

**KNOWLEDGE, ATTITUDE AND PRACTICES OF NURSES IN THE MANAGEMENT
OF DIARRHEA AMONG CHILDREN UNDER FIVE YEARS ON PAEDIATRIC
WARD AT KAMPALA INTERNATIONAL UNIVERSITY TEACHING HOSPITAL**

BY

MUHANGUZI CHRISTOPHER

M16/U011/DNE/029

**A RESEARCH REPORT SUBMITTED TO UGANDA NURSES AND MIDWIVES
EXAMINATIONS BOARD IN PARTIAL FULFILLMENT FOR THE AWARD OF
DIPLOMA IN NURSING SCIENCES**

OCTOBER, 2017

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ABSTRACT

The study was to assess the knowledge, attitude and practice of nurses on the management of diarrhea among children under five years of age on Pediatric ward at KIU- TH.

Methodology: The study design was descriptive and cross sectional in nature involving collection of information using questionnaires and enrolled 30 respondents (nurses) who were selected using a simple random sampling procedure.

Results: Majority responded on the three clinical types of diarrhea, 10(33%) indicated acute watery stool that lasts several hours or days, 3(10%) disclosed acute bloody diarrhea also called dysentery and 17(57%) disclosed persistent diarrhea, which lasts 14 days or longer, 15(50%) disclosed that health units had no improved sanitation, 14(47%) agreed that there was improved sanitation and 1(3%) was not sure. 28(94%) agreed that mothers are advised to use exclusive breastfeeding for the first six months 1(3%) disagreed, 1(3%) were not sure, 25(83%) agreed that nurses encourage good personal and food hygiene 3(10%) disagreed and 2(7%) were not sure. Lastly, 15(50%) agreed that nurses educate mothers and 15(50%) disagreed.

Conclusion: The practice of nurses on the management of diarrhea among children under five years of age on Pediatric ward at KIU – TH indicated that improved sanitation like hand washing with soap, exclusive breastfeeding for the first six months, good personal and food hygiene reduce the occurrence of diarrhea, and educating mothers as they received health tips to control diarrhea diseases.

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RESEARCHER: MUHANGUZI CHRISTOPHER

Signature.....Date

KAMPALA INTERNATIONAL UNIVERSITY-WESTERN CAMPUS
P.O.BOX 71, BUSHENYI UGANDA

Signature.....Date

MR. MUSHAIJA JONATHAN KAMANDA
SUPERVISOR

Signature.....Date M/S.

ANNNET KABANYORO
DEAN SCHOOL OF NURSING OF KAMPALA INTERNATIONAL UNIVERSITY-
WESTERN CAMPUS.

DECLARATION

I, **Muhanguzi Christopher**, hereby declare that this research report about knowledge, attitude and practice of nurses in the management of diarrhea among children under five years on pediatric ward at Kampala international university teaching hospital is my own work and has never been presented anywhere either partially or in total for any award unless otherwise stated.

.....

.....

Signature

Date

MUHANGUZI CHRISTOPHER

(Researcher)

DEDICATION

I, **Muhanguzi Christopher** wish to dedicate this work to Almighty God, my parents, friends, relatives and everyone who contributed something towards my education.

I wish to dedicate this research to the Senior Principal Nursing Officer (SPNO), KIU-TH. Also, special dedications go to the staff Kampala International University School of Nursing and more especially to my Research Supervisor.

ACKNOWLEDGEMENT

I acknowledge God the heavenly father for his constant love, protection, guidance and good health.

Special thanks go to my supervisor Mr. **Mushaija Jonathan Kamanda** for advice and courage he has given me, which enabled me to complete this research report.

I wish to extend great thanks to all my parents, relatives and friends for the wonderful support they have rendered to me since I joined up to now.

I appreciate my brothers for his close cooperation and encouragement

Sincere thanks go to my course mates for the good cooperation throughout the course

Sincere appreciation goes to the school administration for the parental guidance and love to me throughout my course.

Grateful thanks to Kampala international university- western campus Teaching hospital for allowing me to carry out my research in their school.

Lastly but not the least, I thank all my respondents who considered my request and answered my questionnaires despite of other commitments they had

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LIST OF ABBREVIATIONS

AHRQ	:	Agency for Healthcare Research and Quality
CDD	:	Childhood Diarrheal Diseases
CDD	:	Control of Diarrheal Diseases
HIV	:	Human Immune Virus
ICU	:	Intensive Care Unit
IMCI	:	Integrated Management of Childhood Illness
IOM	:	Institute of Medicine
IP	:	In Patient
KAP	:	Knowledge, Attitude and Practices
KIU	:	Kampala International University
KIU-TH	:	Kampala International University Teaching Hospital
OPD	:	Out Patient Department
ORS	:	Oral Rehydration Salts/solutions
SPSS	:	Statistical Package for Social Scientist
UNICEF	:	United Nations Initiative on Children Education Fund
WHO	:	World Health Education

LIST OF OPERATIONAL DEFINITIONS

Community : A group of people living together and sharing common social

Dehydration: Condition where children loose water from the body due to vomiting or passing loose watery stools.

Diarrhea: A common disease in childhood which causes loss of water in the

Knowledge: Awareness on the facts of diarrhea control and prevention

Management of diarrhea: Mechanisms employed to reduce dehydration of the body

Mortality rate: Death rate among children below 5 years

Pediatric ward: A gazette treatment unit which specializes in care of children

CHAPTER ONE: BACKGROUND OF STUDY

1.1 Introduction

This chapter presents the background information, statement of the problem, purpose of the study, objectives of the study, research questions, and justification of the study.

Worldwide, Diarrhoea is a common disease and is one of the major determinants of childhood morbidity and mortality. Diarrhoea is one of the main causes of death in children under 5 years of age in India (WHO, 2013). Roughly 1.5 million children die due to diarrhoea and diarrhoea related diseases every year. The Government of India through its National CDD Programme plans to reduce the infant mortality rate from 95 to 50 and pre-school mortality from 41.2 to 10 per 1000 by the year 2000 A.D. The CDD programme which was started in 1986 and covered 90 districts during 1986-87. During the period 1987-88 and 1988-89, another 90 and 120 districts respectively were covered and by 1989-90 the whole country was covered under this programme (WHO, 2013).

Khan (2013), disclosed that diarrhoea can last several days, and can leave the body without the water and salts that are necessary for survival, mainly characterized by skin pinch goes slowly (≥ 2 seconds), with restlessness, irritability, patients who drink eagerly and with thirst.

