

**FACTORS ASSOCIATED WITH PREVALENCE OF HOME  
ACCIDENTS IN CHILDREN UNDER 5 YEARS ATTENDING  
KAMPALA INTERNATIONAL UNIVERSITY TEACHING  
HOSPITAL**

**A RESEARCH REPORT SUBMITTED TO**

**UGANDA NURSES AND MIDWIVES EXAMINATIONS BOARD**

**IN PARTIAL FULFILMENT OF THE REQUIREMENTS**

**FOR THE AWARD OF THE DIPLOMA IN NURSING SCIENCES**

**BY NAMANDA ANNET**

**N16/U011/DNE/020**

**MAY,2018**

## **ABSTRACT**

Under-five children are at high risk for many accidents such as burn, fall, accidental poisoning and drowning, 65% injuries occur around home. Unfortunately, low- and middle- income countries in sub-Saharan Africa where Uganda is inclusive bear the biggest burden of child accidents and injuries

To assess factors associated with home accidents among under five years children attending Kampala international teaching hospital, a cross-sectional descriptive study was done to assess prevalence, parenting and environment factors contributing to these accidents.

81% of under five children had ever got an accident, 55.2% of accident having occurred at homes, mostly; these were falls, cuts and pierces, and mechanical hits at 37.9%, 25.8%, and 24.1% respectively. Most home Injuries (70.6%) occurred in presence of parents, while the responsibility of ensuring safety solely lied on children's parent.

Prevalence of home accidents was high, mostly reported being falls, mechanical hits, cuts and burns, knowledge on child friendly environment was very low, though parent practiced child protection out of insight rather than by knowledge of why and how.

To reduce home accidents in under fives, health education of community about child friendly environment, emphasis being put on ergonomics of play and leisure areas of children, as emphasizing on every stake holders' responsibility in ensuring child friendly environment children safety

**COPYRIGHT**

**Copyright © 2018 Namanda Annet**

**All rights Reserved.**

**AUTHORIZATION**

Unpublished research report submitted to Kampala International University school of Nursing and deposited in the library, is open for inspection, but is to be used with due regard to the rights of **Ms. Namanda Annet(the author)**. The author and Kampala international University school of Nursing can grant privilege of loan or purchase of a copy to accredited borrowers provided credit is given in subsequent written or published work.

**Author; Namanda Annet**

Kampala international university school of nursing and midwifery

Sign-----

Tel-----

**Supervisor:**

Sign-----

**Date** -----

Kampala international university school of nursing

**SR KABANYOORO ANNET**

**Date** -----

Sign-----

**Dean Kampala international university**

## **DEDICATION**

I dedicate my research Proposal to my dear parents Mr. and Mrs. Kakooza Mary and Mr. Kakooza John Mary my beloved husband and finally to all nursing staff of Kampala international university school of nursing and midwifery.

## **ACKNOWLEDGEMENT**

I thank the almighty God for the great love, care, knowledge and wisdom provided to me throughout my studies.

I sincerely appreciate all the support, guidance and encouragement provided to me by my supervisor Miss Musimenta Ester Also I extend my thanks to the principal tutor Sr. Kabanyoro Annet for approving my research topic. God bless you all.

Special thanks go to my friends particularly class mates; my Old Boys and Girls (OBs and OGs) for their continuous encouragement during my period of study and assistance in my Research.

I would like to also pass a vote of thanks to my tutors and staff of Kampala international University School of Nursing and Midwifery for their teaching and instruction both in class and ward.

May the almighty God shower you all with blessings and live in awe of him  
Amen!

## **LIST OF ABBREVIATIONS/ACRONYMS**

**KIU-TH:** Kampala International university teaching hospital

**UNICEF:** United Nations International Children Emergency Fund

**WHO:** World Health Organization

**UCG;** Uganda clinical guidelines.

## **OPERATIONAL DEFINITION OF TERMS**

<b>Accident:</b>	Anything that happens without prior knowledge of its happening and can negatively affect health of an individual or community.
<b>Child friendly environment:</b>	Implies a setting free from physical and psychological stressors thus making it suitable for work, play and leisure
<b>Children:</b>	Refers to all young human beings below 18 years that is considered adulthood age as far as legal authority in Uganda is concerned.
<b>Ergonomy:</b>	A process of ensuring safety from health hazards and physical harm within working/leisure environment.
<b>Home accident:</b>	Any accidents that occur within habitation setting.
<b>Prevalence:</b>	Refers to a proportion of under five years children that have ever got a home accident among all children population seeking health care in Kampala international university teaching hospital.  thus preventing child injuries and illnesses related to environment.



