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# NEWPORT INTERNATIONAL JOURNAL OF PUBLIC HEALTH AND PHARMACY (NIJPP) Volume 3 Issue 2 2023

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# Knowledge, Attitude and Practice of Mothers/Caregivers Regarding Oral Rehydration Therapy at Ishaka Adventist Hospital Bushenyi District Uganda.

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### ABSTRACT

In Uganda, diarrhea is the second killer of children after malaria. Uganda's diarrhea prevalence rate in children under five was 26% according to World Health Organization (WHO). This study was designed to assess the knowledge, attitudes, and practices of mothers/caregivers regarding oral rehydration therapy at Ishaka Adventist Hospital, Bushenyi district, Uganda. A simple random sampling technique was used to select 100 mothers of underfive children. A validated semi-structured Questionnaire was used for data collection. The questionnaire included 16-point Oral Rehydration Therapy (ORT) knowledge scales. ORT/SSS knowledge scores of 0-5, >5-10, and >10-16 were considered poor, fair, and good, respectively. The age of respondents was 29.8±5.5 years. Their main occupations are petty trading (43%), full-time "housewives" (36%), and artisanship (13%). Most respondents (98%) were aware of ORT, 95% correctly stated the composition of Oral Rehydration Salt (ORS) and 44% were able to state the correct proportions of sugar, salt, and water in ORS. Respondents' sources of information about ORT included health personnel (79%), relatives (11%), and television (6%). The majority (80%) of respondents reported that their child (ren) had diarrhea within the three months preceding the study and the home treatment given included the use of ORT (50%); others gave native medicine (19%). Seventy percent of respondents stated that they could prepare ORS, but 73% preferred taking children with diarrhea to the hospital instead of using ORS. Knowledge about oral rehydration therapy was high among respondents, but their use of oral rehydration was low. Training, public enlightenment, and social marketing strategies are needed to promote the use of oral rehydration therapy among mothers of under-five children.

Keywords: Diarrhea, Children, Mothers, Caregivers, Oral rehydration Therapy

### **INTRODUCTION**

Each year, an estimated 2.5 billion cases of diarrhea occur among children under five years of age, and estimates suggest that overall incidence has remained relatively stable over the past two decades [1-3]. More than half of these cases are in Africa and South Asia where bouts of diarrhea are more likely to result in death or other severe outcomes. The incidence of diarrheal diseases varies greatly with the seasons and a child's age. The youngest children are most vulnerable: Incidence is highest in the first two years of life and declines as a child grows older United Nations International Children's Emergency Fund [4]. Oral rehydration therapy (ORT) is a primary intervention for the management of diarrhea. It can be easily administered at home by the mothers/caregivers as soon as a diarrhea episode begins. ORT is simple, inexpensive, and the most effective way to treat dehydration and reduce diarrhea mortality [5]. In Uganda, diarrhea is the second killer of children after malaria. Uganda's diarrhea prevalence rate in children under five was 26% [6-8]. Children who are malnourished or have impaired immunity as well as people living with HIV are most at risk of life-threatening Diarrhea [9-13]. Diarrhea is usually a symptom of an infection in the intestinal tract, which can be caused by a variety of bacterial, viral, and parasitic organisms.

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Infection is spread through contaminated food or drinking water, or from person to person as a result of poor hygiene [14-17]. The latest recommendations for treating childhood diarrhea in the developing world are set out in a UNICEF and WHO joint statement. These interventions are proven, affordable, and relatively straightforward to implement to prevent dehydration. According to WHO [14], the number of death under 5 in 2013 was 101,552 in Uganda of which diarrhea is among the 3 main causes.

### Statement of Problem

Diarrhea is the most prevalent pediatric disease and cause of death in children under five years of age in developing Page | 46 countries [18-20]. Moreover, diarrheal diseases cause serious economic problems for developing countries. The leading cause of death from acute diarrhea is the loss of water and essential minerals, which can be compensated in most cases by an oral rehydration solution (ORS) \[ 5 \]. Diarrhea can last several days and can leave the body without the water and salts that are necessary for survival. Most people who die from diarrhea actually die from severe dehydration and fluid loss. A study done in Tanzania Mkuranga district indicated that diarrhea was among the top ten causes of morbidity and mortality among children under the age of five [21]. There is limited data on diarrhea treatment knowledge, attitudes, and practices in program districts in Uganda.