Most people who die from diarrhoea actually die from severe dehydration and fluid loss. Children who are malnourished or have impaired immunity as well as people living with HIV are most at risk of life-threatening diarrhoea. Diarrhoea is usually a symptom of an infection in the intestinal tract, which can be caused by a variety of bacterial, viral and parasitic organisms (Singh and Baral, 2011). Infection is spread through contaminated food or drinking water, or from person-to-person as a result of poor hygiene from people of different social – economic backgrounds.

In Africa, Diarrhoeal disease remains a leading cause of mortality and morbidity of children in Sub-Saharan Africa and from different backgrounds. In Ethiopia, according to WHO, (2013),

Diarrhoeal disease affects about 13.3% of under five children. Of those, 3% had bloody Diarrhoea in the two week before the survey (WHO, 2013). Diarrhoea was most common among children age 6–23 months (23-25 percent). Gupta and Sarker, (2015), explained how diarrhoea prevalence is highest among children residing in households that drink from unprotected wells 18%, those residing in rural areas (14%). The Integrated Management of Childhood Illness (IMCI) guidelines advise the use of ORT, along with continued feeding, and zinc for appropriate Diarrhea case management.

In underdeveloped countries, acute gastroenteritis involving Diarrhoea is the leading cause of mortality in infants and children younger than 5 years of age. Diarrhoea is the most prevalent pediatric disease and cause of death in children under five years-of-age in developing –countries (Kapoor and Rajput, 2016). Moreover, Diarrheal diseases cause serious economic problems for developing countries. The leading cause of death from acute Diarrhoea is the loss of water and essential minerals, which can be compensated in most cases by an oral rehydration solution (ORS) (Singh and Baral, 2011).

In Ethiopia, Diarrhoea is the major killer of children and thus is a serious public health problem. An estimated 73,700 children under the age of five die each year due to Diarrhoea. This accounts for an estimated 20% of the deaths among children under- five years of age in the country (Farahmand, 2012).

Diarrhea is a major public health problem in Uganda as evident from its increasing incidence and fatality. Unlike other diseases, diarrhea is generally not considered as an illness and thus most diarrhea cases are not are not managed at all or managed at home through traditional approaches (Karrar and Gibril, 2009). About one half of children below five years are not taken to any healthcare centre and about one third of the children with diarrhea do not receive any treatment at all. The remaining a third of children with diarrhea are the ones who get hospital care (Farahmand, 2012).

In Uganda, a policy statement was formulated for the control of Diarrheal diseases (CDD) program in 1993 with benchmarks through 1997. In 1997, the CDD merged with other program to become the Integrated Management of Childhood Illnesses (IMCI) strategy (Taha, 2015). In 2004, WHO and UNICEF released a revised recommendations aimed at dramatically reducing the number of child deaths due to diarrhea. These new recommendations take into account significant advances; new formulation of ORS containing low concentration of salt and glucose and the use of zinc Sulphate in addition to rehydration therapy in management of diarrheal diseases (Karrar and Gibril, 2009).

Since 2010, Uganda has adopted several initiatives to increase access to diarrheal treatment for children (Khazindar, 2014). These include; the national diarrhea and pneumonia scale up plan, re-classification of Zinc Sulphate from prescription only to over the counter product, development of locally produced ORS/Zinc and introduction of Rotavirus vaccine. The government of Uganda and its stakeholders has encouraged and financed special trainings of all health workers on diarrhea and nutrition (Taha, 2015).

1.2 Statement of the problem

Diarrhea has remained a major Public Health Problem and a common symptom on the Paediatric ward and general Health Care Centers national wide despite the great effort employed so far. A 2013 report by the Agency for Healthcare Research and Quality (AHRQ) describes several AHRQ-funded studies on the relationship between hospital nurse performance and the management of diarrheal diseases.

In Uganda diarrhea mortality rate remains high (Ministry of Health, 2014). Currently, in areas of northern eastern and south eastern Uganda, diarrhea among infants below 5 years is at an increase of 4% per year, and incidence is increasing at 3% annually (Ministry of Health, 2014). In Uganda, the primary caregivers display poor perception about the signs of dehydration, dysentery and management of diarrhea. The attitude of parents and caretakers towards the disease management

vary with their perception about its seriousness especially on young children and health care-seeking practices of the primary caretakers of children < 5 years of age.

Data from Ministry of Health, (2014), showed that an increase in knowledge and practice of nurses in the management of diarrhea in children below 5 years over the past decade; it was 13 % in 2000 to 22 % in 2005 and 32 % in 2011. However, almost one child in every two (49 %) were offered less fluid than usual or were given no fluids at all; 28% were offered somewhat less, 13% were offered much less, and 7% of children were offered no fluids at all. Only 10% of children with diarrhea were given increased liquids and continued feeding as recommended, while 25 % of children with diarrhea continued to be fed and given ORT.

Thus, there is need to increase the knowledge, attitude and practice of nurses on the management of diarrhea among children under five years of age, which may reduce new cases and control the existing cases to effectively manage diarrhea in children below five years.

1.3 Purpose of the study

To assess the knowledge, attitude and practice of nurses on the management of diarrhea in children below five years of age on Pediatric ward at Kampala International University Teaching Hospital.

1.4 Specific objectives

- i. To determine the Knowledge of nurses on the management of diarrhea in children below five years of age on Pediatric ward at Kampala International University Teaching Hospital
- ii. To determine the attitude of nurses on the management of diarrhea in children below five years of age on Pediatric ward at Kampala International University Teaching Hospital
- iii. To assess the practice of nurses on the management of diarrhea in children below five years of age on Pediatric ward at Kampala International University Teaching Hospital.

1.5 Research Questions

- (i). What is the Knowledge of nurses on the management of diarrhea in children below five years of age on Pediatric ward at Kampala International University Teaching Hospital?
- (ii). What is the attitude of nurses on the management of diarrhea in children below five years of age on Pediatric ward at Kampala International University Teaching Hospital?
- (iii). What is the practice of nurses on the management of diarrhea in children below five years of age on Pediatric ward at Kampala International University Teaching Hospital?

1.6 Justification

- a) The study may help the ministry of health Uganda, Kampala International University Teaching Hospital and Bushenyi district in providing physical solutions to prevent the problem of diarrhoea among infants.
- b) The findings of this study may be used by community health educators generate a new information on the management of diarrhea in children below five years of age through integrating necessary innovations into the academic curriculum in the region.
- c) The study findings may provide information on key problems facing nurses in the hospital and add references for further researchers in community health who may like to carry out further studies in the related area.
- d) This study may also help me obtain my Diploma of Nursing sciences at the end of the course.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter presented view from other scholars on the topic under study. It is arranged according to research objectives.

