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Original article

FACTORS ASSOCIATED WITH GROWTH MONITORING AND PROMOTION AMONG CHILDREN 0-23 MONTHS IN MALONGO SUB-COUNTY, LWENGO DISTRICT, CENTRAL UGANDA: CROSS-SECTIONAL STUDY.

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Abstract

Background:

The study explored factors associated with growth monitoring and promotion among children 0-23 months in Malongo sub-county, Lwengo district, central Uganda with specific objectives; assessment of the Nutritional status of children, knowledge of caregivers, accessibility to Health facilities and Health-care package.

Methodology:

Qualitative and quantitative approaches were applied to draw clearer correlations between findings. Questionnaires with semi-structured open and closed-ended questions were used to collect data. Health staff were interviewed and observations were made with a simple checklist. Pre-tests were carried out for result consistency and validity prior to community subjection.

Results:

Most caregivers were knowledgeable about GMP services. 200(75.5%) had easy access to health facilities. A number of children were wasted 67(25%), stunted 47(17.5%) and underweight 51(19.2%) as per Z-scores. 190(71.7%) female caregivers, 200(75.5%) were cohabiting/married. Education levels did not impact much on GMP, elites 85(32.1%) never practiced what they knew. 63(23.8%) households at times went without a meal due to poverty. 30(11.3%) caregivers received GMP counseling. 240(90.6%) found functional facilities but 115(43.4%) expressed varying challenges. The nutritional status of children was majorly affected by knowledge differences, unacceptable food regarded as medicine and restrictions deprived children of balanced diets. Poor health-seeking practices due to poverty and negative attitude about the health sector contributed to undefined malnutrition.

Conclusion:

Boy children were more affected than girls. Malnutrition taking both undernutrition and overnutrition was more pronounced in boys than girls. Thus, the double malnutrition burden is equally on the rise in low- and middle-income countries thereby calling for more efforts in regular GMP to solve and prevent anomalies, especially in the first a thousand days of life.

Recommendation:

Health service points should be equipped with knowledgeable personnel, functional screening tools, and nutritional supplements. Positive attitudes should be promoted in both caregivers and health workers. Policymakers should prioritize MCH services.

Keywords: Growth monitoring and promotion, nutrition assessment, children, caregivers, knowledge, health care package, Submitted: 2023-05-25 Accepted: 2023-06-12

1. Background of the Study:

Growth monitoring and promotion (GMP) refers to the process of tracking child growth by regularly measuring the child and comparing his/her growth indicators like height and weight to a standard. It involves assessing growth adequacy and linking the trend with a target action through tailored counseling and referral (USAID, 2017). GMP encompasses the measurement of children's growth, recording and interpreting findings in order to provide focused counseling, therapy, and follow-up. It primarily concerns monitoring and correcting growth and development faults. It further presents a basis for routine health management information system data, utilization, and coverage of preventive health services over time (Sulley et al., 2019). A child's nutritional status as revealed by GMP reflects and predicts daily energy intake that reveals under, over, or adequate nutrition. Consequences such as obesity, retardation, Protein Energy Malnutrition (PEM), Severe Acute Malnutrition (SAM), retardation, and poor immunity among others may indicate the need for intervention(Swa Mya, Tin Kyaw and Tun, 2019). Incorporating the Young Child Clinic (YCC) activities such as immunization was seen to have an impact on children's growth therefore GMP remained key in caring for children that aim to identify faltering in early stages of life.

Globally, over 152 million children under five years were undernourished majority of whom were aged between 6-23 months old (Muche et al., 123AD). According to World Health Organization (WHO) and the United Nations International Children's Emergency Fund (UNICEF), consequences of under-nutrition included but were not limited to increased mortality, irreversible brain damage, and negative effect on cognitive ability (Feleke, Adole, and Bezabih, 2017).

