

Challenges to proper nutrition in children under five years: a cross-sectional study on mothers of malnourished children attending Lubaga Hospital

Florence Nakamya*, Donatus Kimera, Rev. Sr. Jane Frances Namuddu
Lubaga Hospital Training School

Abstract

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Globally, micronutrient deficiency affects millions, with children being particularly vulnerable to its effects. In Uganda, malnutrition remains a concern, as evidenced by high rates of stunting and underweight among children under five. This study aimed to identify the Challenges to Proper Nutrition in children under five years old among Mothers of Malnourished Children attending UMHL.

Methods

This study used a descriptive cross-sectional study that utilized a quantitative method of data collection. Data was collected from 30 respondents using both a structured and a non-structured questionnaire distributed using a simple random sampling method. Data collected was arranged in the form of tables, pie-charts, and graphs.

Results

In this study 10(33.3%) were aged between 36-45 years, 11(37%) were Baganda, 9(30%) were of secondary level, 8(27%), and 13(43.3%) were mothers. Majority of the respondents 16(53%) were not sure about the components of a balanced diet, 8(27%) believed that proper nutrition practices had a significant impact on the health and development of the children, 14(47%) said that the cultural beliefs and practices somehow influenced how they fed their child, 18(60%) noted that the affordability of nutritious foods for their children was expensive. 15(50%) declared that they faced financial challenges in purchasing nutrient-dense foods, and 18(60%) stated that the cost of nutritious foods hindered them from providing a balanced diet. 18(60%) mentioned that they have never received any assistance in the form of financial support for child nutrition.

Conclusion

The study revealed the influence of cultural, social, and gender factors on maternal decisions in child nutrition, which included challenges accessing nutritious foods, negative media impact, consideration of traditional foods, and gender roles.

Recommendation

Enhance maternal education on essential nutrition practices, address cultural beliefs and gender roles that influence feeding habits.

Keywords: malnutrition, child nutrition, cultural practices, and Lubaga hospital.

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Corresponding Author: Florence Nakamya
Lubaga Hospital Training School

Background

A balanced diet in early childhood is essential for supporting proper physical and cognitive development in children. However, millions of children under the age of five face the severe consequences of malnutrition, which remains a pressing global health issue. Globally, despite significant progress in combating malnutrition over the years, undernutrition remains a persistent problem worldwide. According to Pakistan by Ahmad et al. (2020), nearly 149 million children under the age of five are stunted, 49 million are wasted, and 40 million are overweight or obese. Malnutrition in these young children can lead to irreversible consequences, such as stunted growth, impaired cognitive development, and weakened immune systems. The economic burden is also substantial,

with malnutrition costing billions of dollars in lost productivity and increased healthcare expenses. (Ismail et al., 2020). In African countries, only 7% of children obtain the minimum standard of young and feeding requirements. This is related to poor economic status, low education of caretakers, lack of guidance on proper child feeding, and unavailability of enough food and poor feeding practices among caretakers. (Agho et al., 2019). According to a study by Bundara et al. (2017), 239,446 children in Tanzania suffer from moderate undernutrition, 2600 suffer from severe acute undernutrition, and undernutrition contributes to 35000 child deaths in the country. Research from Kenya (Ahmad et al., 2020) found that 26% of children experienced stunting, while 4% suffered from wasting, and 11% were classified as underweight. The

causes associated with this were in line with how caretakers understand and practice prevention measures for undernutrition. In Uganda, a study by Nankinga & Aguta (2019) found that nutrition was a major problem in the country, whereby 33% of children were stunted, 6% were wasted, and 14% were underweight. A study conducted in Uganda's Nakaseke and Nakasongola districts revealed that 38.5% of children exhibited stunted growth, 16.5% showed signs of wasting, and 13.5% were underweight (Habaasa G., 2015). The caretakers had a great influence in the above situation, and this was influenced by their understanding, their attitude, and how they practice preventive measures for undernutrition among their children. The improper nutrition crisis among children under five years at Lubaga Hospital is concerning, with a substantial 42.5% diagnosed with malnutrition. This worrisome statistic highlights the severe impact on the health and well-being of these young children (Hall et al., 2020). Mothers attending the hospital with malnourished children face significant challenges in providing adequate nutrition, impacting their children's physical and cognitive development. The lasting effects of early childhood malnutrition can hinder growth, immunity, and overall health, jeopardizing their prospects. Although Lubaga Hospital has initiated nutrition education programs and support services to address the issue, the problem persists. This study delves into the challenges that hinder achieving adequate nutrition for children under five, focusing on mothers of malnourished children attending Lubaga Hospital.