2.2 Knowledge of nurses on the management of diarrhea among children under five years of age

Diarrhea is a medical condition characterized by passing out watery stools more than three times a day. Diarrhea is a primary cause of dehydration and malnutrition, the leading causes of childhood deaths and stunted growth (Taha, 2015). Diarrhea can be caused by bacteria or viral infection as well as parasites and sometimes reaction to certain drugs and always present as a sign of other infections and food intolerance (Datta and John, 2016).

Each child under five years of age experiences an average of three annual episodes of acute diarrhea. Moulton and Becker, (2015), disclosed that globally, diarrhea is the leading cause of death (after pneumonia). Nurses' knowledge on management of diarrhea especially two signs of lethargy/ unconsciousness, children who are unable to drink, or drink poorly with restlessness and irritability. In the developing countries is limited to a few cases since most children are brought to the hospital while in critical situations. Due to poor staffing statistics, poor payments and lack of well-equipped facilities, affect the productivity of the nursing care (Datta and John, 2016).

Research shows that a single nurse is loaded to work on more than 20 patients for more than 8 hours daily. This greatly affects the work of the nurse (Moulton and Becker, 2015). The major weakness of this type of research is that it conceptualizes nursing workload at a macro level, ignoring the contextual and organizational characteristics of a particular health care setting (e.g., physical layout, information technology available) that may significantly affect workload (Patwari, 2013).

Although not as strong, some evidence exists regarding the impact of nurse staffing levels on failure to rescue (death within 30 days among patients who had complications) and mortality (Patwari, 2000). A study using administrative data from 799 hospitals in 11 States revealed that a higher number of hours of RN care per day was associated with lower failure to rescue rates (Patwari, 2013).

In a study of 168 nonfederal adult general hospitals in Pennsylvania, it was found out that each additional patient per nurse was associated with a 7 percent increase in the likelihood of mortality within 30 days of admission and in the likelihood of failure to rescue. An earlier study found that hospitals that had more RNs per admission had lower mortality rates (Aiken L et al 2006).

There were four studies that found a relationship between nurse staffing and patient outcomes (Moy and Booth, 2004). One study found that having a nurse-patient ratio of less than 1:2 during evening shifts was associated with a 20 percent increase in length of stay in patients who had abdominal aortic surgery in Maryland hospitals between 1994 and 1996. Researchers conducted studies in 1992 and 1994 using hospital cost reports and discharge data in New York and California, finding that more nursing work hours were associated with reduced length of stay (World Health Organisation, 2014).

Banerjee and Hazra, (2004), disclosed that in this case the researcher is aimed at assessing the impacts of staffing, routine remedial courses, self-motivation and skills of nurses they exhibit towards the management of diarrhea in children below 5 years.

2.3 Attitude of nurses on the management of diarrhea among children under five years of age

Diarrhea is one of the commonest causes of morbidity in children in developing countries. Diarrhea is responsible for 4000 million episodes and 2.4 million deaths each year in children under 5 years (World Health Organisation, 2014). In Nepal, the prevalence of diarrhea is 15% with higher rate in rural areas. In the last two decades the mortality due to diarrhea in children

under 5 years has reduced. This reduction may be due to correct case management as per standard treatment guidelines recommended by WHO and use of oral rehydration therapy as a keystone in the management (Banerjee and Hazra, 2004).

According to WHO, (2012) guidelines for the management of diarrhea, antidiarrheal, anti-amoebic and antibacterials have little role to play. Despite this fact over use of antimicrobial agents have reported for the management of the diarrhea. Community health education is of utmost importance for effective case management, since it has potential to establish productive contact between the health services and the community to increase capability of families to recognize the danger signs of diarrhea in children and to encourage appropriate and early care seeking behaviors (Aiken and Clarke, 2007). Effective health education can only be provided on the basis of an accurate understanding of prevailing knowledge, attitude and practices (KAP) of the community. Therefore, it is necessary to have relevant information concerning KAP of nurses about diarrhea for successful implementation of control activities (Aiken and Clarke, 2007).

Knowledge according to Amaravadi (2004), mothers are advised to use exclusive breast feeding which would help them to control diarrhea, nurses should encourage good personal and food hygiene to reduce the occurrence of diarrhea, educate mothers about how infections. The accumulated facts, truth, principles and information to which human mind has access. Knowledge can be defined as the sum of conceptions, views and propositions which has been established and tested. An educated and knowledgeable person is one who understands, among other things the basic facts concerning health and disease and protects his or her own health and that of the community.

WHO (2012), also maintained that if a person is well informed in the area of health, he or she would be able to reject practices that imperil his or her health. The individual will also be well equipped to make the right decision concerning the children and family, and will play active role in improving the society in which the person lives. In the context of this study, knowledge refers

to the act of having adequate information and understanding of the concept, signs and symptoms, modes of transmission and management practices of diarrhea by the child bearing mothers. Adequate or high level knowledge of the concepts, signs and symptoms, mode of transmission of diarrhea is capable of guaranteeing proper management practices of diarrhea among children (Amaravadi, 2004).

Management according to Anderson and Maloney, (2005), is the co-ordination of all the resources of an organization through the process of planning, organizing, directing and controlling in order to attain organizational objectives. Amaravadi, (2004), described management as the process of designing and maintaining an environment in which individuals working together in groups efficiently accomplish selected aims.

Management in this context involves child bearing mothers doing or producing something like proper breast feeding, washing feeding bottles, washing plates and hands, keeping the environment clean and producing oral rehydration solution to cope with childhood diarrhea. Carayon and Gurses (2005), noted that there was a relationship between knowledge and management practice adopted by nurses like access to safe drinking-water, improved sanitation and handwashing with soap. Anderson and Maloney, (2005), concluded that better life will not come from mere acquisition of knowledge but from its practice.

2.4 Practice of nurses on the management of diarrhea among children under five years of age

Diarrhea is defined as passage of watery stool for three or more times in 24 hours. A loose stool is one that takes shape of the container. Diarrhea is a major killer disease in children and thus an important health problem in India, Occupying at least 15 % of hospital beds; diarrhea also emerges as a major economic burden to the country (Duffield et al, 2003). It is an important cause of malnutrition in children; primarily being related to improper absorption of food. Poor food

intake during diarrheal episodes is related to unhealthy practices of withholding food during motions, and anorexia vomiting associated with same (Duffield et al, 2003).