Africa was faced with the biggest burden of undernutrition contributing to over 25% of the world's undernourished children 0-23 months majority of whom were in Sub-Saharan Africa due to high poverty levels leading to inadequate growth monitoring and promotion.(Kramer and Allen, 2015)

Africa had been reported to contribute the biggest proportion of under-nourished children about 38.2%, followed by Southeast Asia at about 27.6%. Latin America and Caribbean countries ranked lowest in childhood under-nutrition at about 13.5% (Abebe et al., 2017), so, without proper GMP, there would be higher levels of undefined morbidity and mortality especially in children.

In a survey carried out in 202 African countries, over 154 reports showed that children's growth was not adequately monitored (Modo Martin Eric, 2018). United States Agency for International Development (USAID) (Pollifrone et al., 2020) also carried out a study in 43 African countries and found that there was low utilization of growth monitoring and promotion activities. Low and middle-income countries were singled out for inadequate growth monitoring and promotion.(Hossain et al., 2017)

In Uganda, 4%, 29%, and 10.5% of children under 5 years were wasted, stunted and underweight, respectively ('Guidelines for integrated management of acute malnutrition in Uganda 2020', 2020). More than one-third of children, that is; over 2.4 million children under five years were stunted and therefore with irreversible physiological damages.

A study conducted in 2010 by Food and Nutrition Technical Assistance, FANTA, in the Southern and Western regions of Uganda revealed that the country was trending towards a double burden of malnutrition with both over- and undernutrition especially because of knowledge gaps and socioeconomic differences (FANTA-2, 2010).

With Growth Monitoring and Promotion GMP, malnutrition forms were discovered where Malnutrition meant a state of an individual that depicted whether he or she consumed more or less than the daily recommended energy requirement resulting in under or over-weight and/or physiological impairment thereby predisposing affected

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individuals to life threats like obesity, retardation, poor immunity, and others (Muche et al., 123AD).

According to World Health Organization (WHO), Under-nutrition was defined as Z-scores less than -2 standard deviations irrespective of the indicators used. 'Undernutrition' included stunting (low height for age), wasting (low weight for height), underweight (low weight for age), and micronutrient deficiencies or insufficiencies (a lack of important vitamins and minerals). In developing countries like Uganda, there were more under-nutrition cases than over-nutrition cases as a result of knowledge gaps, food insecurity, and low socio-economic status.(Kramer and Allen, 2015). The main objective of the study was to explore the factors associated with growth monitoring and promotion among children of 0-23 months in Malongo Sub County in Lwengo district, central Uganda.

2. Methodology:

2.1. Research design:

A quantitative approach by cross-sectional research study design was applied. Respondents' information at a given point in time represented the entire sub-county. Correlational research design in comparison of the relationship between the dependent and independent variables gave conclusions to the hypotheses.

2.2. Study population:

The study population was caretakers of children aged 0-23 months in Malongo Sub-County.

2.3. Sample size determination

Since it was a quantitative study, the researcher used Yamane Taro's (1967:0886) equation.

The required Sample size as n

N is the study population

e is the margin of error, usually 0.05 at 95% level of significance

Therefore, considering the population of 1,612, n= 320

2.4. Sampling techniques and procedures

After enrolling all households with children 0-23 months, they were randomly sampled by a simple random sampling SRS method as n/N (320/1612) where this was a probability of choice for a household. This SRS method was labor conservative, timely, easy to conduct, economical, reduced on data bulk and hence eased data analysis and was dependable.

2.5. Data Collection methods

2.6. Questionnaire survey

Both primary and secondary data was gathered by use of questionnaires with a flexibility plan that allowed for interpretation by a person on the research team in case of illiterate respondents or those facing language barrier issues. The researcher designed questionnaires with both open- and closed ends to enable participants appreciate and/or freely provide brief but clear responses.

2.7. Interviews

Semi-structured interviews were conducted such that respondents were able to give both qualitative and quantitative data about factors associated with childhood GMP. Facility staffs were the target group for these interviews. All forms of interview especially person-to-person, telephone and group interviews were employed.

2.8. Observation

Observation for both external or clinical conditions and general presenting status of children like wasting were made. Caregiver-health worker interaction and associated technicalities were also observed.