## TABLE OF CONTENTS

<b>ABSTRACT.....</b>	<b>I</b>
<b>COPYRIGHT.....</b>	<b>II</b>
<b>AUTHORIZATION.....</b>	<b>III</b>
<b>DEDICATION.....</b>	<b>IV</b>
<b>ACKNOWLEDGEMENT.....</b>	<b>V</b>
<b>LIST OF ABBREVIATIONS/ACRONYMS.....</b>	<b>VI</b>
<b>OPERATIONAL DEFINITION OF TERMS.....</b>	<b>VII</b>
<b>LIST OF TABLES.....</b>	<b>XI</b>
<b>LIST OF FIGURES.....</b>	<b>XI</b>
<b>CHAPTER I: INTRODUCTION.....</b>	<b>1</b>
1.0 INTRODUCTION.....	1
1.1 BACKGROUND OF THE STUDY.....	1
1.2 PROBLEM STATEMENT.....	2
1.3 STUDY OBJECTIVES.....	3
1.3.1 <i>Main objective</i> .....	3
1.3.2 <i>Specific objectives</i> .....	4
1.3.3 RESEARCH QUESTIONS.....	4
1.3.4 JUSTIFICATION OF THE STUDY.....	4
<b>CHAPTER TWO: LITERATURE REVIEW.....</b>	<b>6</b>
2.0 INTRODUCTION.....	6
2.1 PREVALENCE OF HOME BASED ACCIDENTS IN UNDER FIVE YEARS CHILDREN.....	6
2.2 PARENTING RELATED FACTORS ASSOCIATED WITH HOME ACCIDENTS AMONG UNDER FIVE YEARS CHILDREN.....	7
2.3 ENVIRONMENTAL FACTORS ASSOCIATED WITH CHILDHOOD INJURIES.....	8
<b>CHAPTER THREE: METHODOLOGY.....</b>	<b>11</b>

3.1 INTRODUCTION.....	11
3.2 RESEARCH DESIGN AND RATIONALE.....	11
3.3 STUDY SETTING AND RATIONALE.....	11
3.4 STUDY POPULATION AND RATIONALE.....	12
3.4.1 SAMPLE SIZE DETERMINATION.....	13
3.4.2 SAMPLING PROCEDURE.....	14
3.4.3 INCLUSION AND EXCLUSION CRITERIA.....	14
3.4.3.2 <i>Exclusion criteria</i> .....	15
3.5 DEFINITION OF VARIABLES.....	15
3.5.1 <i>Dependent variables</i> .....	15
3.5.2 <i>Independent variables</i> .....	15
3.7 DATA COLLECTION PROCEDURE.....	16
3.7.1 DATA MANAGEMENT.....	16
3.7.2 DATA ANALYSIS.....	17
3.8 ETHICAL CONSIDERATION.....	17
3.9 LIMITATIONS OF THE STUDY.....	18
3.10 DISSEMINATION OF RESULTS.....	18
<b>CHAPTER FOUR: DATA PRESENTATION.....</b>	<b>19</b>
4.0 INTRODUCTION.....	19
4.1 SOCIAL DEMOGRAPHIC CHARACTERISTICS OF THE STUDY POPULATION. N=130 .....	19
4.2: PREVALENCE OF HOME ACCIDENTS IN UNDER FIVE YEARS CHILDREN.....	20
4.3 PARENTING FACTORS ASSOCIATED WITH HOME ACCIDENTS IN UNDER FIVE YEARS CHILDREN.....	22
4.4 ENVIRONMENTAL FACTORS ASSOCIATED WITH HOME ACCIDENTS IN UNDER FIVE YEARS CHILDREN.....	24
<b>CHAPTER FIVE.....</b>	<b>27</b>
<b>DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS.....</b>	<b>27</b>
5.0 INTRODUCTION.....	27
5.1.2: PREVALENCE OF HOME ACCIDENTS IN UNDER FIVE YEARS CHILDREN.....	29

5.1.3 PARENTING FACTORS ASSOCIATED WITH HOME ACCIDENTS IN UNDER FIVE YEARS CHILDREN.....	31
5.1.4 ENVIRONMENTAL FACTORS ASSOCIATED WITH HOME ACCIDENTS IN UNDER FIVE YEARS CHILDREN.....	33
5.3: CONCLUSION FROM THE STUDY FINDINGS.....	34
5.4: RECOMMENDATIONS FROM THE STUDY FINDINGS.....	36
<b>REFERENCES.....</b>	<b>39</b>
APPENDIX I: CONSENT FORM FOR CHILD BEARING AGE MOTHERS...	42
APPENDIX II: STUDY PARTICIPANTS QUESTIONNAIRE.....	43
D: ENVIRONMENTAL FACTORS ASSOCIATED WITH HOME ACCIDENTS IN UNDER FIVE YEARS CHILDREN.....	47
APPENDIX III: AUTHORISATION LETTER.....	48
<b>APPENDIX IV: A MAP OF UGANDA SHOWING BUSHANYI WHERE KIU- TH THE STUDY AREA IS LOCATED.....</b>	<b>49</b>
APPENDIX V: MAP OF BUSHENYI SHOWING LOCATION OF KIU-TH....	50