Practice, according to Banerjee and Hazra, (2004), is a way of doing something that is common or habitual; it is a way of doing something or expected way in a particular situation. Duffield et al, (2003), defined practice as any customary action or proceeding regarded as individuals habit. Duffield et al, (2003), further defined practice as an established way of doing things especially one that developed through experience and knowledge. When management relates to practice, it becomes management practice.

World Health Organization, (2014), perceived management practice as the application of good health actions to one's daily living such as proper personal hygiene and nutrition. In this study, management practices refer to all the actions that are undertaken by nurses to avert childhood diarrhea. Under five children in developing countries are known to get vicious cycle of diarrhea and malnutrition causing increasing morbidity and mortality related to diarrhea (Banerjee and Hazra, 2004). Mortality related to diarrhea is more common in 6 month to 1 year age, more so in a malnourished child among different backgrounds.

Oral rehydration solution (ORS) being simplest economical, consulting a health professional, in particular for management of persistent diarrhea and effective therapeutic intervention for prevention and treatment of dehydration has emerged as a magic potion in 20th century in management of diarrhea (Moy and Booth, 2004). Despite this, it is felt that ORS propaganda is not adequately transferred to community resulting in inadequate, erratic or incomplete ORS therapy during dehydration (Duffield et al, 2003).

Many wrong practices were noted in community when a child is hospitalized with diarrhea. Some parents stop food, stop milk or reduce solid intake. This study is planned to evaluate awareness, attitude and knowledge about diarrhea and ORS in a tertiary care hospital in Hyderabad (Moy and Booth, 2004).

Since diarrhea is a common disease in childhood and the etiology of this disease has been mostly implicated with feeding habits and pattern in these children (Patwari, 2000). There are inherent cultural practices for management of diarrhea at the domestic level mostly the practices which have been inherited from earlier times. Some of these practices may be beneficial some harmful and some will have no management value (Patwari, 2013). The objective is to study such practices in Kashmir valley for management of diarrhea (Moy and Booth, 2004). Also the treatment practices adopted at health facilities were studied, especially with the view to detect the overuse of antibiotics and IV fluids.

According to Moulton and Becker (2015), each child, on an average, in the developing world suffers from diarrheal diseases for more than three times a year. This study also supports the fact that diarrheal disease is the foremost leading cause of under five deaths among the major childhood diseases in the developing world contributing to 35% of mortality in children under five (Patwari, 2013).

In the developing countries of the world an estimated 13,000 million episodes of Diarrhea with 3.2 million deaths occur among children annually (Datta and John, 2016). 80% of these deaths occur in children under two years of age 9.5% of all deaths (200,000) in infants and 23–30 percent in under five age group children are due to Diarrhea with a heavy economic burden and account for 15% of all Pediatric beds (Khazindar, 2014).

CHAPTER THREE: METHODOLOGY

3.1 Introduction

This chapter dealt with the methodology that was used in the study.

3.2 Study design

The study was descriptive and cross sectional in nature involving collection of information concerning knowledge, attitude and practice of nurses on the management of diarrhea among children under five years of age on Pediatric ward at Kampala International University Teaching Hospital, using questionnaires, while doctors and nurses will be interviewed.

3.3 Study setting

The study was carried out in Kampala International University Teaching Hospital and is one of the biggest hospitals in Uganda located in Ishaka Town along Bushenyi Kasese Road, 5Km away from Bushenyi District Headquarters. Ishaka is found in Ishaka - Bushenyi Municipality, Bushenyi District, South Western Region of Uganda - East Africa.

It is a teaching hospital found at the western campus of Kampala International University, one of the leading universities in Uganda.

Paediatric ward is one of the departments of KIU-TH, which specializes in care of children below 12 years of age. Besides the paediatric ward, there are other wards like Obstetrics, Gynecology, Medical, Surgical, Psychiatric and Accidents and Emergency wards. It offers all outpatient services including antenatal care, immunization, laboratory services, radiology and so many others. The hospital has got a structural administration which includes medical staff and non-medical staff.

3.4 Study population

The study was carried out among nurses and doctors in the pediatric ward where children below the age of 5 years who were admitted. Also, mothers were consulted to give information about

their children. It enrolled a total number of 30 respondents from a total population of about 120 mothers in the pediatric ward.

3.4.1 Sample size determination

To arrive at the sample size the following formula of Fisher 1998 will be used in calculating the population

$$n = N$$

$$1 + N(e)^2$$

Where n = Sample size

N = Population

e = Margin of error @ 0.05

$$n = 35 = 35 = 35 = 30$$

$$1 + 35 \times 0.05^2 = 1 + 35 \times 0.0025 = 0.09$$

Thus, 30 respondents were the required population according to the formula.

3.4.2 Sampling procedure

The study employed simple random sampling technique during data collection, by randomly selecting nurses, doctors and mothers of the children suffering from diarrhea. This helped to select respondents irrespective of their background.

This study only catered for nurses, doctors and mothers of the children suffering from diarrhea at KIU-TH, who were ready to consent, were included in the study

3.4.3 Inclusion criteria

Nurses at KIU-TH who consented to participate in the study were included.

3.5 Definition of variables

3.5.1 Dependent variable

Delivery of quality nursing care in the management of diarrhea among children below 5years

3.5.2 Independent variable

Factors affecting the delivery of quality nursing care.

3.6 Research instruments

A pre-tested questionnaire with both open and close ended questions were designed and administered to the selected respondents. To collect data with the questionnaire, the researcher conducted a face-to-face interview with the selected respondents and he filled in the responses from respondents who could not know how to read and write. Those who were able to read and write were allowed to fill their responses in the questionnaire themselves.

3.7 Data collection procedures

After getting permission from the university, the researcher administered questionnaires to selected respondents, who were assisted by getting clarifications from the researcher to fill in the questionnaires. Interpretation, coding and analysis of data followed, before data was presented in form of a report, which were presented.

3.7.1 Data management

The researcher took notes against each question asked and answered respectively in their corresponding orders. Two sampling techniques of eliminating extraneous variables and holding factors constant were used so as to reduce substantially the effect that extraneous variables would have on the dependent variable. This objectively focused on the relevant information leaving out the irrelevant ones.

3.7.2 Data Analysis

After data collection, the researcher analyzed, interpreted and coded responses according to the questions asked to ensure completeness, uniformity, accuracy and consistency of all questions asked. The analyzed data was then presented in form of tables and graphs, which formed a basis for discussion, conclusion among others.