2.9. Data collection tools

2.10. Questionnaire guide

Questionnaires with both open- and closed ended questions to enable participants appreciate and/or freely provide brief but clear responses were used. The questionnaires were written in English and orally translated for respondents where

necessary. This was because the area had varying languages like Luganda, Runyankole, Runyarwanda and Rukiga among others. It was printed out and treated as a hard copy.

An interview guide as a data collection instrument that supported the researcher through directing an interview process towards the objectives and issues regarding the survey. The facility staff were interviewed on a few aspects related to YCC.

2.11. Observation checklist

Observation about facility user equipment, GMP assessment tools and service delivery were made and findings tagged to the interviewed facility staff. This facilitated output comparisons.

2.12. Quality control methods

2.13. Validity of the data collection instruments.

Validity measures the extent to which an instrument correctly produces results as intended by the researcher.

Prior to getting into the field, questionnaire, interview and observation guides were pre-tested in a pilot study to ensure that their contents were satisfactory and clear as to their primary intention. In case the pilot results are 'confusing', then the guides were to be revised accordingly to perfection. For study purposes, the supervisor supported the researcher to fine-tune the guides.

2.14. Reliability of data collections instruments

This addressed consistency of a research instrument. Instruments were similarly assessed to possess a uniform interpretation as presented to different respondents. This was gauged as determined by the pilot study. The pilot study involved a small sample of the intended sample of the target population since they were rated at a similar level with their colleagues. Same guides were subjected to respondents at about three occasions and an average of the three scores needed not be so different from individual scores. The guides would be revised in case of great discrepancies.

2.15. Data collection procedure

Prior to data collection, an official introductory letter from Uganda Christian University was presented to the different levels of administration like the district, sub-county, parish and the villages to seek permission and official authorization to carry out the data collection exercise. It was been noted that the study ran from March 2022 to July 2022. At the end of the exercise, findings were shared at different levels without disclosure of respondents' identities.

2.16. Data Analysis

Data analysis as a process of inspecting data, cleansing the available data, transforming it and finally modeling the data into a sole goal of proving or discovering new and useful information, making conclusion, recommendation and/or decision was done both manually and in software

2.17. Quantitative Data Analysis

The data was analyzed using Excel spread sheets, Microsoft word and Statistical Package for Social Sciences (SPSS) version 20 software in form of descriptive statistics, simple regression and analysis of variance. Data was presented in form of tables, charts, plots and graphs.

2.18. Measurement of variables

Four levels of measurement were used in the study to include nominal for instance categorizing the sex of respondents and/or children, Ordinal measurement where variables like nutritional and socio-economic status levels (low, medium or high), education levels (non, primary, secondary or tertiary), interval scale such as for age brackets and ratio as fraction expressions of variables in regards to their contribution to the dependent variable. Time, weights, length and population can create ratios of comparison.

2.19. Ethical considerations

Respondents were guaranteed maximum privacy and were therefore called upon to freely give accurate responses to benefit the entire community. No identity such as names was expected on the respondent's guide. This implied that only

information was required and not individuals. No intermediate parties were involved except for the authorized translator VHTs on rare occasions. The research team sought each respondent's consent after giving prior information about the purpose of the study and selection criterion.

By seeking and presenting introductory letters from the governing institution, it was justified that the activity was official and for academic purposes. The researcher therefore often unveiled her intentions to the respondent at all times since this was not a trespass. The researcher ensured that the data, methods and findings were true, original and just, with no bias.

3. RESULTS:

The majority 94(35.5%) of the respondents were between the age of 20-29 years, and 190 (71.7%) of them were Females. Most of them 200(75.5%) were married/cohabiting, 168(63.4%) attained primary education. 213(80.4%) of the respondents were peasant farmers. The majority 259(41.1% of 630) family members were 60 months and above.

More than half of the participants 209 (78.8%) revealed that their major source of family food was a home garden. Majority 106(40%) of the respondents fed their babies on demand. Most of them 200 (75.5%) travelled<5km to the market, garden, or shop. 88 (33.2%) considered some food as medicine and 63(23.8%) failed to eat due to lack of food while 205 (77.3%) had no unacceptable food.