## **LIST OF TABLES**

Table 1: table showing demographic characteristics of the children.....	19
Table 2: parents occupation, n=58.....	23
Table 3: other people that take care of children apart from parents n=58.....	24
Table 4: Measures used to ensure children safety, n=47.....	25

## **LIST OF FIGURES**

Figure 1: prevalence of accidents in under five years children. n=130.....	21
Figure 4: where was the parent/ caretaker during the time that the child got an accident, n=58.....	23
Figure 5: knowledge on child friendly environment, n=85.....	24
Figure 6: Parents and caretakers efforts to ensure children safety n=58.....	25

## **CHAPTER I: INTRODUCTION**

### **1.0 Introduction.**

This chapter deals with general background of the study, Problem statement, general objective and specific objectives of the study, research questions, and justification of the study.

### **1.1 Background of the study.**

Accident. Anything that happens without a person's awareness and can cause harm. Whereas home accident in under five years is anything that happens to children of such age bracket without their initial awareness, or their caretakers awareness and results into physical, psychological or physiological harm.

Childhood accidents and injuries is a global problem, especially in low and middle income countries. Deaths due to home accidents in under five years children were 3.4 times higher in such countries compared to their developed counterpart. In 2013 alone, 324,000 children from 0-59 months are estimated to have succumbed to home accidents and injuries worldwide ( Xiong L, 2017).

In some countries like china, Program for child development 2010-2020 targeted reducing home based accidents and injuries by one sixth of 2010 level, Sweden a well considers childhood injuries and accidents as a common public health problem that society as whole must control, and implement societal based approach in promotion of children safety. The program include development of surveillance of public information and education, environmental improvement,, and product safety development. It is well believed that injury survillarence is a pre-requisite in curbing home accidents.( Lancet T, 2015).

Children have a very limited ability to react quickly and properly in an emergency situation as well as they acquire little control over their environment, which increase the risk of accidents and death (Peeden M ,2009).

In New Zealand only, the rate of hospitalization of children aged 0-4 years from an injury sustained from home between 2000 -2010 was 737 per 100,000 populations per year. The most frequent cause of hospitalization being falls, scalds, poisoning and piercing/cuts. (Gulliver, 2015).

Unfortunately, most of countries in both developed and developing world lack a comprehensive national profiles on home injuries not only in children under five years , but also in general population, hence to develop effective targeted accident and injury prevention initiatives had remains at stall.( Kool B, 2011).

## **1.2 Problem statement.**

Globally about one million children die from preventable injuries and accidents every year (World Bank 2015). Under-five children are at high risk for many accidents such as burn, fall, accidental poisoning and drowning. Studies in four low-income countries found that 65% of childhood burns had occurred in and around home. WHO's report about childhood injuries stated that, injuries among under-five children increase with age between one to five years (Khasnabis, 2009).

Unfortunately, The World Report on Child Injury and accidents prevention concluded that low- and middle- income countries in sub-Saharan Africa and south Asia where Uganda inclusive bear the biggest burden of child accidents and injuries (Puspa *et al*, 2015) .

In sub-Saharan Africa, most countries lack published reports on prevalence and incidence of home accidents in under five years children. However a few with clear published reports like northern Sudan, a study done from its capital city Khartoum on home based accidents in under five and predisposing factors found prevalence at 10.3%. (Mohammed *et al* 2015)

In Uganda, there is no clear published report on home based accidents among under five years children, however, unpublished report from Kampala International University Teaching Hospital (KIU-TH) on all accident reported between march 2016-june 2016, 46% reported were home accidents that constituted of burns, electric shocks, falls, piercing and stubbing, accidental poisoning, animal and insect bites among others. Unfortunately, 68% of all home based accidents reported were in children under five years.(KIU-TH records department 2016) with serious repercussions from these like deaths, deformities being more common in under five years, their associated factors need to be investigated in order to establish an evidence based prevention strategy to keep these children safe.

### **1.3 STUDY OBJECTIVES.**

#### **1.3.1 Main objective.**

The objective of the study was to assess factors associated with home accidents among children 0-5 years attending Kampala international university teaching hospital. (KIU-TH)

### **1.3.2 Specific objectives.**

- i. To assess prevalence of home based accidents among children under five years attending KIU-TH.
- ii. To ascertain parenting factors associated with home accidents among children attending KIU-TH.
- iii. To determine environmental factors associated with home accidents among children under five years.

### **1.3.3 Research questions.**

- i. What is the prevalence of home based accidents among children under five years attending KIU-TH?
- ii. What are some of parenting factors that are associated with home accidents among children under five years?
- iii. What are some of environmental factors associated with home accidents in children under five yea

### **1.3.4 Justification of the study.**

Injury risks are different around the world, but all children whether rich or poor, living in urban or rural area, industrialized or in rural poverty have a right to grow up, in good health and safe environment.