Specific objectives of the study

1. To establish the cultural challenges to Proper Nutrition in Children less than Five Years among Mothers of Malnourished Children attending Lubaga Hospital, Kampala District.
2. To identify the economic challenges to Proper Nutrition in Children less than Five Years old among Mothers of Malnourished Children attending Lubaga Hospital, Kampala District.

Methodology Study design

The study employed a cross-sectional study design for assessing the Challenges to Proper Nutrition in Children under Five Years among Mothers of Malnourished Children attending Lubaga Hospital, Kampala District. It enabled the dependent and independent variables to be assessed at the same time, and there was no follow-up of the study participants.

Study area

The study was carried out in 2023 at Lubaga Hospital. Lubaga Hospital is located in Lubaga Division, Kampala Capital City, about 6.4 kilometers southwest of Mulago National Referral Hospital. It is one of the largest health

facilities in the division, with various departments like OPD, nursing, maternity, and family planning services, among others. This made it a suitable study site for assessing the Challenges to Proper Nutrition in Children under Five Years among Mothers of Malnourished Children.

Study population

The study population consisted of Mothers of Malnourished Children in Lubaga Hospital.

Sample size determination

The sample size was determined according to Roscoe (1975), who revealed that a minimum sample of 30 participants and not more than 500 participants is enough for any research study. Therefore, a sample of 30 mothers of children who were malnourished was considered for this study.

Sampling techniques

The study participants were selected using a simple random sampling method.

Data collection method

The study employed a survey using a structured questionnaire during data collection. The questions were set according to the three specific objectives, and the interviewer administered the questionnaire with closed-ended questions to respondents. Since some of the respondents were illiterate, the researcher administered the questionnaire and employed a translator, and the respondents answered freely as they were able to read and write, but in case of the respondents who were unable to read and write, an interpreter was used who assisted them on how the study was to be carried out.

Data collection tools

A researcher-administered questionnaire was used to collect information regarding the Challenges to Proper Nutrition in Children under Five Years among Mothers of Malnourished Children attending Lubaga Hospital, Kampala District.

Study variables

The Independent variable is: Challenges to Proper Nutrition in Children Less Than Five Years among Mothers of Malnourished Children. The Dependent Variable is: Proper Nutrition in Children less than Five Years among Mothers of Malnourished Children.

Quality control

Sample size was determined using the approved formula. Pre-testing of the data collection tools was done before the actual data collection by conducting a pilot study to determine the validity of the data collection tool.

Data analysis and presentation

Questionnaires were collected from the respondents after filling in their views, counted to ensure that all were returned, and checked for completion. Row data collection was daily, and all variables were given number codes and edited before leaving the area of study. This was done to ensure that no mistakes were left and no blank spaces before leaving the study area. The results were stored on a flash disk and compiled into a research report. Data was analyzed with the assistance of statisticians. The results for all objectives were examined, categorized, and presented in a summarized separate graph; frequently, tables, percentages, and the measurement of mean were used using Microsoft Excel 2013.

Inclusion criteria

Mothers of malnourished children attending Lubaga hospital who consented to participate in the study.

Ethical considerations

The Hospital administrator of Lubaga Hospital granted the researcher permission to carry out the research. The Ethical principle of beneficence was ensured by collecting information that yielded support or benefits to the participants. Nonmaleficence was ensured by protecting participants from any possible harm during the research study. Autonomy was assured through the provision of consent forms, which were taken, and the respondents were reassured of the confidentiality of their information. There was equal treatment of all participants, and they were allowed to withdraw from the study at any point in their interest. All information was kept confidential by using patient identification codes and not names.

Results

Demographic characteristics of the respondents

The study analyzed the socio-demographic characteristics of the respondents. The findings were presented in Table 1.

