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KNOWLEDGE, ATTITUDES, AND PRACTICES ASSOCIATED WITH MALNUTRITION IN CHILDREN UNDER 5 YEARS OF AGE AT RUKUNYU HOSPITAL, KAMWENGE DISTRICT. A CROSS SECTIONAL STUDY.

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Abstract

Introduction:

The main objective was to assess the knowledge, attitudes, and practices of caretakers on malnutrition among children less than 5 years at Rukunyu Hospital, Kamwenge district.

The specific objectives were to assess the knowledge of caretakers, to determine the attitudes of caretakers, and to identify the practices of caretakers towards malnutrition among children below five years at Rukunyu Hospital, Kamwenge district.

Methodology:

A cross-sectional descriptive study design was used, using a quantitative approach at Rukunyu Hospital Kamwenge district. The researcher conveniently sampled on 86 respondents from 25th June 2023 to 27th July 2023. Data collection was done by using self-administered questionnaires.

Results:

Out of the 86 respondents. The majority; 59(69%) knew the importance and nutritious effects of first thick milk. The majority; 74(86%) agreed that a balanced diet was important in preventing malnutrition. The majority; 80(93%) indicated that they did not have enough time to attend to their children. majority 42% of the caretakers initiated their babies on breast milk within 1 hour after delivery.

Conclusion:

The study showed that despite the caretakers knowing initiation of breastfeeding after delivery within one hour, a number of them did not adhere to the attitudes and this was affiliated to the limited resources to do so.

Recommendation:

There is a need for the caretakers to adhere to the practices and knowledge acquired to affect results concerning the improvement of the nutrition status of children. The health care providers should educate the public on other practices that reduce on malnutrition like exclusive breastfeeding, and should be advised on how and when to introduce supplementary feeds during the growth cycle of the children.

Keywords. *Knowledge, Attitudes, Practices, Malnutrition.*
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Background of the Study

Malnutrition is the intake of an insufficient, surplus, or disproportionate amount of energy and/or nutrients (Obasohan et al., 2020). Malnutrition has numerous forms i.e. stunting, overweight, and wasting. Stunting is the devastating result of poor nutrition in –utero and early childhood (WHO & Group, 2020). Meanwhile, overweight refers to a child who is too heavy for his or her height (WHO & Group, 2020). Then, wasting refers to a child who is too thin for his or her height (WHO & Group, 2020). Wasting is the result of recent rapid weight loss or the failure to gain weight(Shah, 2020). This study is particularly focused on undernutrition.

Globally, malnutrition has remained a public health burden with greater concern among children under five years old (Obasohan et al., 2020). According to the World Health Organization Report 2020, 144 million children under 5 years

have stunted growth, 47 million children are wasted and 14.3 million are severely wasted, whilst 38.3 million are overweight or obese (Govender et al., 2021). The joint estimates, published in March 2020, cover indicators of stunting, wasting, severe

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wasting, and overweight among children under five, and reveal insufficient progress to reach the World Health Assembly targets set for 2025 and the Sustainable Development Goals set for 2030 (*PAHO*, 2023).

In 2018, the Sub-Saharan African region witnessed a rise in the relative figure from 50.3 million to 58.8 million children (Obasohan et al., 2020). Interestingly, the 7.1% prevalence of children under 5 wasting in Africa is lower than the global rate of 7.3%.

In East Africa, Rwanda has 33.21% of stunted children in the Western province and 24.22% of stunted children in the Eastern province (Habimana & Biracyaza, 2022).

In Uganda, 29% or 3 in 10 children below 5 years of age are stunted while about 3.5% of all children below 5 years of age are faced with body wasting (Maniragaba,V.N et al., (2023)). Meanwhile, malnutrition in Rukunyu Hospital Kamwenge district has remained a major concern in children aged five years and below leading to increased morbidity and mortality in the Western region, of Uganda.

General objective

To assess the Knowledge, Attitudes, and Practices associated with malnutrition in children less than 5 years of age at Rukunyu Hospital, Kamwenge district.

Methodology

Study design

A descriptive cross-sectional study was done where the quantitative method of data collection was employed. A cross-sectional study was opted for because it involved interacting directly with participants so that findings are generated from raw sources. Quantitative methods helped to ascertain the number of children whose participants'knowledge, attitudes, and practices had been assessed.

Study area

The study was carried out at Rukunyu Hospital located in Kamwenge district, Toro sub-region of Western Uganda. Rukunyu Hospital is a government-aided hospital with several departments i.e. outpatient department, an inpatient department with wards like female and male wards, a pediatric ward, and surgical, medical, and private wards. Most of the people in Kamwenge district were peasants and a few carried small-scale businesses. Most of the people who had access to the health services at Rukunyu Hospital were from catchment areas of Busiriba, Biguri, Kabambiro, Kahunge, Bisozi, Nkoma, Bwizi, and Rwamanja. The researcher chose Rukunyu Hospital because it received a large number of cases of malnutrition in children under five and the hospital was easy to reach. The study was focused on assessing the knowledge, attitudes, and practices of malnutrition in children under five years in Rukunyu Hospital Kamwenge district from 25th June 2023 to 27th July 2023.

Study population

The study was done among caretakers at Rukunyu Hospital Kamwenge district to assess the knowledge, attitudes, and practices associated with malnutrition in children under five.