With increasing need to create awareness and capacity building in current society to embrace disease and disability prevention, problem focused innovations and interventions to eradicate such health hazards are employed. This needs adequate knowledge on source of problem, most risk factors to accidents, most vulnerable



age group in order to prevent these accidents effectively. Hence a study to establish factors associated with home accidents in under five years children attending KIU-TH will be of great importance to curb down injuries, deaths and disabilities caused by home accidents if utilized by following sectors in nursing.

**Nursing practice.** Findings from this research study will help to generate knowledge on assessment for ergonomic safety in homes and other inhabited facilities where children can be found.

**Nursing education.** The research study will generate evidence based strategies that can be educated to scholars and members of community regarding accident prevention among under five years children, thereby reducing child mortality rate as result of eradicating accident related deaths.

**Nursing research.** The research findings will help site out areas for research regarding home based accidents, their common associated factors and possible methods of prevention in order to reduce injury, deaths and disability created by these accidents.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.0 Introduction.**

This chapter deals with review of literature relevant to home based accidents and their associated factors in children under five years. The literature is arranged basing on objectives as outlined in chapter I above that is; prevalence and incidence of accidents in under five years children, parenting factors associated with home accidents in under five years children, and environmental factors associated with home accidents.

### **2.1 Prevalence of home based accidents in under five years children.**

Descriptive analysis conducted to find out the percentages and frequencies of demographic characteristics of mothers to children that had got home accidents in Khartoum, The age of mothers under study ranged between 19 years and 46 years with mean age  $31\pm 6$  years. Most of the mothers are not workers. They are mainly primary or secondary level education. Home accidents occur among both sexes, within ages between 1-4 years (mainly three years). The most frequently risk factor of under-five home accidents was the area of fall in the home and mainly happened in the rooms. (Mohammed et al 2015).

In a study on epidemiology of deaths resulting from home accidents in New Zealand found out that of 4000 children admitted with home accident, 60 die as result of sustained injuries and dangers from home accidents. The leading cause of deaths among home accidents reported in health facilities being poisoning, falls

and burns, while male children reporting higher incidences of hospital admissions compared to their female counterparts. (Kool B, 2011).

A case incidence report from university of Benin teaching hospital accident and emergency department, children 0-5 years formed 13% of all cases reported in the department. The most common accident cases in children under five reported were burns 16%, poisoning 11%, while dyspnoea formed the main emergency that presented at the department among all other pediatric emergencies ( Xakhary *et al* 2010).

There is no single intervention that can get rid of childhood accidents due to variety of risks ranging from children poor cognitive function that often lead them into suicidal motions, however; a responsible parent, teacher, or child attendant is ought to know where the child under his/ her care troads most and set a safe atmosphere( Rsakul Catherine Mkhalid, 2013).

## **2.2 Parenting related factors associated with home accidents among under five years children.**

To assess the parents work conditions in relation to safety of the children under their care, casual laborers parenting children under age of five were found frequently having cases of home injuries and among the under five years children compared to those that do office or public service work( Hhellen K, 2012).

According to Salmo *et al*, children raised from social family i.e. in orphanages, day care centers and children homes were more likely to experience childhood

injuries compared to their counter parts raised in direct contact by their parents. ( Salmo *et al*, 2013).

In a study to assess role played by family in upbringing and safeguarding children in extended families of west Africa, it was found out that majority of extended family communities believed that Children are not their parents assets only, but also the family and the clans asset. Hence every family member is responsible for contributing to children care and child safety by providing necessary support and provision in order to facilitate children growth, safety (Kanale symptom ,2011).

A study by Kaleedne mitthinah, ( 2009) to determine role played by parents presence in ensuring their children safety found out that 74% of injuries and home based accidents that had occurred in Canada from 2000-2007 occurred in absence of children's parents at the scene of accidents, and more that 50% of mothers that brought their children in hospital for health care after sustaining an accident did not fully know the details of what had happened to their children(Kaleedne mithinah,2009).

### **2.3 Environmental factors associated with childhood injuries.**

Chemical pollution of the environment and other forms of pollutants has since time immemorial been known for causing hazards to human life and other living creatures. However in young children, these have often had a direct impact to harm of their lives. In study to assess prevalence of home poisoning among inhabitants of Nepal province in southern India, children under age of five formed largest percentage (63%) of all home poisoning cases with organic and inorganic chemicals domestically. The incidences were more common in rural than urban

setting, and also more common in low social economic status population than high social class ( Alkhalifd *et al*, 2011).

Whereas play is an important necessity in a child's development, falls, fractures and wound have been sustained while children are in active exercise with each other, with toys and other playing objects. Hence safety measures like helmet wearing, safety belts and safety bags could highly contribute in reducing injuries and deaths causes by falls, collisions and drowning while children are playing. (Malgardhi *et al* ,2014).

