involved in children said it was a man's to make decisions at home, even regarding child feeding, the study established that the male's dominating decision making did not significantly influence, male involvement, with an odds ratio of 5.2(0.81-8.67 and p-value of 0.593.

The participants were asked if they knew the signs of malnutrition in children, majority of those 18(56.3%) who had been fully involved said they knew while at least 28(52. %) of those who had not been involved in child nutrition did not know, the study established that knowing signs of malnutrition in children was a significant factor for males to be involved in nutrition of their children with an odds ratio of 0.22(0.09-11.0 and a p-value of 0.003.

**DISCUSSION****Prevalence of Male Involvement in Nutrition**

The study found that only 32 (37%) of participants were fully involved in the nutrition of their under-five children, while 47 (55.3%) were partially involved,

and 6 (7.1%) did not involve themselves at all. This indicates a low prevalence of male involvement in child nutrition, with 53 (62.4%) of respondents not being fully engaged. The lack of awareness about

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their roles in child nutrition may contribute to this low involvement. This finding aligns with a study by Arikpo et al., [11] which demonstrated that community-based initiatives involving fathers significantly reduced malnutrition.

#### **Factors Associated with Male Involvement in Nutrition**

When asked whose duty it was to feed children, the majority (28, or 52.8%) of those not fully involved believed it was the mother's responsibility, while 24 (75%) of fully involved participants recognized it as a shared responsibility. The study found that males who perceived feeding as a woman's duty were significantly less likely to participate in child nutrition, with an odds ratio of 1.21 (0.47–4.09) and a p-value of 0.003. This belief may stem from societal norms where men grow up observing women handling feeding responsibilities. Such perceptions can adversely affect child nutrition, as mothers often lack sufficient resources to meet all nutritional needs. These results are consistent with a World Bank (2020) report that found higher stunting rates in children cared for solely by mothers compared to those raised with both parents' involvement in countries such as Cameroon, the DRC, and Nigeria. The study also showed that most participants, regardless of their involvement, lacked knowledge about suitable foods for under-five children. Among those fully involved, 18 (56.3%) lacked this knowledge, compared to 34 (64.2%) of those who were not fully involved. However, this knowledge gap was not a significant factor for male involvement, with an odds ratio of 6.4 (1.82–7.15) and a p-value of 0.799. This gap may be attributed to men not attending antenatal care (ANC) visits or other health services where child nutrition education is often provided [12].

#### **Barriers to Male Involvement**

When asked why they did not participate in child nutrition, most respondents cited a lack of financial resources as the primary barrier, while 16 (50%) admitted they did not know what actions constituted meaningful involvement. The study found that financial constraints were a significant factor, with an odds ratio of 1.33 (0.03–2.02) and a p-value of 0.002. This is likely because many participants were peasant farmers or operated small businesses with limited income, making it difficult to meet household needs. These findings align with Umar et al. [10], who noted that societal norms often assign men the role of providing financial resources for basic household activities, including food and healthcare.

#### **Willingness to Learn**

Most participants, regardless of their current level of involvement, expressed a willingness to learn about child nutrition. However, the study found that this willingness was not a significant predictor of involvement, with an odds ratio of 5.20 (1.57–8.40)

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and a p-value of 0.329. The high willingness to learn suggests that most men are open to contributing to child nutrition but may be constrained by work demands, leaving little time for active participation [13].

#### **Cultural Influence on Male Involvement**

The majority of participants, both fully involved and not, stated that cultural norms did not hinder their involvement in child nutrition. The study confirmed that culture was not a significant factor, with an odds ratio of 3.47 (0.14–12.10) and a p-value of 0.128. This could reflect a shift away from strict cultural norms that traditionally limited male participation in childcare. However, these findings contradict Wanyoni et al., [14], who reported that cultural and social institutions often discourage men from engaging in maternal and child health (MCH) activities. Men who deviate from traditional gender roles, such as preparing food or participating in childcare, may face stigma and ridicule in some communities [13].