Sample size determination

The sample size was calculated using the Kish Leslie formula (1967) that stated; N= a2b c
X2
Where,
N= Desired sample
A standard normal deviation is usually set at 1.55 which corresponds to a 95% confidence level b= proportion of children under 5 with malnutrition where 60% is used
c= probability that the research got a certain number of children under 5 with malnutrition and 79% is used to cater for this.
X= is the degree of errors which is 0.1 Substituting the above figures into the formula; (1.55)2×(0.6×0.6)=0.8649
0.8649÷ (0.1)2=86.49,
Therefore, N=86.49 which is approximately 86 respondents.

Sampling technique

The researcher used a simple random technique to choose respondents who participated in the study. The researcher chose this technique because there was no bias since respondents were selected by chance.

Sampling procedure

The researcher used a simple random technique to choose respondents that participated in the study i.e. chance and lottery techniques were used where‖@ —and —#‖ were written on small papers and then folded and mixed through a small box. Respondents were asked to pick one at a time and those who picked —#‖ were selected to participate in the study.

Data collection method

The researcher personally obtained data by administering questionnaires to the caretakers. The questionnaires were self-administered to the respondents and the researcher assisted and were given a reasonable period to give their views and

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Original Article

responses. For respondents who didn't read English, the researcher helped in translating the questionnaires into their respective local languages i.eRunyakole, Rukiga, and Rutooro since the researcher was well versed in those languages that were commonly spoken in the region. The questionnaires were then collected, filed, and put in appropriate boxes which were then sealed to ensure more privacy.

Data collection tool(s)

Data was collected using an approved semi-structured questionnaire developed by the researcher consisting of both closed and open-ended questions. These were written in English and translated into the local language for those who could not understand English during the time of data collection.

Data collection procedure

During data collection a self-administered questionnaire was used for the literate and among the illiterates, interpreters were employed to assist in the study. The purpose of the research was explained to the respondents for their maximum cooperation. Data collection took place for 2 weeks thus approximately 7 respondents were approached for the study each day for 14 days. The researcher used the research assistants to help in collecting data.

Study variables

Independent variables; knowledge, attitudes, and practices associated with malnutrition

Dependent variables; malnutrition in children under five years

Quality control

Quality control measures were put into consideration to ensure the validity and reliability of collected data by; pretesting of the research tool, training of research assistants, giving ample time to data collection, clear inclusion and exclusion criteria, and finally adherence to standard operating procedures (SOPs).

Pre-testing and piloting the study

The researcher pre-tested the questionnaire on a tenth of the sample size at Kagongo Hospital, Ibanda district before the time of data collection. This was done to identify the gaps in the questionnaire and give room for errors before the actual data collection process commenced. Piloting was done before data collection at Kagongo Hospital that ensure the validity, credibility, and reality of the questionnaires.

Research assistants

Two research assistants were employed and their selection was dependent on their level of education, communication skills, and knowledge about the topic of the study. These were first oriented and trained about the data collection process and then were involved in presenting the questionnaires to the participants.

Inclusion criteria

Caretakers of children aged below 5 years at Rukunyu Hospital, Kamwenge district who were accepted to be involved in the research study were included in the study.

Data analysis and presentation

Respondents filled in their views and responses using the questionnaires, and the researcher collected the questionnaires and crosschecked them to ensure that all the questions had been answered. For questionnaires that were not filled in, the researcher returned them to the participants to ensure completeness. Data was collected manually, tallied, and grouped inform of tables as applicable and appropriate. Also, the acquired results were analyzed by Microsoft Excel and then eventually presented using figures, tables, bar graphs, and pie charts.

Ethical considerations

The researcher presented the research topic to the research and ethics committee of Medicare Health Professionals College for approval. After approval by the committee, a letter of introduction and permission seeking to carry out the study was provided to the researcher by the research committee of the College. This was presented to the District Health Officer of Kamwenge district through the hospital medical superintendent of Rukunyu Hospital for permission to conduct the study. The researcher explained the objectives and purpose of the study to each respondent and assured them of confidentiality, privacy, and observation of their rights throughout the study. The researcher then got consent from the respondents and the research study commenced. All the information and data collected from the respondents were coded to avoid disclosure of personal information and identity. This was meant to ensure the confidentiality of the data collected.

Results

The research study revealed demographically that majority of the caretakers 44(51%) were aged 25-29 years, 23(27%) was aged 19-24 years, 13(15%) were aged above 30 years and 6(7%) were aged 15-18 years. Furthermore, more than half of

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Original Article

the caretakers were married accounting to 46(54%), the widowed were accounting to 21(24%), the single parents were 12(14%) and the divorced accounted to 7(8%). More so, majority of the caretakers 52(61%) had gone through primary education, 19(22%) through secondary level 6(7%)had attained tertiary level of education and only 9(10%) had never attended any level of education. In addition to age, marital status and level of education, majority of the caretakers 45(52%) had 1-4 children, 18(21%) had only one child, 15(18%) had 4-8 children while 8(9%)of the caretakers had more than 8 children.

Caretaker's knowledge on Malnutrition in children under five years

The table 2 shows that majority 36(42%) of the caretakers initiated their babies on breast milk in the first one hour after delivery, 30(35%) after one hour of delivery while 20(23%) did not know when to start breastfeeding the baby after delivery.

Majority 59(69%) of the caretakers agreed that first thick milk was important and had nutritious effects to the baby, 27(31%) did not agree.

In figure 3 above, majority 68(79%) of the caretakers fed their babies on other foods other than breast milk to babies at 6 months of age, 16(19%) at 12 months of age and minority 2(2%) immediately after birth.