3.8 Ethical considerations

Clearance was obtained from institutional ethical review committee Board of KIU – Western Campus. Also, permission was sought from medical superintendents of KIU-TH, and the in charge Pediatrics department. In the process of data collection, consent was obtained from the participants as enrolment into the study, where privacy was ensured using private codes known only by the researcher.

3.9 Limitations of the study

Problems encountered in course of this study may mainly be financial constraints, time constraints and Power failure making it difficult to effectively carry out the work at the stipulated time.

However, most of the limitations were overcome by making budgets, timetabling the study and using various storage devices like flash diskettes to avoid power failure. However, those that could not be overcome were handled in the most appropriate and possible way.

3.10 Dissemination of the results

Copies of the dissertation will be presented to KIU-TH the faculty of nursing science, findings may also be presented in Conferences and published in nursing journals. The various stakeholders like Bushenyi District, the Ministry of Health will be entitled to copies of this study report.

CHAPTER FOUR: DATA PRESENTATION AND ANALYSIS

4.1 Introduction

This chapter presents an analysis and interpretation of the findings from the study. The data collected was analyzed using score tables to present this data with variables, frequencies and percentages as responses were given by the respondents. A total of 30 participants participated in this study.

4.2 Socio-demographic characteristics

Table 1: Showing demographic data of the respondents

Variables	Frequency(N=30)	Percentage (%)
Age		
18-35	10	33%
36-59	20	67%
Tribe		
Munyankole	20	66%
Mukonjo	2	7%
Mukiga	5	17%
Others	3	10%
Education levels		
Primary	14	46%
Secondary	8	27%
Graduate	-	-
Other	8	27%
Religion		
Pentecostal	10	33%
Catholics	10	33%
Moslem	3	10%
SDA	7	24%

Source: primary

From table 1 above, according to the figure above, majority of the mothers who had their children admitted for diarrhea were aged between 18-35 years presented by 20(66.7%), and 10(33.3%) of the mothers who had their children admitted were aged between 35-59 years.

Responses according to tribe indicated that majority of respondents were the Banyankole with 20(66%), followed by the Bakiga with 5(17%). The least numbers came from other tribes 3(10%), as well as Bakonjo with 2(7%) of the total number of respondents.

According to religion, majority of the respondents were Pentecostals, presented by 10(33%) as well as Catholics 10(33%) of the total number of respondents. The least number of respondents by religion were Moslems with 3(10%) and other religions which included SDA's and born again with 7(24%).

According to education level, majority of the respondents 14(46%) had studied up to primary education level, followed by 8(27%) who had studied up to secondary school. None of the respondents was a graduate, while 8(27%) had other levels like early primary school drop outs and no education level.

4.2 Knowledge of nurses on the management of diarrhea in children below five years of age on Pediatric ward at KIU – TH

Table 2: showing knowledge of nurses in the management of diarrhea among children below five years on pediatric ward at KIU-TH

Variables	Frequency(N=30)	Percentages (%)
Types of diarrhea		
Acute watery diarrhea	8	27%
Acute bloody diarrhea	3	10%
Persistent diarrhea	12	40%
All types of diarrhea	7	23%
Types of dehydration		
Dehydration	12	40%

Some dehydration	10	33%
Severe dehydration	5	17%
All types of dehydration	3	10%

List, at least 6 measures of prevention diarrhea

None	5	17%
1 – 3	8	27%
4 – 6	10	33%
All the above	7	23%

Primary source

In the table 2, according to the respondents 8(27%) indicated that there was acutewaterydiarrhea which lasts several hours or days, and includes cholera, followed by 3(10%) who disclosed acute bloody diarrhea also called dysentery and majority of 12(40%) disclosed persistent diarrhea, lasts 14 days or longer and 7(23%) disclosed all the above.

Views from 5(17%) disclosed that is severe dehydration as type of dehydration, majority of 12(40%) who disclosed dehydration followed by 10(33%) who disclosed some dehydration and 3(10%) who disclosed all the above.

The key measures to prevent diarrhea are as follows: (1). Safe drinking-water, (2). Use of improved sanitation, (3) Ensure handwashing with soap. (4) Exclusive breast feeding for the first six months of life, (5) Ensure good personal and food hygiene and lastly, (6). Health education about how infections spread. According to respondents of 5(17%) disclosed none of the above, where by majority of 10(33%) disclosed 4-6 followed by 8(27%) who disclosed of 1-3 and then 7(23%) disclosed of all the above.

4.3 Attitude of nurses on the management of diarrhea in children below five years of age on Pediatric ward at KIU-TH

Table 3: Showing different ways how nurses manage of diarrhea

Variables	Frequency (N-30)	Percentage (%)
Rehydrate with ORS solution		
Agree	20	66%
Disagree	5	17%
Not sure	5	17%
Weather nutrient-rich foods the vicious cycle of malnutrition and diarrhea		
Agreed	28	93%
Disagreed	2	7%
Not sure	-	-
Nurses were consulting a health professional		
Agreed	15	50%
Disagreed	10	33%
Not sure	5	17%

Source: primary

From the table 3 above, according to respondents, majority 20(66%) agreed that many nurses use rehydration with oral rehydration salts (ORS) solution, while 5(17%) disagreed and disclosed that nurses use other methods of controlling dehydration like encouraging breast feeding, and 5(17%) were not sure.

Responses from 25(83%) agreed that Nutrient – rich foods the vicious cycle of malnutrition and diarrhea can be broken by continuing to give nutrient rich foods including breast milk, while 5(17%) disagreed.

Views from 15(50%) agreed that nurses are consulting a health professional, in particular for management of persistent diarrhea or when there is blood in stool or if there are signs of

dehydration, while 10(33%) disagreed and disclosed that nurses treat according to the conditions of the patient. Lastly, 5(17%) were not sure.

4.4. Practice of nurses on the management of diarrhea in children below five years of age on Pediatric ward at KIU – TH.

Table 4: showing the practice of nurses in the management of diarrhea among children under five years on pediatric ward at KIU-TH

Variables	Frequency (N-30)	Percentage (%)
Whether nurses provide safe drinking water		
Agreed	28	93%
Disagreed	-	-
Not sure	2	7%
No improved sanitation		
Agreed	14	47%
Disagreed	15	50%
Not sure	1	3%
Whether mothers are advised on exclusive breast feeding		
Agreed	28	94%
Disagreed	1	3%
Not sure	1	3%
Whether nurses encourage on personal and food hygiene		
Agreed	25	83%
Disagreed	3	10%
Not sure	2	7%
Whether nurses educate mothers about infections spread		
Agreed	15	50%
Disagreed	15	50%
Not sure	-	-

Source: primary

From the table 4 above, on whether nurses of ten provides drinking-water to children suffering from diarrhea, majority of 28(93%) agreed that nurses provided safe drinking water to children suffering from diarrhea to help in disease control, none disagreed and only 2(7%) were not sure.