Table 1: Showing demographic data of respondents (n=30)

Variable	Category	Frequency(n=30)	Percentage (n=100%)
Age	18-25 years	7	23.3
	26-35 years	9	30
	36-45 years	10	33.3
	Above 45 years	4	13.3
	Total	30	100
Tribe	Muganda	11	37
	Musoga	4	13
	Mukiga	9	30
	Munyankole	6	20
	Total	30	100
Level of education	Tertiary	8	27
	Secondary	9	30
	Primary	7	23
	No education	6	20
Relationship child	wMother	13	43.3
	Guardian	7	23.3
	Relative	10	33.3
	Total	30	100

Table 1, showing the majority of the respondents, 10(33.3%) were aged between 36-45 years, 9(30%) were aged 26-35 years, 7(23.3%) were aged 18-25 years, and the least were 4(13.3%) were aged above 45 years. Most of the respondents, 11(37%) were Baganda, 9(30%) were Bakiga, 6(20%) were Banyankole, and the least

4(13%) were Basoga. Majority of the respondents, 9(30%) were of secondary level, 8(27%) were of tertiary level, 7(23%) were of primary level, while minority, 6(20%) never went to school. Majority of respondents, 13(43.3%) were mothers, 10(33.3%) were relatives, while minority, 7(23.3%) were guardians.

Cultural challenges to proper nutrition among mothers of malnourished children

Figure 1: showing whether respondents' cultural practices influence how they feed their children (n=30).

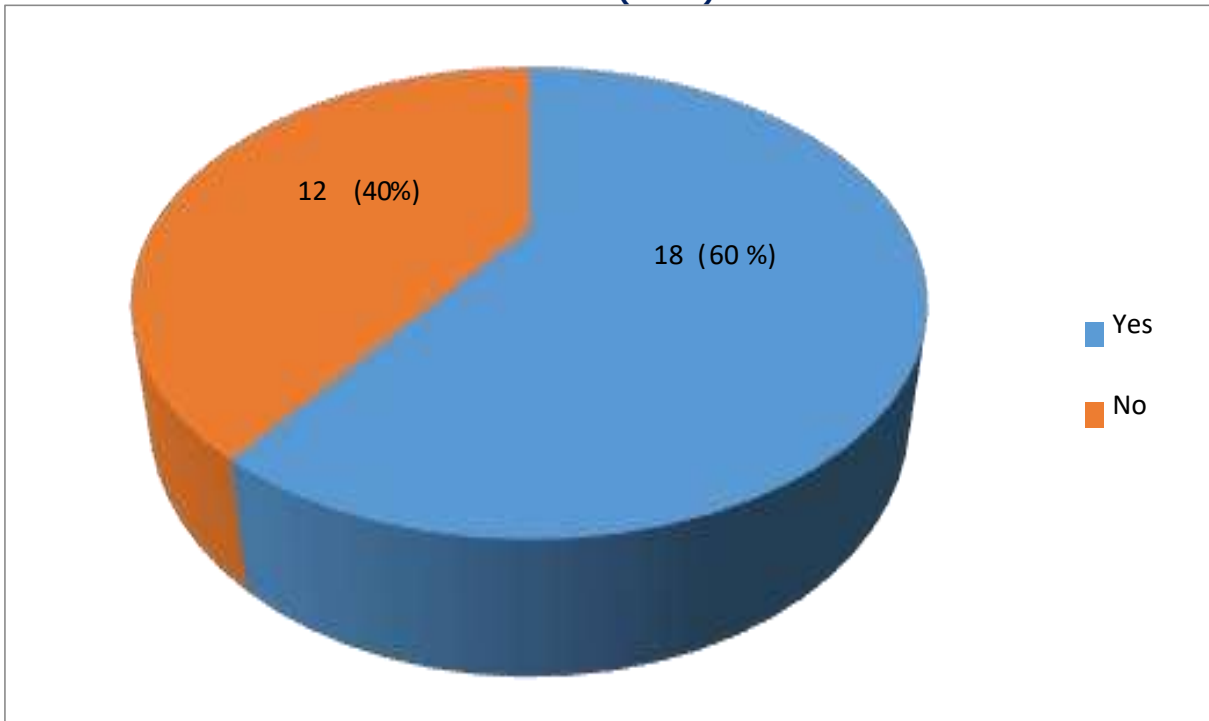


Figure 1 shows that the majority of the respondents, 18(60%), mentioned that their cultures influence how they feed their children, while the least, 12(40%), mentioned that their cultures have no influence.