(No. Of girls was 184, boys were 81) Z-SCORES

Weight for age, height for age and weight for height, respectively

Majority89 (48.6%) of the girls were at average score.

A number 29(35%) of the boys had an average weight in respect to their ages.

Majority 122(66.6%) of the girls were above average

About half, 40(48.7%) of the boys were above average height for their ages.

Most 121(66.1%) of the girls were above the average score.

More than a half 50(60.9%) of the Boys were above average score.

The majority 163(61.5%) of the respondents reported that they visited the health facilities when their children were sick. The majority 120 (45.2%) of the respondents reportedthat they were given immunisation services at the health facility. More than half 191 (72%) of the respondents regularly weighed their children and 47(17.7%) weighed them to monitor their growth.

More than half 176(66.4%) of the participants covered less than 5 km from home to the health facility distances. The majority (69.4%) of the respondents travelled by foot. The majority 240(90.6%) of respondents reported having found health workers available/present at the health facilities. Most of the respondents (75.8%) reported having found specific child days at the health facilities. The majority 71.3% had their children's growth monitored and charts updated regularly. Most of the participants 115(43.3%) faced challenges at the health facility and 43.4% faced fever/malaria challenges whereas 50 (43.4%) suggested free treatment to solve the above challenges.

4. Interview and observation results were as follows:

All staff participated in YCC activities although most of them10(71.4%) did not complete child heath card charts. Support staff included riders and students.

No facility had a height board, Z-score charts, and Nutritional supplements. All facilities had a child weighing scale, while 28.6% had MUAC tapes. Most of the items present were not in use.

5. Discussion of ftndings

5.1. Demographic and social characteristics of respondents.

The study revealed that the majority of the respondents 190 (71.7%) were females especially aged twenty to twenty-nine. The 43.3% difference

Table 1: Shows demographic and social characteristics of respondents.

CATEGORY	VARIABLES	FREQUENCY=265	PERCENTAGE
Age	10 – 19 years	14	5.3
	20 – 29 years	94	35.5
	30-39 Years	86	32.5
	40 years and above	71	26.7
Gender	Male	75	28.3
	Female	190	71.7
Marital status	Never married	6	2.3
	Single	30	11.3
	Married/cohabiting	200	75.5
	Separated/widowed	29	10.9
Education status	Primary	168	63.4
	Secondary	72	27.2
	Tertiary	13	4.9
	None	12	4.5
Occupation	Self employed	27	10.2
	Professional	9	3.4
	Peasant farmer	213	80.4
	Others	16	6.0
Number of people in a family	0-6 months	66	10.5
	7-23 months	197	31.3
	24-59 months	108	17.1
	60 months and above	259	41.1

in the sex of caregivers implied that men were less involved in the growth of children. This was not different from a study carried out in Western Uganda that showed 6% male involvement in Maternal Child Health (MCH) services as of 2019, (Muheirwe and Nuhu, 2019). This meant that the males have low utilization of health services in comparison to the females.

200 of the 265 respondents were married or cohabiting meaning that children had a chance of being cared for by both categories of caregivers. The Uganda Bureau of Statistics showed that more than half of Ugandan men and women are married/cohabiting (UBOS, 2017). Study findings were that urban and semi-urban areas had more children than rural areas a situation attributed to rural-urban migration population growth. This, however, was different from the Uganda demographic Survey statistics that reflected 5.9% children in rural areas and 4% in urban areas as analyzed by women's fertility. (UBOS, 2016). Malongo sub-county had several caregivers with up to or below primary level education background followed by secondary level graduates and a few with tertiary education. Some of the caregivers had never gone to school.

The sub-county was predominantly occupied by peasant farmers with a small number being self or professional employees. Households had people of different age brackets majority of who were above five years. Children 0-23 months were estimated to be about 41.7% of the entire assessed population that captured 630 people. This signified a big number of less productive citizens than productive adults.

Table 2: Shows the Nutritional status/food security and Socioeconomic.