Caretaker's attitudes towards malnutrition in children under 5years

Figure 4 above shows that majority of caretakers52 (60%), felt uncomfortable when breastfeeding in public while 34(40%) felt comfortable while breastfeeding in public.

Figure 5 shows majority 74(86%) of caretakers agreed that balanced diet was important in the prevention of malnutrition while12 (14%) disagreed to whether a balanced diet prevented malnutrition.

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Original Article

Table1: Respondents' demographic characteristics (n=86)

Bio data		**Frequency**	**Percentage (%)**
Age	15-18	06	7
	19-24	23	27
	25-29	44	51
	Above 35	13	15
Total		**86**	**100**
Marital status	Single Parent	12	14
	Married	46	54
	Divorced	7	8
	Widowed	21	24
Total		**86**	**100**
Level of education	Primary only	52	61
	Secondary	19	22
	Tertiary	6	7
	Never attended	9	10
Total		**86**	**100**
Number of children	1-4	45	52
	4-8	15	18
	8 & above	8	9
	Only one	18	21
Total		86	100

Table 2: Respondents by what time the newborn should be initiated on breastfeeding after delivery (n=86)

Time a new born is initiated on breastfeeding after delivery	**Frequency**	**Percentage (%)**
Within one hour	36	42
Afterone hour	30	35
I don't know	20	23
Total	**86**	**100**

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Figure 1: Distribution of respondents according to the importance and nutritious effects of first thick milk to the baby (n=86)

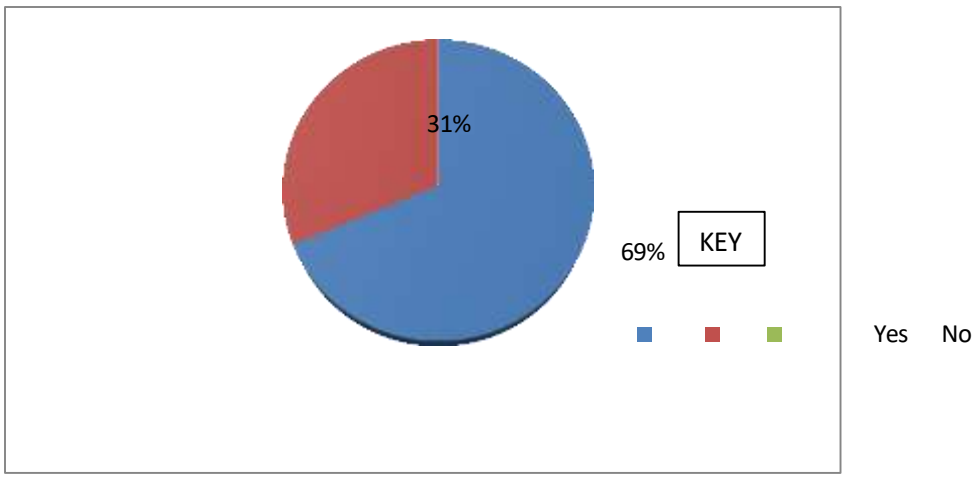

Figure 2: Distribution of Caretakers when to feed other foods to the baby (n=86)

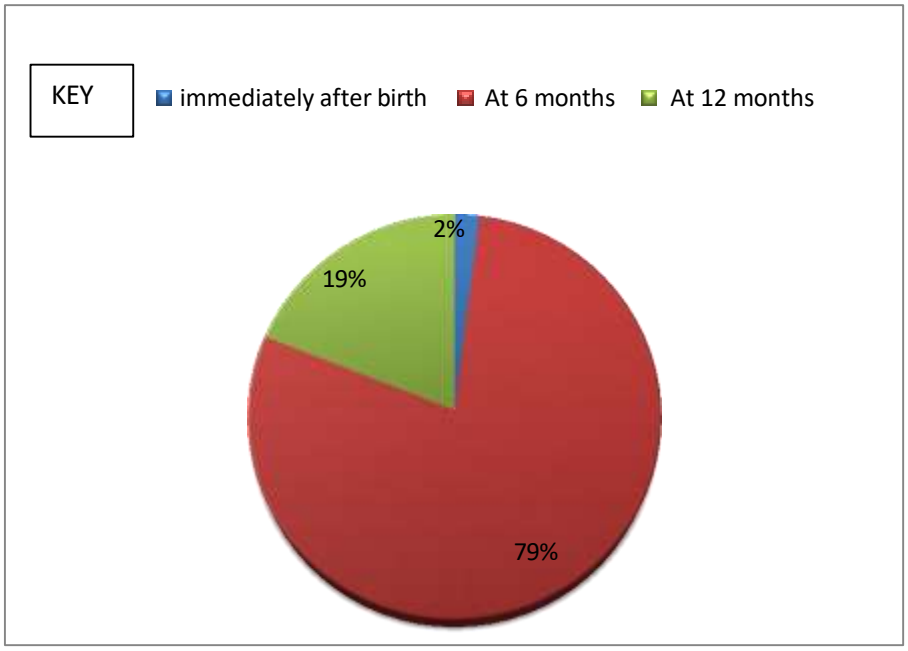

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Figure 3: showing how caretakers felt while breastfeeding in public (n=86)