According to majority of respondents, 15(50%) they disagreed and disclosed that in the health units there was no improved sanitation to reduce cases of diarrhea a like handwashing with soap, because they bought and stored their own soap and water, while 14(47%) agreed that in the health units, there were improved sanitation to reduce cases of diarrhea like hand washing with soap, and only 1(3%) were not sure.

Responses from 28(94%) agreed that mothers are advised to use exclusive breast feedingfor the first six months of child's life. These disclosed that mainly, doctors and nurses were advised to use exclusive breast feeding, which would help them to control diarrhea, 1(3%) disagreed and also 1(3%) were not sure.

According to 25(83%) of the respondents, they agreed that nurses encourage good personal and food hygiene so as to reduce the occurrence of diarrhea. This was because it would reduce the rate of poor hygiene which causes diarrhea, while 3(10%) disagreed and only 2(7%) were not sure.

Responses from 15(50%) of the respondents agreed that nurses educate mothers about how infections are spread. These disclosed that they received health tips top control numerous diseases, though some nurses were harsh on them, followed by 15(50%) who disagreed and they disclosed that nurses did not give information to mothers on the infections and how they are spread.

CHAPTER FIVE: DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter summarizes the study findings, represents conclusions and recommendations basing on results shown in chapter four of this report.

5.2 Discussion of study findings

5.2.1 Socio-demographic characteristics

According to age, majority of the mothers who had their children admitted for diarrhea were aged between 18-35 years 20(66.7%), 10(33.3%) were aged between 35-59 years. Responses according to tribe indicated that majority were the Banyankole with 20(66%), Bakiga with 5(17%), other tribes were 3(10%) and the Bakonjo with 2(7%), while on religion, majority were Pentecostals 10(33%), Catholics 10(33%), Moslems with 3(10%) and other religions which included SDA's and born gains with 7(24%). On education level, majority 14(46%) had studied up to primary education level, 8(27%) had studied up to secondary school, while 8(27%) had other levels like early primary school drop outs and no education level.

This agrees with Banerjee and Hazra, (2004), who disclosed that mortality related to diarrhea is more common in 6 month to 1 year age, more so in a malnourished child among different backgrounds.

Also, Singh and Baral, (2011), disclosed that infection is spread through contaminated food or drinking water, or from person-to-person as a result of poor hygiene from people of different social – economic backgrounds. In Africa, Diarrhoea disease remains a leading cause of mortality and morbidity of children in Sub- Saharan Africa and from different backgrounds.

5.2.2 Knowledge of nurses on the management of diarrhea in children below five years of age on Peadiatric ward at KIU - TH

Views on the clinical types of diarrhea indicated the clinical types of diarrhea 8(27%) indicated that there was acute watery diarrhea which lasts several hours or days, and includes

cholera, 3(10%) disclosed acute bloody diarrhea also called dysentery and 12(40%) disclosed persistent diarrhea, which lasts 14 days or longer and 7(23%) disclosed all types of diarrhea. Views from 5(17%) disclosed that is severe dehydration as type of dehydration, majority of 12(40%) who disclosed dehydration followed by 10(33%) who disclosed some dehydration and 3(10%) who disclosed all the above. The key measures to prevent diarrhea are as follows: (1). Safe drinking-water, (2). Use of improved sanitation, (3) Ensure handwashing with soap. (4) Exclusive breast feeding for the first six months of life, (5) Ensure good personal and food hygiene and lastly, (6). Health education about how infections spread. According to respondents of 5(17%) disclosed none of the above, where by majority of 10(33%) disclosed 4-6 followed by 8(27%) who disclosed of 1-3 and then 7(23%) disclosed of all the above.

This agrees with Moulton and Becker, (2015), who disclosed that globally, diarrhea is the leading cause of death (after pneumonia). Nurses' knowledge on management of diarrhea especially two signs of lethargy/ unconsciousness, children who are unable to drink, or drink poorly with restlessness and irritability.

Views on different measures of treating diarrhea in child under 5years indicated that 28(93%) agreed that there are different measures of treating diarrhea in children under 5years, while 2(7%) disagreed, while the key measures to prevent diarrhea are as follows, safe drinking-water, use of improved sanitation, ensure hand washing with soap, exclusive breast feeding for the first six months of life, ensure good personal and food hygiene and lastly, and health education about how infections spread.

This agrees with Carayon and Gurses (2005), who noted that there was a relationship between knowledge and management practice adopted by nurses like access to safe drinking-water, improved sanitation and handwashing with soap.

5.2.3 Attitude of nurses on the management of diarrhea in children below five years of age on Paediatric ward at KIU-TH

Views on different ways of managing diarrhea indicated that 28(93%) agreed that there are different ways of managing diarrhea, and 2(7%) disagreed, while on whether many nurses use rehydration with oral rehydrationsalts(ORS) solution, majority 20(66%) agreed that many nurses use rehydration with oral rehydrationsalts (ORS) solution, 5(17%) disagreed and 5(17%) were not sure. 25(83%) agreed that Nutrient – rich foods the vicious cycle of malnutrition and diarrhea can be broken by continuing to give nutrient rich foods including breast milk. Views on whether nurses are consulting a health professional, in particular for management of persistent diarrhea, 15(50%) agreed that nurses are consulting a health professional, in particular for management persistent diarrhea or when there is blood instool or if there are signs of dehydration, 10(33%) disagreed that nurses treat according to the conditions of the patient and 5(17%) were not sure.

This agrees with Moy and Booth, (2004), who disclosed that Oral Rehydration Solution (ORS) being the leading treatment of diarrhea as well as consulting a health professional, in particular for management of persistent diarrhea and effective therapeutic intervention for prevention and treatment of dehydration has emerged as a magic potion in 20th century in management of diarrhea.