CATEGORY	VARIABLES	FREQUENCY=265	PERCENTAGE
Major source of family food	Market	37	14.0
	Home garden	209	78.9
	Home store	2	0.8
	Shop/Supermarket	17	6.3
Time for feeding baby	During family meals (3)	101	38.1
	On demand	106	40.0
	2 or less hourly	42	15.8
	Undefined	16	6.1
How far is market, garden, or shop	<5km	200	75.5
	5-9km	31	11.7
	10+km	2	0.8
	Not answered	32	12.0
Food considered as medicine	Yes	88	33.2
	No	177	66.8
Failure to eat due to lack of food	Yes	63	23.8
	No	202	76.2
Any Unacceptable food	Yes	60	22.6
	No	205	77.3

Table 3: Shows the caretakers' knowledge and practices

CATEGORY	VARIABLES	FREQUENCY=265	PERCENTAGE
When child is taken to the health centre	Immunisation	82	32.0
	When child is sick	163	61.5
	No answer	20	7.5
Services given to child	Immunisation	120	45.2
	Free services	10	3.7
	Treatment	100	37.7
	Counselling services	30	11.3
	No answer	10	3.7
Regularly weigh child	Yes	191	72.0
	No	57	21.5
	Neither	17	6.5
Reasons for weighing child regularly	Growth monitoring	47	17.7
	Weight monitoring	36	13.6
	Unknown	182	68.7