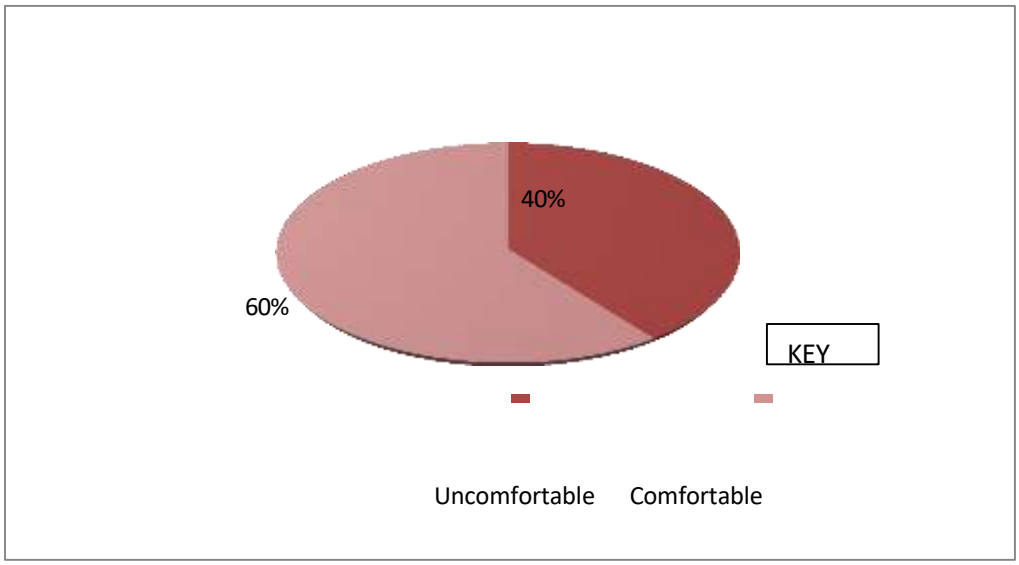

Figure 4: Distribution of caretakers to whether serving a balanced diet prevented malnutrition in children under five years (n=86)

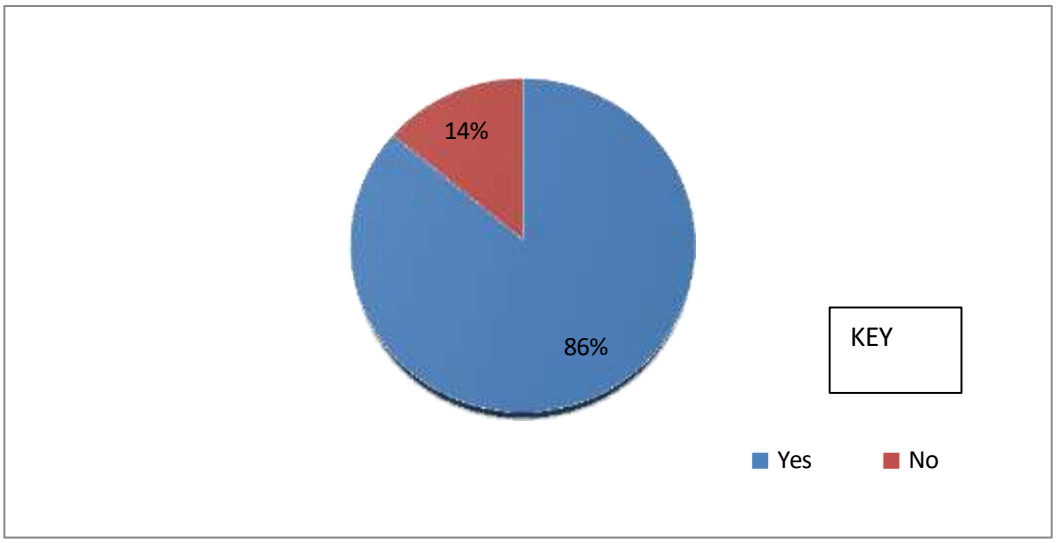

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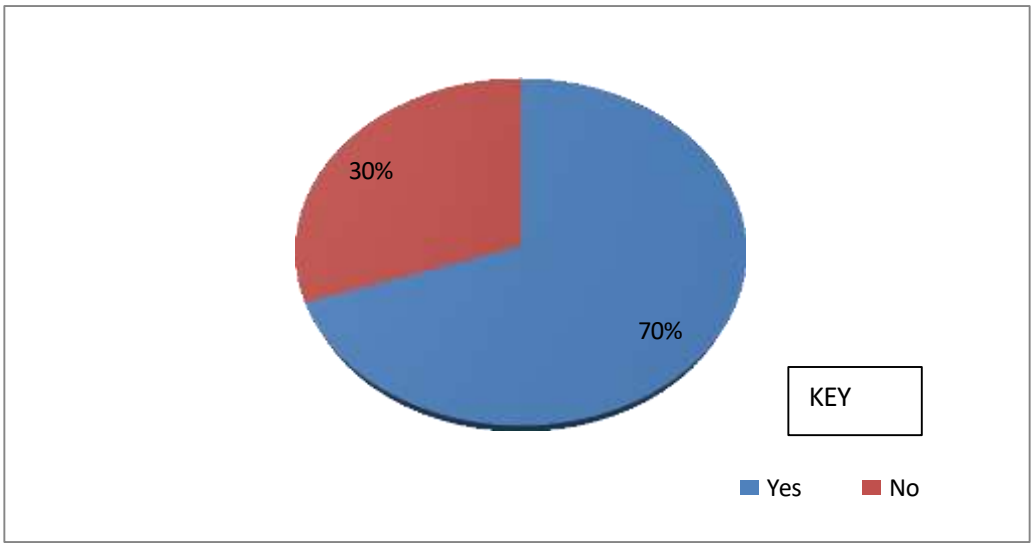
Figure 5: Distribution of caretakers who breastfed their children up to 6 months (n=86)



Caretakers practices towards malnutrition in children under five years

Table 3 reveals that majority 24(52%) stopped breastfeeding between 6-12months and 17(37%) stopped breastfeeding between 2-5years and 5(11%) stopped before 6months.