5.2.4 Practice of nurses on the management of diarrhea in children below five years of age on Peadiatric ward at KIU - TH

Findings on whether nurses often provide safe drinking-water to children suffering from diarrhea, 28(93%) agreed that nurses provided safe drinking water to children suffering from diarrhea to help in disease control 2(7%) were not sure whether there was provision of safe drinking water on the health facility. On whether in health units, there are improved sanitation to reduce cases of diarrhea like handwashing with soap, 15(50%) they disagreed and disclosed that in the health

units, there was no improved sanitation to reduce cases of diarrhea like handwashing with soap, 14(47%) agreed and 1(3%) was not sure. 28(94%) agreed that mothers are advised to use exclusive breastfeeding for the first six months of child's life which would help them to control diarrhea. Also, 25(83%) agreed that nurses encourage good personal and food hygiene so as to reduce the occurrence of diarrhea, 3(10%) disagreed and 2(7%) were not sure. Lastly, views on whether nurses educate mothers about how infections spread, 15(50%) agreed that nurses educate mothers as they received health tips to control numerous diseases, and 15(50%) disagreed.

This agrees with Amaravadi (2004), who disclosed that mothers are advised to use exclusive breastfeeding which would help them to control diarrhea, nurses should encourage good personal and food hygiene to reduce the occurrence of diarrhea, educate mothers about how infections.

5.3 Conclusion

In conclusion, on the knowledge of nurses in the management of diarrhea among children under five years of age on Pediatric ward at KIU – TH which included cholera, acute bloody diarrhea also called dysentery and persistent diarrhea, which lasts 14 days or longer. The degree of dehydration is rated on a scale of three, with least two signs of lethargy/ unconsciousness, sunken eyes, children unable to drink, and they drink poorly, skin pinch goes back very slowly (≥ 2 seconds), restlessness, irritability. Other signs of dehydration as drinks eagerly, thirsty. There were different measures of treating diarrhea in children under 5 years, which included access to safe drinking-water, improved sanitation, and hand washing with soap. Also exclusive breastfeeding for the first six months, good personal and food hygiene and health education about how infections are spread.

There were different ways of managing diarrhea which included the use of rehydration with oral rehydration salt (ORS) solution, using Nutrient – rich foods to break the vicious cycle of malnutrition and

consulting a health professional for management of persistent diarrhea or when there is blood in stool or if there are signs of dehydration.

The practice of nurses in the management of diarrhea among children under five years of age on Pediatric ward at KIU – TH indicated that nurses often provide safe drinking-water to children suffering from diarrhea, improved sanitation to reduce cases of diarrhea like handwashing with soap, exclusive breastfeeding for the first six months, nurses encourage good personal and food hygiene so as to reduce the occurrence of diarrhea, and nurses educate mothers as they received health tips to control numerous diseases.

5.3 Recommendations

Based on the finding and conclusion of this study, the following recommendations were drawn:

- The health workers at the various hospitals and health centers should strengthen their teachings on the management practices of mothers regarding childhood diarrhoea. Since these mothers varied in their responses in all the management practices.
- More scientific research should be conducted on factors that hinder the management of childhood diarrhea by mothers. This is essential for developing rational and effective intervention to the problem.
- All methods of Oral Rehydration Salts should be uniformly taught to mothers so that they can have a variety of choice based on conveniences to them.
- Since there was significant difference in the knowledge and management practiced of mothers regarding childhood diarrhea according to level of education. The state government should provide free and compulsory education for both younger and older mothers to enable them acquire education up to tertiary level so as to widen their scope in all spheres of life including health issues such as childhood diarrhea.

5.4 Suggestions for further studies

- Research work should be concentrated on the demographic factors that facilitate the management practices of mothers regarding childhood diarrhea.
- Studies should also be conducted to determine cultural factors that predispose mothers to poor management of childhood diarrhea.

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APPENDICES

Appendix I: Informed consent form

I am MUHANGUZI CHRISTOPHER, a student of Kampala International University pursuing a diploma in nursing of Kampala International University, am conducting a study on the knowledge, attitude and practice of nurses in the management of diarrhea among children under five years of age on Pediatric ward at Kampala International University Teaching Hospital. I kindly request you to participate in this study. The information given will be kept confidential. You are free to/or not to participate at any stage. A questionnaire will be given to you and I will be glad to explain where you will not understand. Thank you.

I after carefully listening to the explanation from MUHANGUZI CHRISTOPHER, I do understand the purpose of the study and have willingly accepted to participate in this study. I promise to give the information to best of my knowledge.

Participant's signature..... Date.....

Researcher's signature..... Date.....

Appendix II: Questionnaire

I am MUHANGUZI CHRISTOPHER, a student of Kampala International University pursuing a diploma in nursing science of Kampala International University, am conducting a study on the knowledge, attitude and practice of management of diarrhea in children below five years of age on Pediatric ward at Kampala International University Teaching Hospital. I kindly request you to participate in this study. The information given will be kept confidential. You are free to/or not to participate at any stage. A questionnaire will be given to you and I will be glad to explain where you will not understand. Thank you.

Section A:

Demographic and social – economic factors affecting child being mothers distances to Kampala international university teaching hospital for treatment of their children.

1. Age

a. Youth 18-35 () b. Middle age 36-59 ()

2. Tribe

a. Munyankole () b. Mukonjo () c. Mukiga ()

d. Others (specify).....

3. Religion

a. Pentecostal () b. Catholic () c. Moslem ()

d. Other specify.....

4. Education level

a. Primary () b. Secondary () c. Graduate () d. Others ()

Section B:

Knowledge of nurses on the management of diarrhea in children below five years of age on Paediatric ward at Kampala International University Teaching Hospital

1) Mention the types of diarrhea you know?

i)

ii)

iii)

2) Mention the types of dehydration you know?

i)

ii)

iii)

6) List at least 4 measures of preventing diarrhea?

i)

ii)

iii)

iv).....

Section C:

Attitude of nurses on the management of diarrhea in children below five years of age on Paediatric ward at Kampala International University Teaching Hospital

1) Mention different way show nurses manage diarrhea

i)

ii)

iii)

2) Do nurses use rehydration with oral rehydration salt (ORS) solution?

a)Yes

b)No

c)Not sure

3).Do nurses use nutrient – rich foods the vicious cycle of malnutrition and diarrhea can be broken by continuing to give nutrient rich foods including breast milk?

a)Yes

b)No

c)Not sure

4) Do nurses consult other health professional, in particular for the management of persistent diarrhea or when there is blood in stool or if there are signs of dehydration?

a)Yes

b)No

c)Not sure

Section D:

Practice of nurses on the management of diarrhea in children below five years of age on Paediatric ward at Kampala International University Teaching Hospital

1) Do nurses often provide safe drinking-water to children suffering from diarrhea

a)Yes

b)No

c)Not sure

2) Is there improved sanitation to reduce cases of diarrhea like handwashing with soap?

a)Yes

b)No

c)Not sure

3) Do mothers get advice about exclusive breastfeeding for the first six months of child's life?

a)Yes

b)No

c)Not sure

4) Do nurses encourage mothers about good personal and food hygiene?

a)Yes

b)No

c)Not sure

5) Do nurses health educate mothers about how infections spread?