Ergonomy is important in ensuring friendly working conditions in all kind of production at all stages of development, however in children who are less conscious of their safety and health during pray and living need much more friendly environment compared to adults, hence necessary to keep their environment free from harmful substance and instruments like sharps, corrosive smoke, chemicals, electricity run objects among others (UNICEF 2014).

Ministry of health outlined general possible ways of reducing some of common home accidents like burns. Public awareness of burn risks and first aid water use in cooling burnt skin, Construction of raised cooking fire places as safety measure, *to prevent burns*, ensure safe handling of hot water and food, keep well out of the reach of children, Particular care of high risk persons near fires e.g. children, epileptic patients, alcohol or drug abusers. Encourage people to use closed flames e.g. hurricane lamps. Avoid candles, Be aware of possible cases of child abuse. *To prevent poisoning*, store chemicals like drugs, pesticides and rodenticides away from reach of children (UCG, 2016).

A study in Hunan province in china that aimed at describing the epidemiology of childhood injuries and accidents, trends of injury related deaths of children under age five employed Cochran armitage trend found out that ; injury was a leading cause in under five years children, ranging to 4896 per 100,000 children. Injury mortality as more common in rural setting than in urban setting. The three leading causes of home accidents being drowning (43.63%), suffocation (27.57% and traffic accidents (14.3%) (Xiong Lili *et al* ,2017).

## **CHAPTER THREE: METHODOLOGY**

### **3.1 Introduction**

This chapter details the methodology that was used in the research study. It detailed the research design, study population, sample size determination, sampling procedure, the Inclusion criteria, and definitions of variables, research instruments, data collection methods, ethical considerations and limitations of the study.

### **3.2 Research design and Rationale**

The study employed a cross sectional descriptive study to assess factors associated with home accidents among under five years children attending KIU-TH thus saving time. Collection of data was quantitative in nature to establish opinions of the respondents about the study problem that was under investigation in health facilities.

### **3.3 Study setting and rationale**

This study was carried out at Kampala International University Teaching Hospital in Ishaka- Bushenyi municipality. It is a major private medical hospital in south western Uganda that started in 2006. It has a capacity of 500 beds and provides medical services for people as well as training medical and nursing students. The hospital has different wards and departments such as general outpatient department receiving between 150-300 patients per day, of which about 35% of clients received daily are under five years children. The facility has different units as in specialty of service provision, and these include; Surgical, Medical,

Pediatrics, and obstetrics and gynecology wards among others. Although KIU-TH is a private hospital whose services offered to community are paid for services, since 2015 KIU-TH in its pursuit for one of missions, that is; to improve on well being of community surrounding it, introduced free services of health care for children under five years which resulted into large influx of under five years children to this facility for health care, seeking services for all types of illnesses from minor that require simple interventions to major health problems in children under five that requires major approaches. Hence considering these numbers make KIU-TH a most suitable area for a study about childhood health and ill health including home accidents due to these numbers received.

### **3.4 Study population and rationale**

The study population included under five years children were attending the hospital for health services as were selected by sampling procedure from all departments where they could be found. However, since the study population was composed of under five years children could neither consent on their own nor give proper information since some of them had not even developed proper communication, those that were selected were only children that were with their parents or caretakers so that they assented and responded on their behalf. Under five years children were selected due to their age since it is considered defenseless hence vulnerable, lacking insight to some of hazardous areas and objectives hence being at a higher risk for accidents and injuries than adults.



### 3.4.1 Sample size determination

The sample size was determined using Fisher's formula 1995,

$$n = \frac{z^2(pq)}{d^2}$$

Where n= sample size

z= standard deviation at confidence level of 95% which is 1.96

p= proportion of population with the desired characteristics

q= proportion of population without desired characteristics q=1-p

d= level of significance or measure of anticipated error taken as 0.05

Therefore, for this study:

n=desired sample size of adolescents between 12-19 years

z= standard deviation at confidence level of 95% = 1.96

p= proportion of the population were children under five years estimated at 50%=

0.5

q= 1-p i.e. 1-0.5=0.5

d= level of anticipated error of 5%= 0.05

Substituting the values into the formula

$$n = \frac{z^2(pq)}{d^2}$$

$$n = \frac{1.96^2(0.5 \times 0.5)}{(0.05)^2}$$

$$(0.05)^2$$

$$n = 384$$

Therefore 384 children were to be used as a sample for the study population.

However due to time and resources scarcity, I only used a sample of 130 children who were with a responsible person that is; a parent or caretaker as a representative sample for the study population.