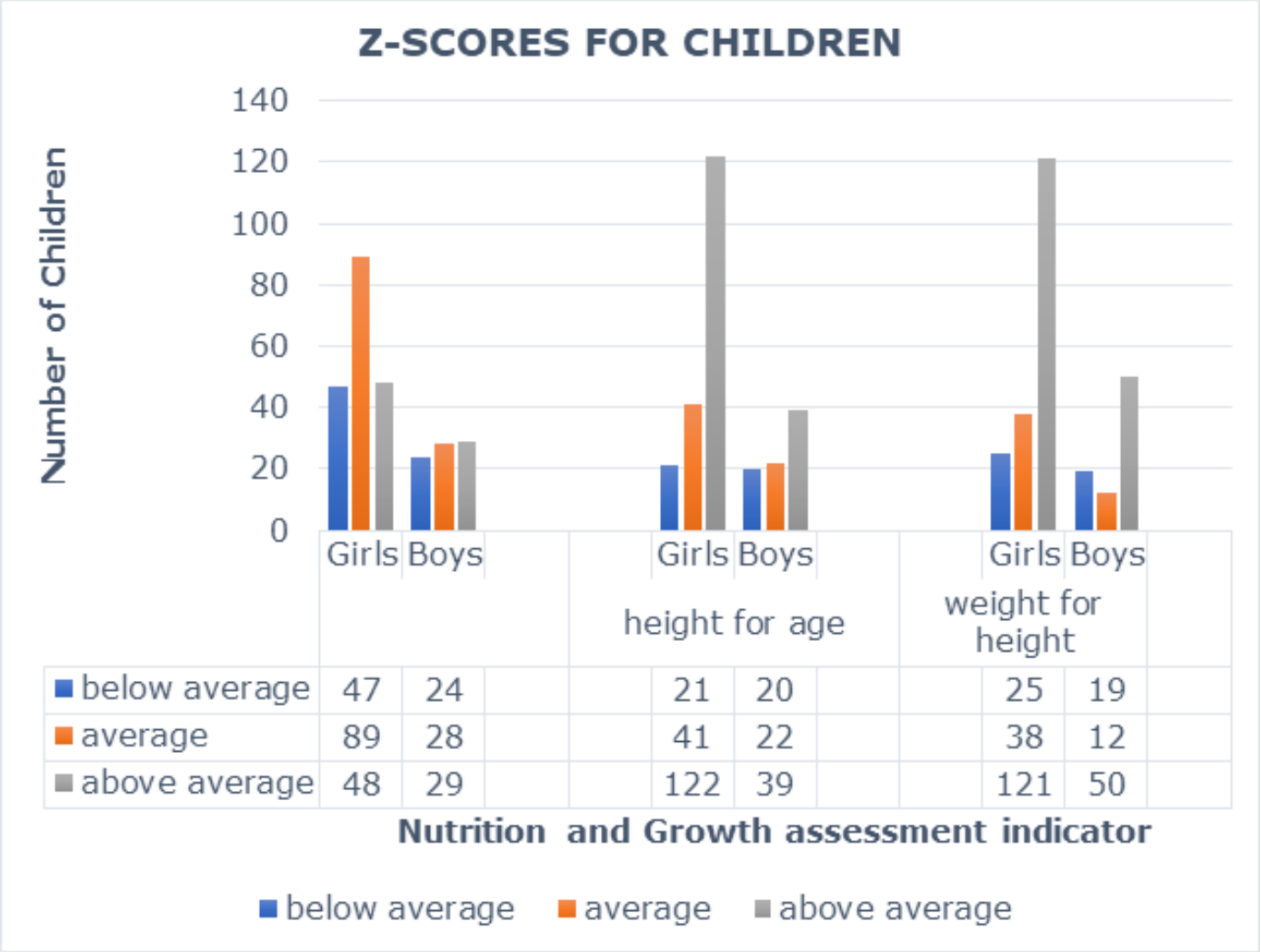

Figure 1: Aspects of Children's Nutritional Status

5.2. *Nutritional status, food security, and socioeconomic.*

Over 78% of the households relied on food produced from their home gardens. It was noted that households in urban and semi-urban areas purchased food from the market. Only two out of 265 households had food stores at home. Food stored included dried cereals of a given season. Some researchers in a similar discovery realized that the majority of the Ugandans did not store food to cater to unpredictable seasons, (Charles, Godfrey, and Gabriel, 2017). The subsistence model of farming in most households predicted probable food insecurity a situation which could expose all ages to inadequate nutrient intake. The majority of the families sold off the surplus harvest for domestic income. The sub-county was found to consume mostly bananas (matooke), maize (posho), potatoes, cassava and beans, ground nuts, and peas for food and sauce respectively. Households, therefore, had a wide range of food groups to balance their diets and uphold individual body immunities. These however did not regularly attain animal protein. Babies were often weaned on matooke, potatoes, and groundnuts. The survey revealed that most babies 106 (40%) were fed on demand.

200 respondents of the 265 notified that they had reachable sources of food such as gardens, markets, shops, or supermarkets. Some of the residents however would not estimate the distances to these areas.

Table 4: Shows the accessibility of health facilities and package of health careservices offered to the respondents.

CATEGORY	VARIABLES	FREQUENCY=265	PERCENTAGE
Distance from home to the health facility	<5km	176	66.4
	5-10 km	60	22.6
	10-15km	22	8.4
	>15km	7	2.6
Means of transport to the health facility	Foot	184	69.4
	Motorbike	65	24.6
	Vehicle	16	6.0
Health workers available at the facility	Yes	240	90.6
	No	25	9.4
Specific child days at the clinic	Yes	201	75.8
	No	64	24.2
Growth Monitoring charts updated regularly	Yes	189	71.3
	No	76	28.7
Any Challenges faced at health facility?	Yes	115	43.4
	No	50	18.9
	Not answered	100	37.7
Example of the challenges	Diseases/Malaria	50	43.4
	Transport/distance	40	34.7
	Poverty	26	22.6
Solutions to the above challenges	Provision of free mosquito nets	45	39
	Free treatment	50	43.4
	Immunisation	15	13

Table 5: Number of health facility staff who participated.

Case Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Interview	**14**	**100.0%**	**0**	**0.0%**	**14**	**100.0%**

Table 5. A total of fourteen health providers were interviewed and observed with a checklist as attached.