Figure 5 shows that majority 60(70%) of caretakers breast fed their children up to 6 months while 26(30%) did not breast feed their babies up to 6 months

In figure 6 Majority 46(53%) of the caretakers had stopped breastfeeding whereas 40(47%) were still breastfeeding

In figure 7, majority 65(75%) of the caretakers fed their children 3 times and beyond in a day, 11(13%) fed their children less than 3 times a day whereas 10(12%) of the caretakers did not know how many times they fed their children in a day.

Figure 8 shows that most of the respondents 69(80%) used hands and plate to feed the children, 10(12%) used cups, 5(6%) used bottles and only 2(2%) used a spoon to feed the children.

Figure 9 reveals that majority 65(76%) of the respondents immunised their children while 21(24%) did not immunise their children.

Figure 10 shows majority 80(93%) respondents did not have enough time to take care of their children while only 6(7%) respondents had enough time to take care of their children.

Table 4 indicate that a half of the respondents 43(50%) fed their children on porridge, 23(27%) on pounded Irish, 15(17%) on meat soup and least of the respondents fed their children on sweet potatoes during weaning period.

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Figure 6: Distribution of Caretakers with children still breastfeeding (n=86)

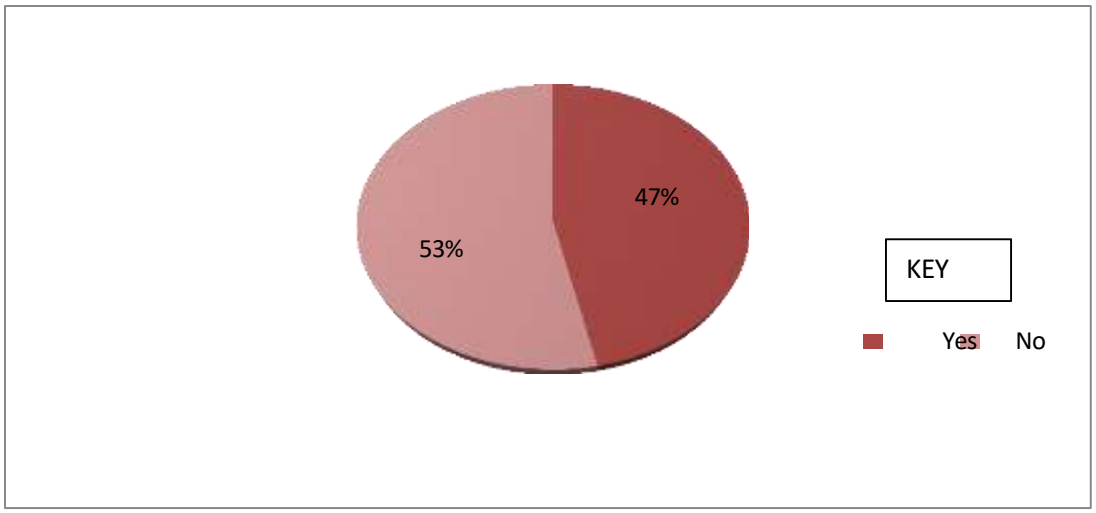

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Table 3: Respondents by what age did the child stop breastfeeding (n=46)

Age	**Frequency**	**Percentage (%)**
Stopped before 6months	5	11
Stopped Between 6-12months	24	52
Stopped between 2-5 years	17	37
Total	**46**	**100**

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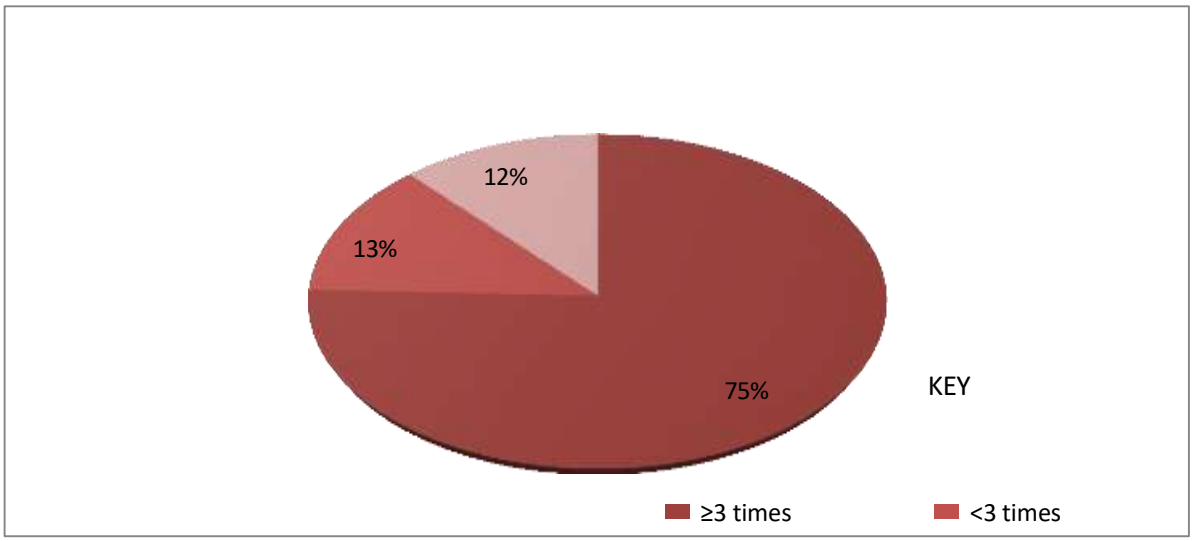
Original Article