### **3.4.2 Sampling procedure**

This is a process of selecting a number of individuals for a study in such a way that the individuals represent the larger group from which they are selected. A sample is a smaller collection of units from a population used to determine truths about that population (Field, 2005). Convenient random sampling was used in this study whereby all children with mothers and care takers that were encountered in KIU-TH Accident and emergency, pediatrics OPD and young children clinic were asked for ascent from their responsible caretakers who also gave the information about children as a sample representing the study population. This method was easy, time saving, economical though it could be slightly biased as all members of study population seeking health care in KIU-TH may not have had equal chances of being selected as a sample to represent the study population since it is clear that not all members using the facility were gathered co-incidentally during the time of the research study.

### **3.4.3 Inclusion and exclusion criteria**

#### **3.4.3.1 Inclusion criteria**

- i) The study included only participants less than five years.

ii) Parents and caretakers will be a mandatory prerequisite to give ascent and later information regarding accident history of the child under their care.

#### **3.4.3.2 Exclusion criteria**

i) Those who will not be in the age bracket under study, that is children 5 years and above.

ii) Those that were not with some one that can give consent to participate in the study on their behalf and give the information on behalf of them.

iii) Children whose parent or any other caretaker were not in sound mind were not considered since children being young could not consent, and the insane parent and caretaker could not also, in addition that they could not give the right information regarding the problem under study.

### **3.5 Definition of variables**

#### **3.5.1 Dependent variables**

Prevalence of home accidents among under five years children

#### **3.5.2 Independent variables**

These included all factors deemed capable of directly or indirectly determine occurrence of home accidents in under five years children they included parenting and environmental conditions under which children were being raised in.

### **3.6 Research instruments**

A closed-ended questionnaire was designed as a tool for data collection. A questionnaire was the main instrument used in the study and was researcher-

administered to create clarity while participants were answering and avoiding any incompleteness and irrelevances on answers given by any particular participant in the study. The questions were prepared in a logical sequence in order to address the research objectives.

### **3.7 Data collection procedure**

A pre-test was carried out in Bushenyi health centre IV that was not chosen for the study. This facilitated clear testing on the reliability and validity of the research instrument in relation to the appropriateness of the questions.

Then after confirming the validity of questionnaire, convenient sampling was employed in KIU hospital, targeting departments that deal with children in order to capture the target population. Pediatric OPD, Young child clinic and pediatric ward. Questionnaires were administered to respondents by the researcher in order to give clarity and ease language interpretation while collecting data from the respondents on behalf of children. The collected data was checked by the supervisor for any incompleteness and/or inconsistency. This helped to make clear adjustments where it was necessary before the primary data collection. Every participant's respondent in the study consented and each was interpreted a questionnaire while they answered. Privacy and confidentiality was maintained throughout the process of data collection.

#### **3.7.1 Data management**

**Editing:** This involved checking the questionnaire for completeness and improperly filled questionnaires were sorted immediately by seeking clarity from

the participant's respondent. Complete filled questionnaires were kept in the cupboard for safety and confidentiality and were later analyzed.

**Coding:** All questions in the questionnaire were coded for easy analysis and helped in reducing data into manageable proportions.

### **3.7.2 Data analysis**

The data collected was checked for completeness. The data was subjected to various steps including; editing in order to identify missing gaps, spelling mistakes, incomplete answers and to eliminate unwanted data; classification of data with common characteristics and coding for easy analysis. Data was exported to SPSS windows version 16.0 for analysis and Microsoft excel program and was presented in form of graphs, tables and pie-charts for easy interpretation.

### **3.8 Ethical consideration**

Permission was obtained from Kampala International University School of Nursing Sciences and administrative authorities from the area of study (KIU-TH). Prior to administering the questionnaires, the objectives of the study were clearly explained to the participants' parents and oral informed consent was sought from the respondents on behalf of participants. Participants' parents/ caretakers were informed about the procedure and the voluntary nature of participation in the study. Confidentiality and anonymity was ensured throughout the execution of the study and informed that no adverse consequences would arise if they refuse to participate and that data collected remained private and was used for research study purpose. This helped to eliminate bias and doubts about the aim of the study.

### **3.9 Limitations of the study**

The study incurred a lot of costs especially on printing, photocopying, and transport. This however was counteracted by soliciting for funds from friends and family relatives to finance the research study.

Some children selected under the study had not been with the specific caretaker throughout their life, different switches had been made exchanging parenting/caretaking responsibility hence some of parents/caretakers could not give full accident history regarding children under their care.

### **3.10 Dissemination of Results**

Four copies of the study findings were produced and given as follows;

- i) The Uganda Nurses and Midwives Examination Board as a requirement for award of a diploma in nursing sciences.
- ii) Kampala International University School of Nursing- western campus library for other scholars' reference.
- iii) To Kampala international university teaching hospital for developing evidence based health education on preventing home accidents.
- iv) My own copy for future reference and publishing if conditions socially and economically allows.