Table 2: whether respondents faced challenges in accessing nutritious foods due to cultural norms of preferences (n=30)

Variable	Frequency	Percentage (%)
Yes	22	73
No	8	27
Total	30	100

Table 2 shows that the majority of the respondents, 22(73%), mentioned that they had faced challenges in accessing nutritious foods due to cultural norms and preferences, while a minority, 8(27%), mentioned that they had not faced challenges.

Figure 2: showing whether there are traditional foods or practices that respondents consider feeding their children (n=30).

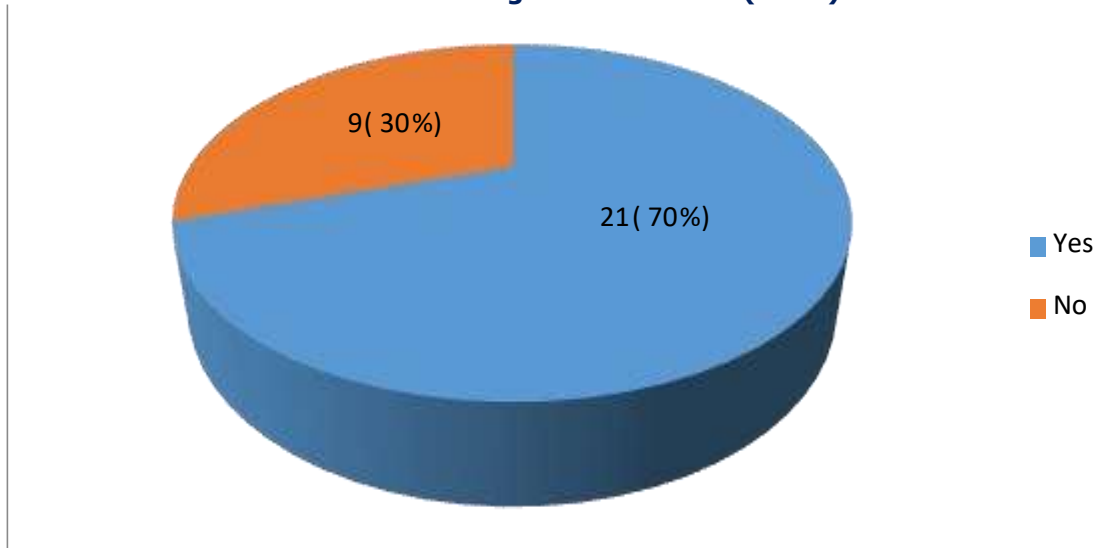


Figure 2 shows that the majority of the respondents, 21(70%), mentioned that there are traditional foods and practices that they consider when feeding their children, while the least, 9(30%), mentioned that they did not follow any cultural practices.

Table 3: Shows how gender roles in respondents' houses influence decisions related to children's nutrition (n=30)

Variable	Frequency	Percentage (%)
Restrict only to feeds that the father can afford	14	47
Not much influence	6	20
Can give my child anything	10	33
Total	30	100

Table 3 shows that the majority of the respondents, 14(47%), mentioned that gender roles in their households restricted them to feed what the father of the house could afford, 10(33%) mentioned that their children can eat anything, while the minority, 6(20%), mentioned that it had no much influence.

Economic challenges to proper nutrition

Table 4 shows how respondents describe the affordability of nutritious foods for their children's diet (n=30)

Variable	Frequency	Percentage (%)
Affordable	7	23.3
Moderately affordable	10	33.3
Expensive	13	43.3
Total	30	100

Table 4 shows that the majority of the respondents, 13(43.3%), mentioned that the nutritious foods for the children's diet were expensive, 10(33.3%) mentioned that they were moderately affordable, while the minority, 7(23.3%), mentioned that they were affordable.

Figure 3 shows whether respondents had ever faced challenges in purchasing nutrient-dense foods due to financial constraints (n=30).