Figure 7:Caretakers by how many times in a day a 1-5 year old child ate in order to grow well and healthy (n=86)



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Original Article

Figure 8: Respondents by what utensils they used for feeding their children (n=86)

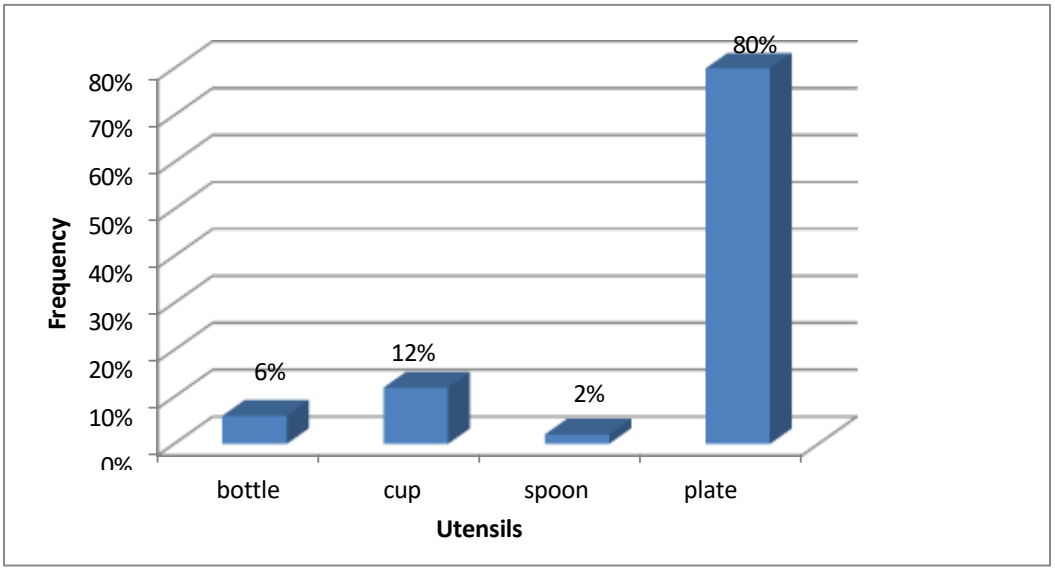
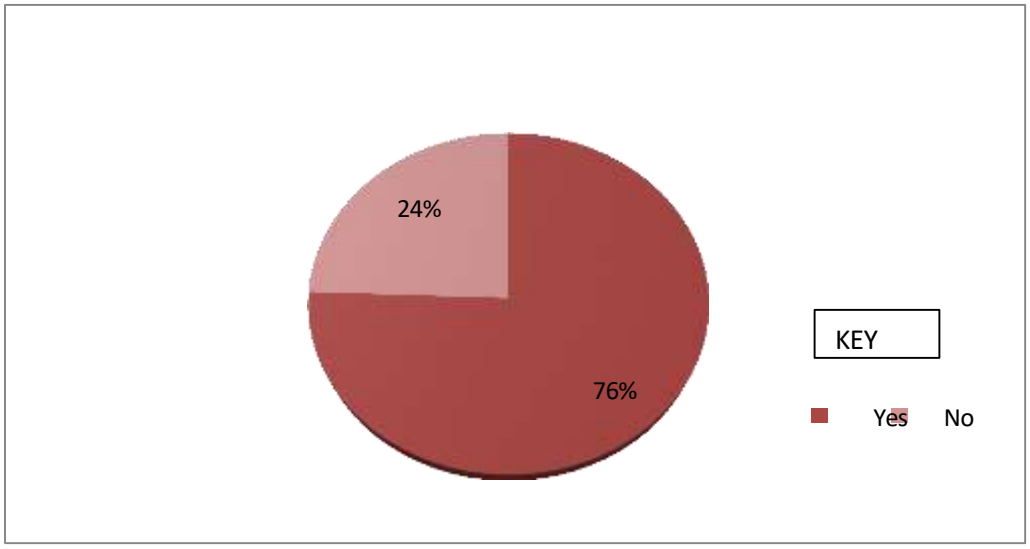


Figure 9: Distribution of respondents who immunised their children (n=86)



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Original Article

Figure 10: Distribution of respondents who had enough time to take care of their children

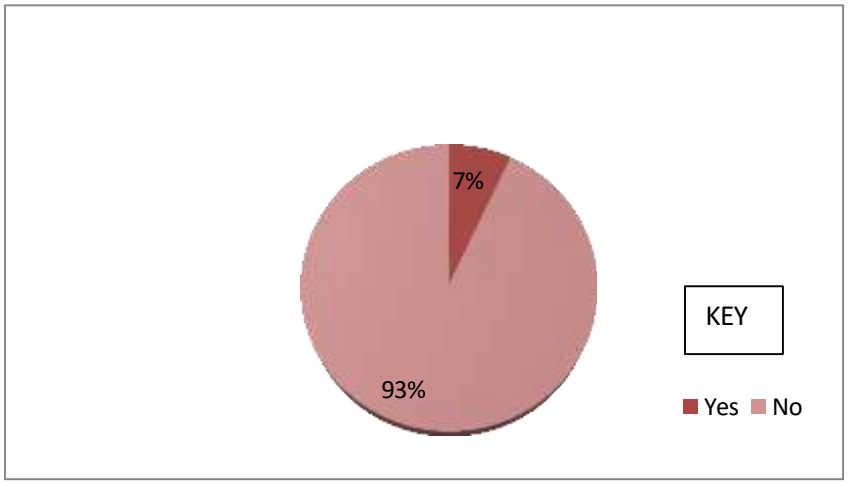

Table 4: showing food fed to children during weaning period by caretakers (n=86)