## CHAPTER FOUR: DATA PRESENTATION

### 4.0 Introduction.

In this chapter, the results of “**factors associated with home accidents in under five years children attending Kampala international hospital**” are presented in form of tables, graphs and charts followed by a brief description. A total of 137 mothers and care takers of children under five years were interviewed in period from 4<sup>th</sup> to 11<sup>th</sup> February 2018, a total of 130 mothers and care takers returned a fully answered questionnaire with the following data that has been represented in figures and tables below forming the information of the study. Data has been presented following the order of outlined study objectives in chapter (i) and also in order of questionnaire as in appendix (ii)

### 4.1 Social demographic characteristics of the study population. n=130

**Table 1: table showing demographic characteristics of the children**

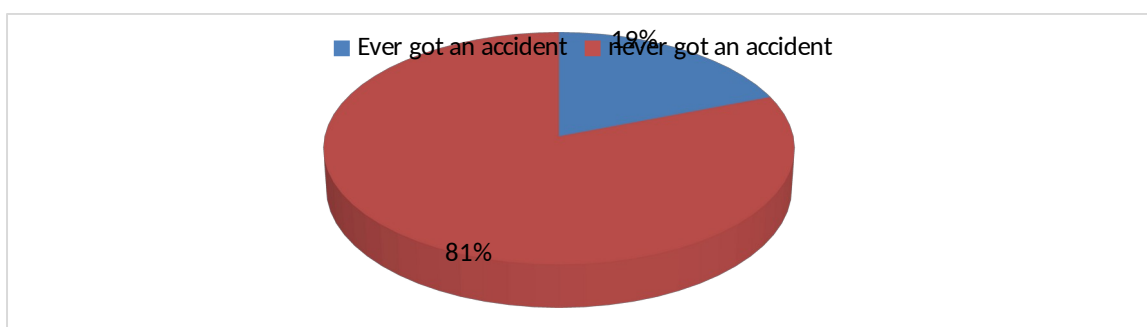
Characteristic		frequency	$\Sigma f$	%
<b>Sex</b>	Male	53	53	40.7
	Female	77	130	59.3
<b>Age</b>	00-12 months	45	45	34.6
	13-24 months	39	84	30
	25-36 months	24	108	18.4
	37-48 months	22	130	16.9
<b>Hobbies</b>	Swimming	2	2	1.5
	Football	19	21	14.6
	Dodge jump	13	34	10
	Hide and seek	17	51	13.1
	Domestic cores	3	54	2.3
	High jump	6	60	4.6
	Others	13	73	10
	None of the above	67	130	51.5

Majority (59.3%) of children were females, 0-12 months old children formed majority (34.6%) of the study population while 37-48 formed the least with (16.9%). Majority of parents did not know the their children hobbies, while among those that were known, majority of children hobbies were football(14.6%) and hide and seek(13.1%)

#### 4.2: Prevalence of home accidents in under five years children

To determine the prevalence of home accidents among under five years children, their parents and caretakers were asked to state whether their children have ever had any form of accident, those whose children had ever had accident were further inquired to state a place where the accident occurred.

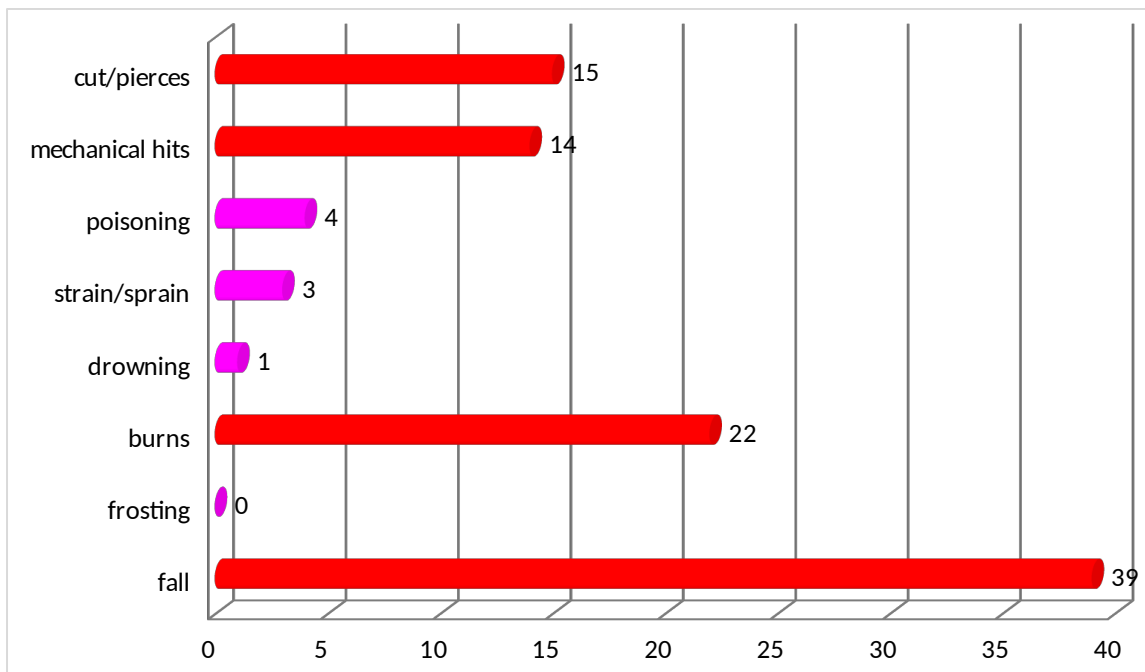
**Figure 1: prevalence of accidents in under five years children. n=130**



Majority (81%) of children had ever got a form of an accident while only 19% had never had an accident.