#### **Perceptions of Nutritional Attention for Children**

The study assessed male perceptions of the need for special nutritional attention for under-five children. Among participants, 19 (59.4%) of those fully involved in child nutrition believed special nutritional attention was necessary, while 29 (54.7%) of those not fully involved considered it unnecessary. A positive perception of the importance of child nutrition was a significant factor for male involvement, with an odds ratio of 0.60 (0.17–3.54) and a p-value of 0.03. This could be attributed to a lack of adequate information on child nutrition, which impacts perceptions negatively. These findings differ from Wanyoni et al., [14], which suggested that household norms and decision-making regarding food often fail to prioritize children's nutritional needs, perpetuating poor outcomes.

#### **Male Perceptions of Their Role in Child Nutrition**

When asked whether male involvement in child nutrition was important, 17 (53.1%) of the fully involved group agreed, while 31 (58.5%) of the partially or non-involved group disagreed. This indicates that many men do not view their role in child nutrition as crucial, often assuming that once they provide food and other necessities, the responsibility shifts entirely to women. The study showed that perception of the importance of male involvement was not a significant predictor of actual involvement, with an odds ratio of 0.77 (0.44–8.61) and a p-value of 0.037. This perception, while culturally ingrained, can negatively affect child nutrition, as evidenced by findings from similar studies [14].



### Perception of Shared Responsibility in Child Upbringing

A majority of participants—22 (68.8%) of the fully involved and 34 (64.2%) of the less-involved group—acknowledged that child upbringing is a shared duty of both parents. This positive perception significantly influenced male involvement in child nutrition, with an odds ratio of 0.4 (0.35–3.22) and a p-value of 0.001. These results suggest that guiding men on their specific roles in child nutrition could increase their involvement, leveraging their existing acknowledgment of shared parenting responsibilities [15].

### Decision-Making in Child Nutrition

The study explored who made decisions regarding child feeding within households. Among fully involved participants, 25 (78.1%) stated that men were the primary decision-makers, compared to 37 (69.8%) of those less involved. Despite this dominance in decision-making, it was not a significant factor influencing male involvement, with an odds ratio of 5.2 (0.81–8.67) and a p-value of 0.593. This pattern reflects societal norms where men control financial resources and, consequently, decisions about nutrition and healthcare, as corroborated by the Uganda Demographic Health Survey (UDHS) of 2018. However, these norms can negatively impact child nutrition if men lack knowledge about age-appropriate and nutritious food choices.

The study highlights the generally poor male involvement (37%) in the prevention of malnutrition, with many participants (52.8%) perceiving child feeding as a woman's responsibility. Poor attitudes toward the necessity of special nutritional attention for under-five children were prevalent, with 54.7% of the less-involved group deeming it unnecessary. Significant factors influencing male involvement included a positive perception of shared parental responsibilities (odds ratio: 0.4; p-value: 0.001) and

### Awareness of Malnutrition Signs

The study revealed that 18 (56.3%) of fully involved participants recognized signs of malnutrition in children, compared to only 28 (52%) of those less involved. Awareness of malnutrition signs was a significant factor for male involvement in child nutrition, with an odds ratio of 0.22 (0.09–11.0) and a p-value of 0.003. The limited awareness among many men may stem from their lack of close interaction with children, making it challenging to detect nutritional deficiencies. These findings align with a study by Victo et al., [16], which found that in urban Accra, men rarely participated in identifying or addressing undernutrition, leaving caregiving responsibilities to older family members.

### Influence of Cultural Norms

Cultural norms were assessed for their impact on male involvement in child nutrition. Most participants, regardless of their level of involvement, reported that culture did not hinder their participation. The study found that cultural factors were not significant, with an odds ratio of 3.47 (0.14–12.10) and a p-value of 0.128. This reflects a shift from rigid traditional norms toward more inclusive parenting roles. However, the findings contradict Wanyonyi et al. [14], which emphasized that cultural stigmas often discourage men from engaging in child-rearing activities, viewing such roles as inconsistent with traditional masculinity.

## CONCLUSION

awareness of malnutrition signs (odds ratio: 0.22; p-value: 0.003). In contrast, cultural norms and male-dominated decision-making were not significant predictors of involvement. The findings underscore the importance of addressing knowledge gaps and societal perceptions about male roles in child nutrition. Interventions targeting male engagement through education and community-based programs could help improve nutritional outcomes for under-five children.

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