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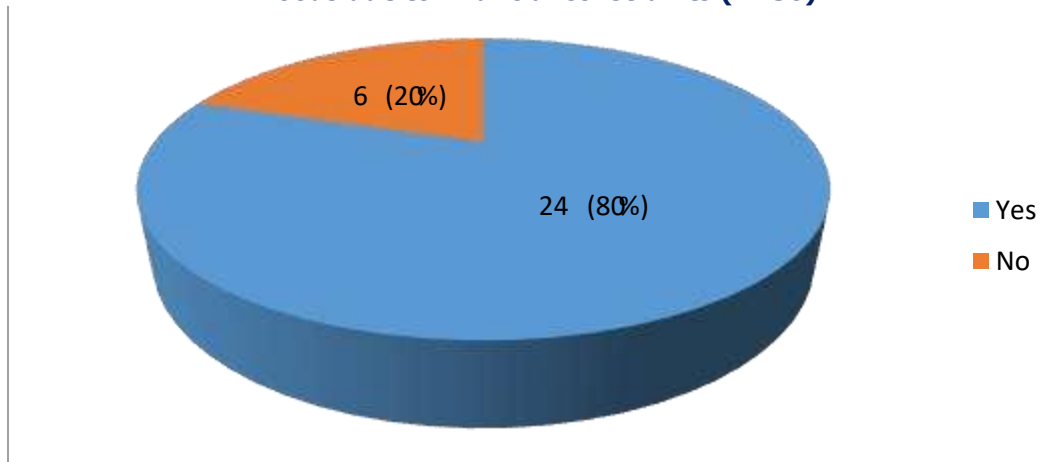


Figure 3 shows that the majority of the respondents, 24(80%), mentioned that they had ever faced challenges in purchasing nutrient-dense foods due to financial constraints, while a minority, 6(20%), mentioned that they had never faced any challenges.

Figure 4 shows whether any government programs or initiatives assist in obtaining nutritious foods (n=30)

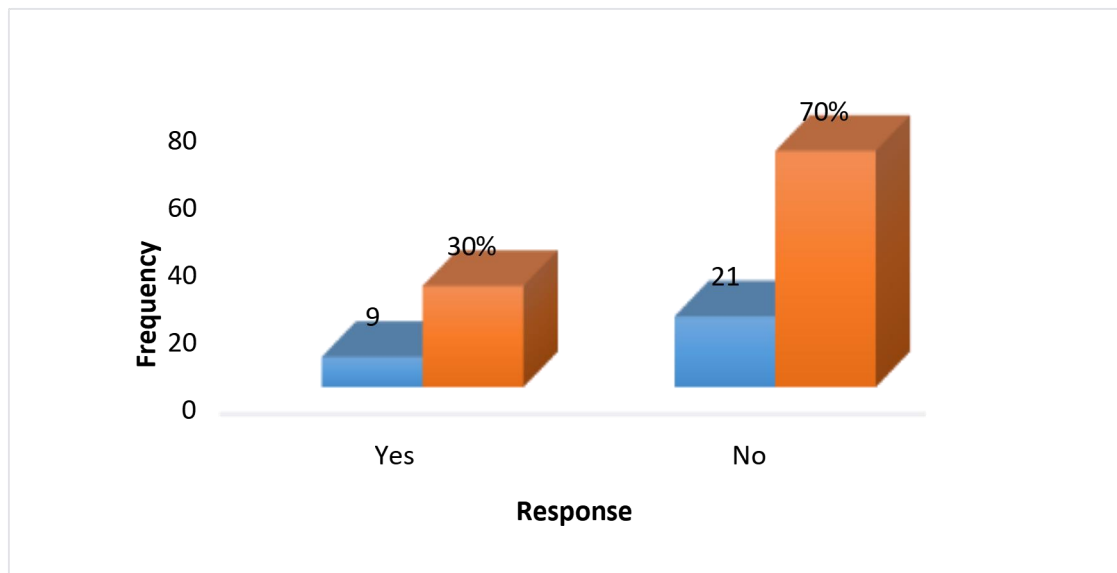


Figure 4 shows that the majority of the respondents, 21(70%), mentioned that there are no government programs or initiatives for obtaining nutritious foods, while a minority, 9(30%), mentioned that there were some programs.

Table 5 shows how the cost of nutritious foods impacts the respondents' ability to provide a balanced diet for the child (n=30)

Variable	Frequency (n=30)	Percentage (n=100%)
Fail to provide frequent feeds	9	30
Cannot afford a balanced diet	15	50
I can afford	6	20
Total	30	100

Table 5 shows that the majority of the respondents, 15(50%), mentioned they cannot afford a balanced diet for their children, 9(30%) mentioned that they cannot frequently provide nutritious feeds, while a minority, 6(20%) mentioned that they can afford the nutritious diet for their children.