The aim of this study was to assess the knowledge, attitudes, and practices of mothers/caregivers regarding oral rehydration therapy.

### Specific Objectives

- To determine the knowledge of mothers/caregivers about oral rehydration therapy and its usage. i.
- ii. To determine the attitudes of mothers towards oral rehydration therapy.
- To determine the practices of mothers towards oral rehydration therapy. iii.

### Research questions

- What is the knowledge of mothers/caregivers about oral rehydration therapy and its usage? iv.
- What are the attitudes of mothers towards oral rehydration therapy? v.
- vi. What are the practices of mothers towards oral rehydration therapy?

### Significance of the study

Diarrhea is one of the leading causes of death globally registering 2.5 billion cases of children under five years of age. In Uganda, diarrhea is the second killer of children after malaria. Uganda's diarrhea prevalence rate in children under five years is 26 % [147]. Broadly recognized risk factors for diarrheal diseases include little or no access to safe water and sanitation, as well as poor personal hygiene, unhygienic food preparations, and unsafe fecal disposal practices at home. WHO/UNICEF's joint statement (May 2004) [4] recommended the use of Zinc and a new formulation of Oral Rehydration Solution (ORS) to manage acute diarrhea in children which were later adopted as policy by the MOH Uganda in 2007, however, there is limited data on diarrhea treatment knowledge, attitudes, and practices regarding ORS in Uganda. The study aims at finding out the knowledge, attitudes, and practices of mothers/caregivers regarding oral rehydration therapy at Ishaka Adventist Hospital, Bushenyi District, Uganda. The data collected will empower mothers and caregivers on how to prepare and administer ORS and when to refer in case the child develops complications. This study is also significant in providing relevant information about Oral Rehydration Therapy (ORT) to reduce the scarcity of published data about the subject matter in Uganda. Data generated will guide the well-coordinated approach in terms of the policy on how to get the ORT information and awareness across health facilities in the district. The respondents who are unable to prepare ORT correctly will immediately be taught how to prepare it at the end of the practical session.

### **METHODOLOGY**

### Area of Study

The study was conducted at Ishaka Adventist Hospital between July and August 2018. This hospital is located in the Ishaka Municipality Bushenyi District. It is also a training school for nurses and laboratory technicians. It also provides various ranges of PHC services to the population inhabiting the area. There is a fully functional pediatric ward in this Health center where the respondents for the study were recruited. In the previous year (2017), over 2,000 under 5 children were attended to in the center.

### Study Design

This was a descriptive cross-sectional survey design because it best provides the necessary information across a big population on the prevailing situation at the time. Quantitative and qualitative approaches used will help in describing the statistical relations and informed opinions of the respondents on the variables respectively.

### Study Population

The study population of this study was all mothers who came to integrated management of neonatal and childhood illness (IMNCI) during data collection time.

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### Inclusion criteria

All mothers who came to integrated management of neonatal and childhood illness (IMNCI) with children under five years during the study period.

### Exclusion criteria

All Mothers who came to integrated management of neonatal and childhood illness (IMNCI) with children more than five years old during the study period.

### Sampling size determination

This was done by using a sample size determination table by Morgan [Morgan and Krejcie 2012]. The minimum sample size is 152. The Confidence Level = 95%, and the Margin of Error = 5%. Therefore, to cater to the non-respondents the researcher will increase the sample size by calculation using margin error. That is  $5/100 \times 152 = 7.6$  which is 8 respondents. So the researcher used a sample size of 160 respondents. However, due to the limited time and funding 100 mothers were interviewed.

### Sampling Technique

This sample was compiled by means of a simple random sampling method. By using this sampling method, every individual will have an equal opportunity of being chosen. The fish bowl sampling method was used whereby every name from the sampling frame was written on a piece of paper and put into a bowl. A slip was drawn from the bowl until the required number of mothers is obtained.

### Data collection method

The data collection was conducted from August 2018 to September 2018. Data was collected by interviewing the respondent using structured questionnaires. The questionnaire was developed taking into consideration the research thematic issues and its easiness to the responding mothers. The questionnaire will initially be prepared in English and then translated into Runyankole because Runyankole is the predominant local language spoken in the area of the study.