Food	**Frequency**	**Percentage (%)**
Sweet potatoes	5	6
Meat soup	15	17
Pounded Irish	23	27
Porridge	43	50
Total		**100**

Discussion of Findings

Knowledge of Caretakers towards malnutrition among children below five years

The objective of the study was to assess the level of knowledge of caregivers of children under 5 years at Rukunyu Hospital, Kamwenge district about malnutrition. The data analysis and interpretation revealed the following major findings:

The majority 69% of the respondents knew the importance and nutritious effects of first thick milk to the baby while 31% did not know the importance and nutritious effects of first thick milk to the baby. This is probably due to the continuous antenatal visits attended by caretakers. The study findings are in agreement with the study carried out in Nigeria which found that 38% of the caretakers knew the importance of colostrums to the newborn (Fadare et al., 2019).

Furthermore, results in regards to knowledge show that the majority 75% knew that children should be given complementary feeds 3 times or more daily,13% knew that feeds should be given not more than 2 times daily while 12% did not know the number of times they feed their children with complementary feeds. This is probably due to the health education regarding nutrition care to be given to children. This study is in disagreement with the study conducted in Kawempe, Uganda indicated that most caregivers 59.5% served their children 1-3 times daily, and 40.5% served meals 4-6 times daily to their children (Nabugoomu, J et al ., (2015).

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Original Article

The results also showed that 79% of the caretakers knew the age of the baby when introducing complementary food that a child should be 6 months old, 19% fed their babies complementary food at the age of 12 months while 2% fed their babies on complementary food immediately after birth. This is probably due to the health education provided and information from fellow women who know the same. The findings agree with a study done in Eastern and Central Uganda, indicating that most caregivers 75% had introduced their babies to complementary feeds at the age of 6 months. (Jacent Kamuntu Asimwe, 2021).

Attitude of Caretakers towards malnutrition among children below five years

Most of the mothers 60%, felt uncomfortable when breastfeeding in public while 40% felt comfortable while breastfeeding in public. This could be because mothers are shy and some consider breasts as sexual objects and so find it difficult to expose them. This is in agreement with the study in Bushenyi, which revealed that 55% of mothers felt uncomfortable when breastfeeding in public while 45% felt comfortable when breastfeeding in public.

The majority of the caretakers 86% agreed that a balanced diet was important in the prevention of malnutrition while 14% disagreed whether a balanced diet prevented malnutrition. This is probably because caretakers had been continuously health-educated about the components of a balanced diet from their villages by village health teams. This is in agreement with the study done in Zambia, where 92% of respondents agreed that a balanced diet was important in the prevention of malnutrition (Iita, 2020)

The majority 70% of caretakers agreed that breastfeeding up to 6 months was good and enough for the baby, while 30% of the caretakers disagreed that breastfeeding was not good and not enough for the baby. This could be because breast milk contains the ideal nutrients for child growth and development. This is in agreement with a study carried out in Eastern and Central Uganda, where 68% of the children below 6 months were exclusively breastfed (Asiimwe, J. K et al., 2021).

Practices of Caretakers towards malnutrition among children below five years

Most of the respondents 79% used plates to feed their children, 10% used cups, 5% used bottles and only 1% used a spoon. This is because plates were readily available and had a large surface area to cool feeds served to children compared to other utensils. This is in agreement with another study done in Nakawa, Uganda where it was found that 98.1% of the children below five years eat from their plates (Nabugoomu, J et al., (2015).

Of most of the caretakers 76% indicated that their children were immunized while 24% of the caretakers had not immunized their children. This is probably because the health teams had sensitized the community on the importance of immunizing children as it provides immunity against killer diseases. This disagrees with the study conducted in Mogadishu Somalia which revealed that more than 50% of the children surveyed were not immunized (Abdullahi Abdi Hussein, 2018).

The majority 42% of the caretakers had initiated their babies breastfeeding within one hour after delivery, 35% of caretakers had initiated their babies breastfeeding after one hour while a minority 23% did not know when to initiate breastfeeding after delivery. This is probably because of the thorough antenatal and postnatal health education particularly about breastfeeding, maternal and child health campaigns aired on local radio and television stations by the MOH and stakeholders like NGOs like UNICEF. Such results are consistence with the study in Eastern and Central Uganda that indicated 41% of the children were initiated on breast milk in the first hour after delivery (Asiimwe, J. K et al., 2021).

The majority of caretakers 93% indicated that they don't have enough time to attend to their children while the least 7% indicated that they have enough time to attend to their children. This could be because some parents have tight schedules and do not get enough time to provide adequate care. This is in agreement with a study done in Nyakishana and Engaju in Buhweju district, South Western Uganda, where 83% of the caretakers for children below five years reported to be working for long hours in their gardens and tea farms that were very far from their homes(Abaasa, et al., 2021).