Figure 5: showing whether respondents have ever received any form of financial support or assistance for their children's nutrition (n=30)

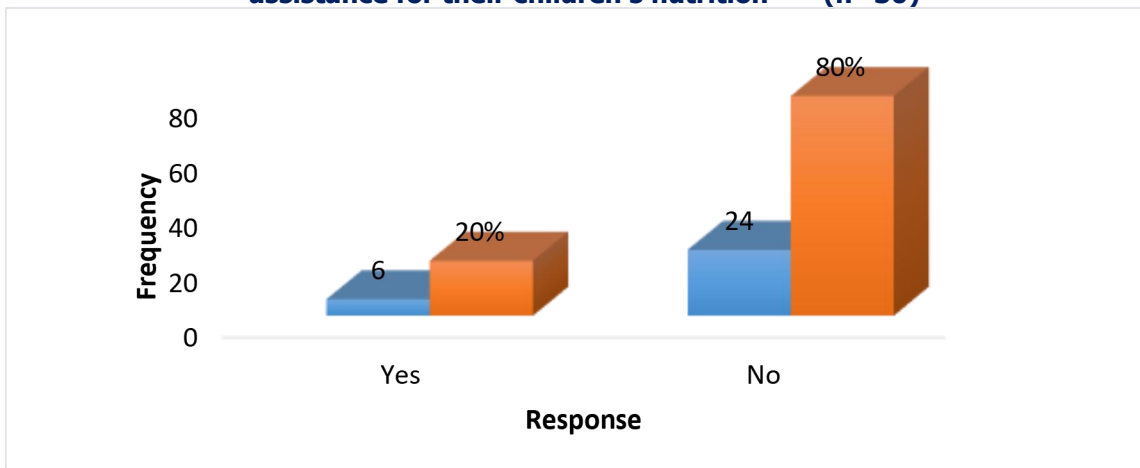


Figure 5, showing the majority of the respondents, 24(80%) mentioned that they had never received any financial support or assistance for their children's nutrition, while a minority, 6(20%) mentioned that they had ever.

Discussion of the findings

Socio-demographic data of the respondents

In terms of age distribution, most participants (33.3%, n=10) fell within the 36-45 year range, followed by 30% (n=9) aged 26-35 years. Another 23.3% (n=7) were between 18-25 years, while the smallest group (13.3%, n=4) was above 45 years. There could be a likelihood that respondents who were aged above 30 years had better practices regarding the nutrition of children below 5 years compared to their counterparts below 30 years due to their anticipated limited exposure.

Concerning tribe, most of the respondents, 11(37%) were Baganda, 9(30%) were Bakiga, 6(20%) were Banyankole, and the least 4(13%) were Basoga. This could be because the study was conducted in the central region, which is mostly inhabited by the Bantu people.

Pertaining education, majority of the respondents, 9(30%) were of secondary level, 8(27%) were of tertiary level,

7(23%) were of primary level, while minority, 6(20%) never went to school. There is a likelihood that respondents with higher education levels had better practices of nutritional management of children below 5 years, compared to counterparts with low education levels below primary.

Further findings revealed that, majority of respondents, 13(43.3%) were mothers, 10(33.3%) were relatives, while minority, 7(23.3%) were guardians. There could be a likelihood that mothers had better nutritional practices compared to relatives, since mothers had an emotional attachment to their children.

Cultural challenges to proper nutrition in children less than five years old among mothers of malnourished children

Regarding culture, the majority of the respondents, 18(60%), mentioned that their cultures influence how they feed their children. This might have negatively affected the children's nutrition, since respondents had strong cultural beliefs and practices, which led to inadequate nutrient intake.

Additionally, the majority of the respondents, 22(73%), mentioned that they had faced challenges in accessing nutritious foods due to cultural norms and preferences. This might be a result of cultural restrictions on certain foods, which might have affected the children's nutrition, and the cultural stigma associated with accessing food assistance programs impacted mothers' choices and resources for child nutrition.

Further findings revealed that the majority of the respondents, 21(70%), mentioned that there are traditional foods and practices that they consider when feeding their children. This could be because respondents had a strong culture and beliefs. The study was in alignment with the study done by Mokone et al (2023) in South Africa, where findings revealed that there were food taboos that they considered when feeding children.

Concerning gender roles, the majority of the respondents, 14(47%), mentioned that gender roles in their households restricted them to feed what the father of the house could afford. This might have contributed to the malnutrition of the children.