### Quality control

A pre-test of 10% was done in a nearby health center a week before the start of actual data collection; and based on the finding from the pre-test, the questionnaire was revised and adopted and the time needed for the interview was estimated. Data collectors were residents of the study area. All data collectors and supervisors were fluent speakers of the Runyankole language. A team of two data collectors with a certificate in health-related subjects and experience working with similar surveys were recruited. The data collectors were taken for one day of training on how to interview, the contents of questionnaires, disciplines, the right of the respondents during data collection, and the approach to the interviewees. The principal investigator ensured the quality of the data, through continuous spotchecking of the interviewers, by checking the completed questionnaire for missed responses and for inconsistent information.

### Data Analysis

The responses in the questionnaire were coded, entered into MS Excel version 2013, and exported into SPSS Version 20 for analysis. Chi-square tests were conducted and significance was taken when P < 0.05.

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### **RESULTS**

### Socio-demographic profile of respondents

The ages of respondents ranged from 17 to 47 years. The highest percentage (47 %) belonged to the 20-29 years age group. Most (97%) of the respondents were married and about two-thirds were Christians (63 %). Sixty-two percent of the respondents had secondary school education while a few (6%) had no formal education. The highest proportion of respondents was Banyankole (40%) (Table 1).

Table 1: Socio-demographic profile of the respondents (N=100)

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Table 1: Socio-demographic profile of the respondents ( $N=100$		Pa Pa
Demographic Information	No.	%
Age (Years)		
10-19	1	1
20-29	47	47
30-39	46	46
40-49	6	6
Religion		
Christianity	63	63
Islam	35	35
Traditional	2	2
Marital Status		
Married	97	97
Divorced	2	2
Widow	1	1

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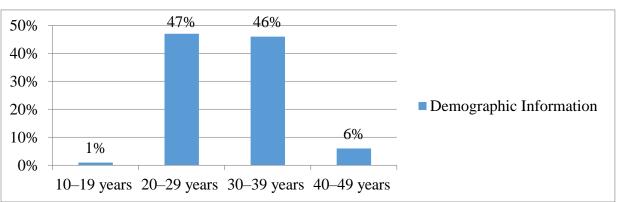
Table 2: Socio-demographic profile of the respondents (N=100)

Demographic Information	No.	%
Occupation		
Petty trading	43	43
Housewives	36	36
Artisan	12	12
Public Servants	3	3
Teaching	2	2
Farming	2	2
Others (auxiliary nurse, students)	2	2
Ethnicity		
Munyankole	40	40
Muchiga	31	31
Mutoro	28	28
Others	1	1
Educational Level		
No formal education	6	6
Primary education	22	22
Secondary education	62	62
Tertiary education	10	10

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Fig 1: Socio-demographic profile of respondents



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Knowledge of oral rehydration therapy

Almost all the respondents (98%) had heard about Oral Rehydration Therapy (ORT) and 93% agreed with the statement that ORT is used for the home management of diarrhea, while 2% disagreed. Most of the respondents (80%) heard of ORS from healthcare personnel. In Table 3, the majority of the respondents (87%) stated that ORT consists of Salt, Sugar, and Water. Twenty-seven percent of the respondents had good knowledge of ORT, 63% had fair knowledge and 10% had poor knowledge. Regarding the safe utensil to use to give oral rehydration solution to a child who has diarrhea, 83% indicated a cup and spoon, 8% feeding bottle and 9% had no idea. Many of the respondents (65%) knew when the unused prepared solution of ORS should be thrown away; that is within twenty-four hours. Eighty-six percent agreed that ORS should be given with other food while 6% disagree and 7% did not know.

Table 3: Respondents' knowledge of Oral Rehydration Therapy (N=100)

Variable	No	%
Oral rehydration is used for the home management of diarrhoea		
True*	93	93
True	33	93
False	2	2
Don't know	5	5
The content of ORT		
The content of ORT		
Salt, Sugar and Water *	87	87
Salt, Sugar and Palm wine	9	9
Salt, Sugar and Oil	2	2
Sart, Sagar and Sh		
Don't know	2	2

Key \* = correct answers

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Table 4: Respondents' knowledge of Oral Rehydration Therapy (N=100)

No.	%
45	45
11	11
6	6
3	3
3	3
2	2
32	32
64	64
21	21
5	5
4	4
1	1
1	1
4	4
	45 11 6 3 3 3 2 32 64 21 5 4 1

Key \* = correct answers

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Table 5: Respondents' knowledge of Oral Rehydration Therapy (N=100)

Other things that can be used as ORT	No.	%	
Tap water	7	7	Page   52
Boiled water*	4	4	
Native medicine	3	3	
Rice water	1	1	
Juice	1	1	
Saline and gripe water	1	1	
Don't know	83	83	

Key \* = correct answers

### Home management of diarrhea

A majority, 80 (80%), of the respondents reported that their children under five had ever had diarrhea and 21% said their children had never. Among mothers who reported that their children had diarrhea, the majority (62%) gave ORT/SSS as home treatment while 19% gave native medicine (Table 6). In addition to home management of diarrhea, the majority (80%) took their children to the public hospital for treatment of diarrhea, 16% private hospital, 2% traditional healer, 1% chemist and 1% said University Hospital.