The rarely consumed foods were those from supermarkets like bread, macaroni, and meat especially because families would not afford them. Cassava was mentioned by other respondents who said it was not their choice so they did not often eat it. The majority of the respondents making 66.8% had no known food considered as medicine. However, 33.2% said foods like greens and mushrooms were medicines, especially for skin conditions like measles. Unacceptable food on the other hand included cultural or religious norms like fish and pork were not acceptable for consumption by Bahima and Moslem communities respectively posing a threat of insufficient nutrient intake to the affected. The majority of the people however were in the position of consuming a variety of food

Table 6: **Interview results showing Inputs from health facility staff**

Interview Frequencies				
Areas interviewed		Responses N	Percent	Percent of Cases
interviewed health staff	Do you participate in the YCC	14	15.6%	100.0%
	Taking measurements	13	14.4%	92.9%
	Tracking indicators to standards	11	12.2%	78.6%
	Completing growth chart	4	4.4%	28.6%
	Discussing growth patterns with caretakers	12	13.3%	85.7%
	Involving caretakers in identifying problems and solutions related to GMP	9	10.0%	64.3%
	Counseling on IYCF	10	11.1%	71.4%
	Identifying and laying follow-up plan for children with growth faltering	6	6.7%	42.9%
	Are you a health worker	11	12.2%	78.6%
Total		**90**	**100.0%**	**642.9%**

Table 7: All staff participated in YCC activities although most of them10(71.4%) did not complete child heath card charts. Support staff included riders and students.

Observation Frequencies				
Focused Areas		Responses N	Percent	Percent of Cases
items present	Weighing scale	14	18.2%	100.0%
	Weighing pants	8	10.4%	57.1%
	MUAC tapes	4	5.2%	28.6%
	Child Immunization cards	11	14.3%	78.6%
	Vitamin A	13	16.9%	92.9%
	Mebendazole	9	11.7%	64.3%
	Vaccines	10	13.0%	71.4%
	Child special clinic	8	10.4%	57.1%
Total		**77**	**100.0%**	**550.0%**

Figure 2: Shows the most common consumed food in the community.

without restrictions.

Households that had less than two meals per day expressed that it was not their choice but at times there was nothing to be eaten coupled with no income to buy. These were families especially headed by children or the elderly.

5.3. Nutritional status

The survey captured 184 girls and 81 boys. Almost half of the girls (48.6%) had normal weight concerning their ages in months. A relative number of about 25.6% of the girls were either overweight or underweight. This implied a rising malnutrition double burden across communities including rural communities. On the other hand, a smaller percentage of the boys (35.3%) had normal weights for their age. 36.5% of the boys were overweight and 24.3% were underweight. Mawa discovered that the male gender is a more probable risk for malnutrition than the female (Mawa,

2018)

Regarding height for age z-score, the assessment revealed that most girls were taller than their respective ages. About 22% had an average height for age while 10.9% were shorter than expected. Almost 50% of the boys were taller than their average expected height. Similarly, a great number was shorter than expected and a few were ranked normal. Stunting levels are on the rise, especially in developing countries. (Bilal et al., 2014)

Weight for height z-score revealed that many girls weighed much more than their expected weight for length. 14.2% were wasted while 19.1% were considered to have normal values. More boys (24.3%) than girls were wasted.15.8% appeared normal while 60.9% were overweight. A significant percentage (5%) of children under five are wasted and others unnoticed due to insufficient data at all assessment levels. (Mawa, 2018)

The study revealed that out of the 66 children, 0-6 months, 57(87%) were exclusively breastfed, 7(9.3%) were on mixed feeding and 2(1.7%) were no-longer breastfeeding. The feeding of a child relies on the caregiver(s) (Asiimwe et al., 2021). The analysis showed that most of the children's milestones were normal with negligible deviations.

5.4. *Caretakers' knowledge and practices*

The study revealed that most of the caretakers took their children to the health facilities especially when they were sick. 32% were simply honouring appointment dates as given by health workers for instance for follow-up or immunization. 7.5% did not respond. Immunization and treatment for ill health were the major services given to children from the health center. 11. 3% of respondents received counselling while 3.7% generalized that they got free services. 10 respondents were naive.

Particular households did not believe in modern medicine and therefore would not attend the health facility care services. Such often had no responses while others did not attend to healthcare services because of rampant stockouts, staff poor attitude, sluggishness, and unnecessary charges.(Mukundane et al., 2016) These were unveiled as responses to the 2016 results of a survey.