Economic challenges to proper nutrition in children under five years old among mothers of malnourished children

Regarding the cost, the majority of the respondents, 13(43.3%), mentioned that the nutritious foods for the children's diet were expensive. This might have hindered the respondents from accessing these feeds often. The study was in agreement with the study done by Ewusie et al (2014), where findings showed that mothers could afford and provide nutrient-rich feeds.

Additionally, the majority of the respondents, 24(80%), mentioned that they had ever faced challenges in purchasing nutrient-dense foods due to financial constraints. This could be related to the high cost of feeds and the long distance to market centers. The study was in agreement with the study done by Ewusie et al (2014), where findings revealed that mothers faced challenges in accessing nutrient-dense foods due to affordability issues, affecting overall nutrition outcomes for their children.

Pertaining to government programs, the majority of the respondents, 21(70%), mentioned that there are no government programs or initiatives for obtaining nutritious foods. This could be because the government is overwhelmed by the overgrowing population and cannot adequately provide for the people. The study was in alignment with the study done in Ethiopia by Yisak and Ewunetei (2020), where findings revealed that there were no government programs for obtaining nutritious foods, hence the need for income-enhancing programs and social protection initiatives to improve the affordability and accessibility of nutritious feeds for mothers and their children.

Concerning affordability, the majority of the respondents, 15(50%), mentioned they cannot afford a balanced diet for

their children, and 9(30%) mentioned that they cannot frequently provide nutritious food. This might have contributed to the malnutrition of the respondents' children. The study was in agreement with the study done by Kinyoki et al. (2017) in Somalia, where findings revealed that mothers faced challenges in purchasing nutrient-dense foods regularly due to financial constraints, affecting child nutrition outcomes.

Conclusion

Concerning cultural Challenges to Proper Nutrition in Children less than Five Years among Mothers of Malnourished Children, this study found that cultures influence how the majority feed their children. The majority faced challenges in accessing nutritious foods due to cultural norms and preferences; many had traditional foods and practices that they considered when feeding their children, and gender roles in their households restricted them to foods that the father of the house could afford.

About economic Challenges to Proper Nutrition in Children less than Five Years among Mothers of Malnourished Children, this current study found that nutritious foods for the children's diet were expensive to the majority, and many faced challenges in purchasing nutrient-dense foods due to financial constraints. The majority reported that there are no government programs or initiatives for obtaining nutritious foods, yet they cannot afford a balanced diet for their children.

Recommendations

To the government of Uganda:

The government of Uganda should put up special programs to support the low-income families in accessing nutritional food for their children.

The government, through partnership with non-governmental organizations, should endeavor to lobby for good, low-cost nutrition feeds and extend these services to people who cannot access them from the city centers.

To the ministry of health:

The Ministry of Health should carry out public awareness campaigns on the radio and television on proper nutrition practices for children under 5 years.

The ministry should also endeavor to decentralize health care services to remote areas, to impact knowledge and provide nutrition services, including putting up hospitals to manage the malnourished children.

To the health workers:

Health workers should also encourage caretakers of children to often seek health services for their children to monitor their growth.

To caretakers:

Caretakers of children should endeavor to maintain good hygiene for their children, and seek advice on the nutrition of their children from the health centers.

Nursing implications

Original study

Nurses should create public awareness about malnutrition, signs and symptoms, as well as the dangers, so that the public can be enlightened to seek health care services.

Nurses should also educate mothers on how they can properly feed their children in order to prevent malnutrition.

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Nurses should also encourage mothers with malnourished children to seek health care services from the hospitals.

Nurses should also educate mothers on other aspects of child health and growth, not forgetting to encourage mothers to take their children for child growth monitoring services.

Nurses should encourage mothers to take their children for complete immunization to prevent killer diseases.

Data availability

Data was available upon request

Acknowledgement

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List of Abbreviations.

UMHL: Uganda Martyrs Hospital Lubaga

OPD: Outpatient Department

Source of funding

The study did not receive any financial support from outside.

Conflict of interest

The author declares no conflict of interest

Author Biography

Florence Nakamyia is a student at Lubaga Hospital Training School pursuing a diploma in nursing. Donatus Kimera is the research supervisor, and Rev. Sr. Jane Frances Namuddu is the principal at Lubaga Hospital Training School.

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