Table 6: Types of home treatment respondents gave their children when sick of diarrhea (N = 100)

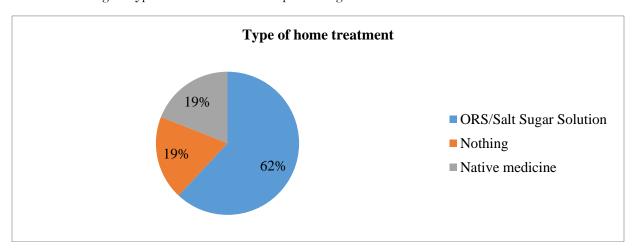
*Type of home treatment	No	%
ORS/Salt Sugar Solution	62	62
Nothing	19	19
Native medicine	19	19

\* Multiple responses

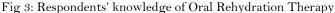
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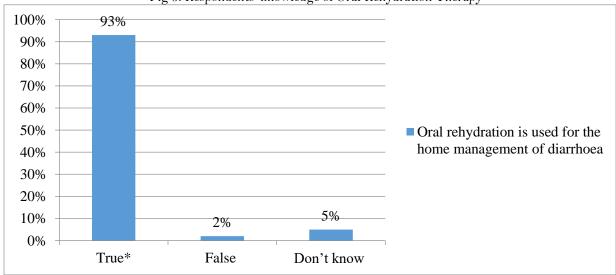
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Fig 2: Types of home treatment respondents gave their children when sick of diarrhea



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### DISCUSSION

All the respondents have heard about ORS disease and health personnel were their major source of information. This is similar to the findings of the study by Agbolade et al. [22] that most of their respondents knew correctly what ORS is. More than half of the respondents used ORT/salt for home management of diarrhea. This could be due to the fact that ORT or the salt solution is available locally and cheap to prepare. The finding from this study is similar to the findings of Adimora et al. [23] who reported that the majority of their respondents use ORT for episodes of diarrhea. However, there is still concern that about half of the respondents did not give ORT during episodes of diarrhea indicating the need for developing appropriate intervention to promote this simple intervention [24-25].

### Respondents' Attitude of Oral Rehydration Therapy

A positive attitude was seen among mothers regarding the use of ORS in the prevention of dehydration. Yet certain lapses are seen in the knowledge and practices of mothers regarding its administration. Mothers must be encouraged to start ORS without waiting for a visit to the doctor. Such simple measures to improve the practices of mothers

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would considerably reduce the burden of morbidity and mortality amongst children under 5 years of age. This study suggests that higher education levels were associated with a higher presence of knowledge of ORS preparation while there was no effect on the age of mothers. Health education of mothers has been shown to improve their knowledge and practice regarding diarrhea and oral rehydration in earlier studies. This confirms the importance of women's education in reducing diarrhea morbidity and mortality through the correct use of ORS. Although the awareness regarding homemade rehydration fluids was high, at least one-fourth (25%) of these homemade fluids were not suitable. Thus, ORS should be primarily used for oral rehydration while appropriate home-available fluids might be Page | 54 used as supplements or only when ORS is not available.

### Respondents' practices of Oral Rehydration Therapy

In this study, 38% of mothers were not administering ORS accurately. Such a high frequency of wrong administration of ORS was mainly due to lack of education among respondents as 6% had never been to school to acquire formal education and 22% had only acquired primary education. This study shows a positive correlation between the knowledge and practices of mothers, thus highlighting the importance of formal education as well as awareness programs in order to enable mothers to prevent the complications of dehydration and decrease mortality amongst children. This is of utmost importance in order to improve the general health status of our children.

### CONCLUSION

In conclusion, the use of oral rehydration therapy is a proven intervention to prevent dehydration among children during episodes of diarrhea. Despite the high level of awareness of this intervention, many women in this survey did not use ORT during episodes of diarrhea among their children.