The study discovered that caretakers weighed their babies, especially as a mandate to monitor growth or weight. However, the majority of the respondents (more than 50%) had no clear indication for weighing their children. A knowledge gap in the utilization and application of GMP services was noticed in the findings in Southern Ethiopia. (Wassie Feleke, Anato Adole and Mulugeta Bezabih, 2017).

5.5. *Accessibility to health facilities and a package of healthcare services.*

The studies showed that the majority (66.4%) of the caregivers were within a 5km distance of a health facility which justified that health services were accessible enough. The results were however contrary to those established in a similar study that captured rural access to healthcare that showed several challenges including long distances. (Dowhaniuk, 2021). The survey in question's respondents reported moving on foot or by motorbike to the facilities hence justifying their accessibility. A small percentage (6%) went by vehicle.

Over 240(90%) respondents agreed that there were always health workers at the facilities and that there were specific child days scheduled at the health facilities. Bohret however discovered absenteeism of health workers is one of the causes of clients failing to seek services (Bohret, 2019). Postnatal and YCC were known as special clinics for children by the majority of the respondents.

189(71.3%) respondents agreed that their children's growth charts were regularly updated by health workers while 28.7% rejected them. On the contrary, many studies realized low utilization of GMP services. This particular study attributed practices to specific health workers. Almost half of the respondents 115(43.4%) reported having faced challenges at the health facilities including poverty and other diseases like malaria. A good number (100) did not respond to this question. Some of the suggested solutions include the provision of free mosquito nets, treatment, and

immunization. Poverty remains a major challenge in health focus.

6. Conclusions

While exploring the factors associated with growth monitoring and promotion among children 0-23 months in Malongo sub-county, it was revealed that boy children were more affected than females. Malnutrition taking both undernutrition and overnutrition was more pronounced in boys than girls. This implied that the double malnutrition burden is equally on the rise in low- and middle-income countries thereby calling for more efforts in regular GMP to solve and prevent anomalies, especially in the first a thousand days of life.

Caretakers had basic information about GMP although most of them did not practice what they knew. Targeted health education sessions with key messages to promote active child GMP are necessary. Male involvement remained a barrier to child GMP and good health-seeking behaviors.

Both public and private health facilities needed to emphasize and avail the minimum recommended health package for clients especially children below two years.

7. Recommendations

Nutritional units from lower levels should fully function with supplements.

Screening tools and user equipment for growth assessment should be provided and functional at all service care points to capture necessary information as required.

Routine refresher training should be embraced to bridge knowledge and skill gaps among practitioners.

Male involvement shall add positive results to GMP activities. Income-generating activities for caretakers shall help improve family income and enhance child health.

Policymakers and NGOs are called upon to get interested and prioritize GMP programs.

8. Acknowledgement

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9. List of Abbreviations

AMREF African Medical and Research Foundation
CBO Community Based-Organization
CWC Child welfare Clinics
DHIS District Health Information Software
EPI Expanded Program on Immunization
FANTA Food and Nutrition Technical Assistance
GBV Gender-Based Violence
GMP Growth Monitoring and Promotion
HFA Height For Age
IMAM Integrated Management for Acute Malnutrition
IYCF Infant and Young Child Feeding
MCH Maternal and Child Health
MoH Ministry of Health
MDGs Millennium Development Goals
MUAC Mid-Upper Arm Circumference
MYCAN Maternal, Infant, Young Child and Adolescent Nutrition
NACS Nutrition Assessment, Counseling and Support
NGO Non-Governmental Organization
SAM Severe Acute Malnutrition
SPSS Statistical Package of Social Sciences
SRS Simple Random Sampling
UNICEF United Nations International Children's Emergency Fund.
USAID United States Agency for International Development
UDHS Uganda Demographic Health Survey
VHTs Village health teams
WFA Weight For Age
WFH Weight For Height
WHO World Health Organization
YCC Young Child Clinic

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