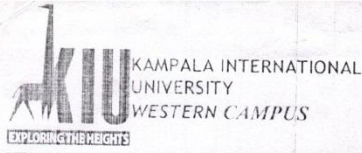
a)Yes

b)No

c)Not sure

THANKS FOR YOUR RESPONSE

Appendix III: Introductory letter



School of Nursing Sciences,
P.O.BOX 71 Bushenyi, Ishaka
Tel: +256 (0) 701 975572
E-mail: akabanyoro@gmail.com
Website: <http://www.kiu.ac.ug>

Office of the Dean - School of Nursing Sciences

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

RE: MUHANGUZI CHRISTOPHER - DNS/E/6103/162/DU

The above mentioned is a student of Kampala International University – School of Nursing Sciences undertaking Diploma in Nursing Science and he is in his final academic year.

He is recommended to carry out his data collection as a partial fulfillment for the award of the Diploma in Nursing Science.

His topic is KNOWLEDGE, ATTITUDE AND PRACTICE OF NURSES IN THE MANAGEMENT OF DIARRHEA AMONG CHILDREN UNDER FIVE YEARS ON PAEDIATRIC WARD AT KAMPALA INTERNATIONAL UNIVERSITY TEACHING HOSPITAL.

Any assistance rendered to him will be highly appreciated.

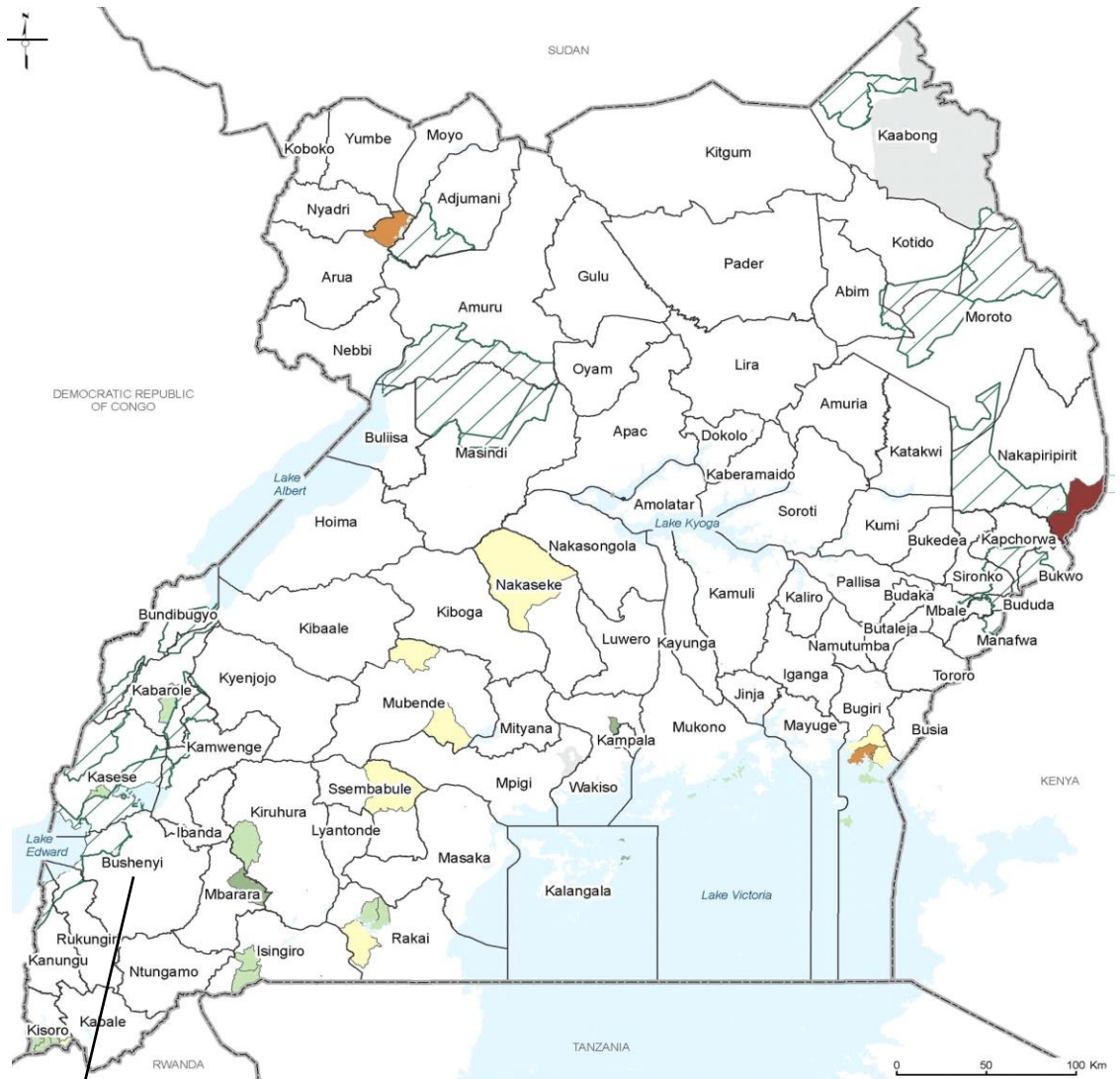
Thank you for the positive response.


Musimenta Pamela
RESEARCH COORDINATOR

Noted and allowed


“Exploring the Heights”

Appendix IV: Map of Uganda showing district of Bushenyi



POVERTY RATE
(percent of the population below the poverty line)

≤ 15	40 - 60
15 - 30	> 60
30 - 40	No data

Urban Subcounties or Rural Subcounties where safe drinking water coverage is over 20 percent

OTHER FEATURES

- District boundaries
- Subcounty boundaries
- Major National Parks and Wildlife Reserves (over 50,000 ha)
- Water bodies

Bushenyi District

Appendix V: Map of study district (Bushenyi) showing location of KIU - TH



Study Area
KIU – TEACHING HOSPITAL