### RECOMMENDATIONS

First, there is a need for formal training of mothers on the causes, prevention, and treatment of diarrhea ORT. Training provides an opportunity for mothers to acquire skills through return demonstration for correct preparation and administration of ORS to children who have diarrhea. This training can be done in a workshop setting where trainer/trainee interactions facilitate learning. Such training can be organized in the community through the local government health office. Secondly, education can also be provided for mothers during ante-natal or post-natal visits. Diarrhea prevention and treatment can be included as a component of mother and child welfare programs. Thirdly, volunteers' mothers/caregivers may be recruited and trained as peer educators who will be charged with the responsibility of informing and teaching skills for the preparation of ORT and their use during episodes of diarrhea. Suitable women may be recruited using existing women groups within the community. Trained women can serve as advocates for the use of ORS. Finally, educational materials like posters and handbills with pictorial illustrations on the steps involved in preparing ORS need to be developed and distributed by trained peer educators to each household in the community as part of strategies to promote the use of ORS in this community.

### REFERENCES

- 1. Semrau, A., Wibbelt, G., Hilbe, M., Lieckfeldt, D., Hermes, R., Müller, K. E., ... & Frölich, K. Experimental superinfection of a Lesser Malayan mousedeer (Tragulus javanicus) persistently infected with bovine viral diarrhea virus. Journal of Zoo and Wildlife Medicine, 2008; 124-127.
- 2. Boschi Pinto, C., et al. The Global Burden of Childhood Diarrhoea. In: Ehiri, J.E. and Meremikwu, M., Eds., International Maternal and Child Health, WHO, Geneva, 2009; 225-243.
- Atuheire, C. T. P., & Nabaasa, S. Roof-harvested rainwater is a potential source of bacteria-associated diarrhea in a Peri-urban Southern Uganda setting: Cross-sectional study. International Journal of Development Research, 2017; 7(11), 16494-16498.
- UNICEF/WHO. Diarrhea. Why children are still dying and what can be done September 2009. Switzerland.
- Binder HJ, Brown I, Ramakrishna BS, Young GP. Oral rehydration therapy in the second decade of the twenty-first century. Curr Gastroenterol Rep., 2014;16(3):376.
- Mwebesa, E., Sumil, N., Katushabe, S., & Sumil, M. Trend, Levels and Differences for Under-Five Mortality Rate in Uganda (U5MR): Is Uganda on Track in Achieving the Millennium Development Goal 4?; approved for oral presentation: Bugema International Multi-Disciplinary Conference, September 28-29, 2015. e.
- 7. Nguyen TYC, Fagbayigbo BO, Guéladio Cissé NR, Fuhrimann S, Okedi J, Christian Schindler MR, et al. Diarrhoea among Children Aged under Five Years and Risk Factors in Informal Settlements: A Cross-Sectional Study in Cape Town, South Africa. Int J Environ Res Public Health, 2021;18(11):6043.
- 8. Nantege, R., Kajoba, D., Ddamulira, C., Ndoboli, F., & Ndungutse, D. Prevalence and factors associated with diarrheal diseases among children below five years in selected slum settlements in Entebbe municipality, Wakiso district, Uganda. BMC pediatrics, 2022; 22(1):1-8.

### Mukisa Emmanuel

### **Publications 2023**

9. Eze, E. D., Barasa, A., Adams, M. D., Rabiu, K. M., Ayikobua, E. T., Ezekiel, I., ... & Okpanachi, A. O. Assessing factors contributing to the prevalence of protein-energy malnutrition among children under five years of age attending Kigoma District Hospital, Tanzania. *Journal of Food and Nutrition Sciences*, 2018; 6(5):123-128.