Study limitations

Limited time for data collection which also limited the amount of information collected.

Lack of funds to facilitate the study

Conclusion

The study showed that many of the respondents 51% were in their late twenties ranging from 25- to 29 years, the majority of them 54% were married, also majority of them 61% had attained a primary level of education and 52% had 1-4 children. The knowledge of caretakers towards initiation of breastfeeding after delivery within one hour was adequate with 42% and the majority 68% of the respondents knew the importance and nutritious effects of colostrums. Also, the majority 60% of caretakers felt uncomfortable to breastfeed in public. The study

further identified 80% of caretakers that used plates to feed their children.

Recommendation

The Ministry of Health in conjunction with the Ministry of Education should introduce child health in the primary school curriculum to increase the knowledge level of mothers since the study indicated that most mothers had attained primary education and had limited knowledge.

Healthcare providers should educate the public on the disadvantages of early pregnancies that predispose to under-five malnutrition since young mothers are also growing at the time of pregnancy and birth of the child.

The district health care providers should educate the public on the importance of good nutrition practices for children especially those below 5 years of age. They should be educated on the right foods that make up a balanced diet necessary for the growth requirements of the children.

Acknowledgment

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I also wish to thank my parents for supporting me financially and enabling my stay in school.

List of abbreviations

WHO: World Health Organization
UNICEF: United Nations International Child Emergency Fund
MCH: Maternal Child Health
UAHEB: Uganda Allied Health Examination Board
GOU: Government of Uganda
NGO: Non-Governmental Organization
SOP: Standard operating procedures
MTC: Malnutrition Treatment Centre
USAID: United States Agency on International Development
UDHS: Uganda Demographic Health Survey

References

1. Abaasa, C. N., Rukundo, G. Z., Ayesiga, S., Atukunda, S. P., Campisi, S., O'Hearn, S., et al. (2021). *Healthcare providers and caregivers' perspectives on factors responsible for persistent malnutrition of under 5 children in Buhweju district, South Western Uganda*; a phenomenological qualitative study. *BMC Public Health*, 5 of 10.

2. Abdullahi Abdi Hussein. (2018). *Factors influencing malnutrition among under 5-year children*. *International Journal of Research in Business, Economics, and Management Vol 2*, 118.

3. Asiimwe, J. K., Nambooze, J., Ssonko, G. W., Kakande, J., Nyanzi, L., & Kaddu, P. (2021). Knowledge, attitudes, and practices of caregivers of children 0-23 months in Eastern and Central Uganda. *Food and Nutrition Sciences*, *12*(6), 494-508.Aziz, A., Hidayat, A., & Prasetyo, E. (2018). *Predictors of Malnutrition in children aged less than 5 years in Surabaya, Indonesia*. *Pakistan Journal of Nutrition*, 644.

4. Fadare, O., Amare, M., Mavrotas, G., Akerele, D., & Ogunniyi, A. (2019). *Mother's nutrition-related knowledge and child nutrition outcomes*: Empirical evidence from Nigeria. *PLoS ONE*, 6/17.

5. Habimana, S., & Biracyaza, E. (2022). *Risk factors of stunting among children under 5 years of age in the eastern and western provinces of Rwanda*. *Pediatric Health, Medicine and Therapeutics*, 119.

6. Iita, K. N. (2020). *An assessment of Knowledge, Attitude, and Practical skills of Caregivers on malnutrition in under-fives at Livingston General Hospital in Livingstone, Zambia.* Lusaka: Kristiana Ndaambella.

7. Jacent Kamuntu Asimwe, J. N. (2021). *Knowledge of attitudes and practices of caregivers of Children 0-23 months in Eastern and Central Uganda*. *Food and Nutritional Sciences*

>*Vol 12.* , 06.

8. Nabugoomu, J., Namutebi, A., Kaaya, A. N., & Nasinyama, G. (2015). Nutrition education influences child feeding knowledge attitudes and practices of caregivers in Uganda. American Journal of Health Research, 3(2), 82-90.Kalid, M., Osman, F., Sulaiman, M., Dykes, F., & Erlandsson, K. (2019). Infant and young child nutritional status and their caregivers' feeding knowledge and hygiene practices in internally displaced person camps,

Somalia. BMC Nutrition, 5 of 11.

9. Maniragaba, V. N., Atuhaire, L. K., & Rutayisire, P. C. (2023). Undernutrition among the children below five years of age in Uganda: a spatial analysis approach. BMC Public Health, 23(1), 390.Mitra, M., Susmaneli, H., Septiani, W., & Nurlisis, N. (2020). Effect of Nutritional Education on Improving Mother's Knowledge and Nutritional Status of Malnourished Toddlers in Pekanbaru City Indonesia. International journal of sciences: Basic and Applied Research.

10. *Child malnutrition—PAHO/WHO | Pan American Health Organization*. (n.d.). Retrieved November 26, 2023, from https://www.paho.org/en/enlace/child-malnutrition

11. Shah, R. C. (2020). *IAP Textbook of Tropical Diseases*. Jaypee Brothers Medical Publishers.

12. WHO, UNICEF, & Group, W. B. (2020). Levels and trends in child malnutrition. *Key findings of the 2020 Edition of the Joint Child Malnutrition Estimates*, 2.

13. World Health Organisation. (2020, April). *Newsroom*. Retrieved from World Health Organization: https://www.who.int/news-room/q-a-detail/malnutrition

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