- Mada, S. B., Bawa, K. D., Saliu, M. A., Garba, A., Abarshi, M. M., Muhammad, A., and Garba, I. Evidence
  of Malnutrition and its Associated Factors among Under-five Children in Danko-Wasagu Kebbi State,
  North-western Nigeria. Nigerian Journal of Basic and Applied Sciences, 2020; 28(1): 56-65.
- 11. Kumbakulu, P. K., Ndeezi, G., Egesa, W. I., Nakalema, G., Odoch, S., Kambele, R. L., ... & Nduwimana, M. Prevalence, feeding practices, and factors associated with undernutrition among HIV-exposed uninfected children aged 6 to 18 months in Bushenyi district, western Uganda: A cross-sectional study. Research Square, 2022;1-22,
- 12. Obeagu, E. I., Bot, Y. S., Obeagu, G. U., Alum, E. U. and Ugwu, O. P. C. Anaemia and risk factors in lactating mothers: a concern in Africa. *International Journal of Innovative and Applied Research*, 2023a; 11(02): 15-17.
- 13. Obeagu, E. I., Nimo, O. M., Bunu, U. M., Ugwu, O. P.C. and Alum, E.U. Anaemia in children under five years: African perspectives. *Int. J. Curr. Res. Biol. Med.*, 2023b; (1): 1-7.
- WHO. Pocket book for hospital care for children. Guideline for management of common childhood illness.2nd ed. 2013:125-148.
- 15. Asogwa, F.C., Ugwu, O. P. C., Alum, E. U., O. Egwu, C. and Edwin, N. Hygienic and Sanitary Assessment of Street Food Vendors in Selected Towns of Enugu North District of Nigeria. *American-Eurasian Journal of Scientific Research*, 2015; 10 (1): 22-26.
- 16. Marcelline, U., Noella, U., Tharcisse, M., Corine, K., Josephat, M., & John Banson, B. The impact of malaria and gastrointestinal helminthiasis co-infection on Anaemia and severe malaria among children in Bugesera District, Rwanda. *Int J Trop Dis Heal*, 2016; 13(4).
- 17. Alum, E. U., Uti, D. E., Agah, V. M., Orji, O. U., Ezeani, N. N., Ugwu, O. P., Bawa, I., Omang, W. A. and Itodo, M. O. (2023). Physico-chemical and Bacteriological Analysis of Water used for Drinking and other Domestic Purposes in Amaozara Ozizza, Afikpo North, Ebonyi State, Nigeria. Nigerian Journal of Biochemistry and Molecular Biology, 37(1), 1-8.
- 18. Motlagh ME, Heidarzadeh A, Hashemian H, Dosstdar M. Patterns of Care Seeking During Episodes of Childhood Diarrhea and its Relation to Preventive Care Patterns: National Integrated Monitoring and Evaluation Survey (IMES) of Family Health. Islamic Republic of Iran. *Int J Prev Med.*, 2012; 3: 60-67.
- 19. Kembabazi Stellamaris, Mutambuka Martin, Marta Vicente-Crespo. Formulation of a Nutrient-Rich Complementary Biscuit for Children between Eight Months and Fifty-Nine Months. International Journal of Food Science and Biotechnology, 2018; 3(1):33-39.
- 20. Mbina, S. A., Magaji, G., Fanuel, A., Pius, T., Gorret, A., Mavine, A. N., ... & Stellamaris, K. Breastfeeding Practices Among Infants and Young Children in Bushenyi, Uganda: Influence of Maternal Knowledge and Occupation. *Journal of Family Medicine and Health Care*, 2021; 7(4):90-97.
- 21. Kakulu, R. K. Diarrhea among under-five children and household water treatment and safe storage factors in Mkuranga district, Tanzania. Muhimbili University of Health and Allied Sciences, 2012.
- 22. Agbolade M.O, Dipeolu I.O and Ajuwon A.J. Knowledge and Use of Oral Rehydration Therapy among Mothers of under-five children in a Military Barrack in Ibadan, Nigeria. *Afr. J. Biomed. Res.*, 2015; 18: 7-15.
- 23. Adimora GN, Ikefuna AN, Ilechukwu G. Home management of childhood diarrhoea: Need to intensify campaign. Niger J Clin Pract., 2011;14:237-41.
- 24. Mujurizi, A.(2023). Evaluation of Factors influencing Health Care Seeking Behaviours among Caretakers of Children below 5 Years in Bugala Island, Kalangala District. IDOSR JOURNAL OF SCIENTIFIC RESEARCH 8 (2), 124-136.
- 25. Stanley, K.(2023). Evaluation of Care-Takers Awareness, Training and Approaches in the Management of Diarrhea in Children in Nawampiti Parish. Journal of Scientific Research 10 (1), 28-35.

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Mukisa Emmanuel (2023). Knowledge, Attitude and Practice of Mothers/Caregivers Regarding Oral Rehydration Therapy at Ishaka Adventist Hospital Bushenyi District Uganda. NEWPORT INTERNATIONAL JOURNAL OF PUBLIC HEALTH AND PHARMACY (NIJPP) 3 (2):45-56.

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