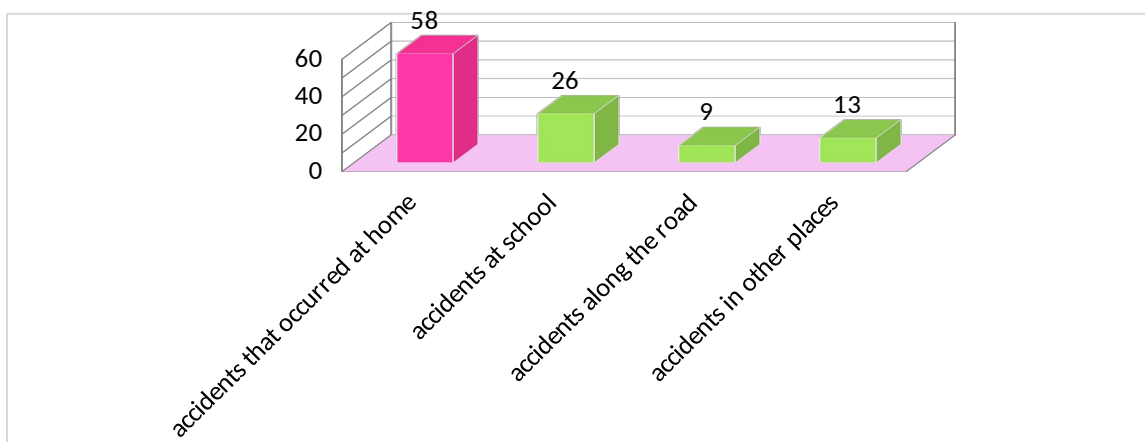


**Figure 2: Prevalence of different forms of accidents in under five years children n=105**



Falls , burns and cuts/pierces formed largest percentages of home accidents 67.2%, 37.9% and 25.8% respectively, while drowning ,frosting and strain were less common in study population with 1.7,0,5.1 percentages respectively.

**Figure 3: place of an accident n=105**

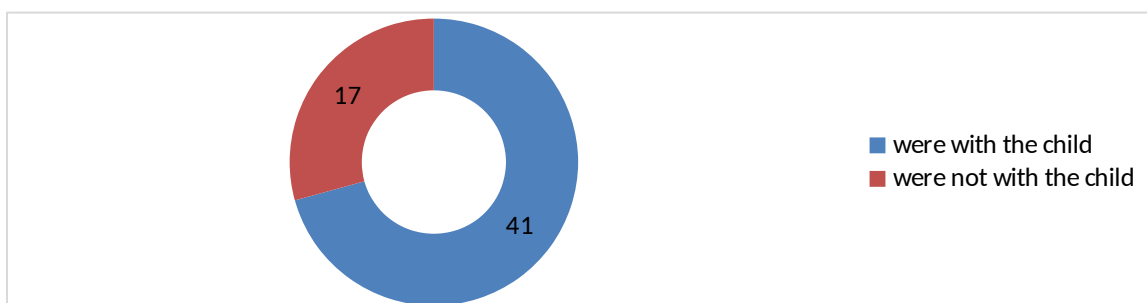


Majority (55.2%, n=58) of under five years children that had ever got an accident had occurred in home setting, followed by those in schools by 27.4% while accidents along the roads were least by (8.6%) mentioned among under five years children.

#### **4.3 Parenting factors associated with home accidents in under five years children.**

To determine whether the parent being with child or away from the child contribute to prevalence in home accidents, parents and caretakers were required to tell whether they were with their children or away from them when they got a home accident, the following were the findings.

**Figure 2: where was the parent/ caretaker during the time that the child got an accident, n=58**



Majority of the parents and caretakers (70.6%) were with their children at the time of accident, while a few (29.3%) were not with children at the time accident occurred.

**Table 2: parents occupation, n=58**

<b>Occupation</b>	<b>Frequenc y</b>	<b>Cumulative frequency</b>	<b>Percentage (%)</b>
Peasants	47	47	81.0%
Civil servants	3	50	5.1%
Business woman	8	58	13.7%

Majority(81.9%) of home accidents victims parents' were peasant farmers, while the least (5.1%) were civil servants.

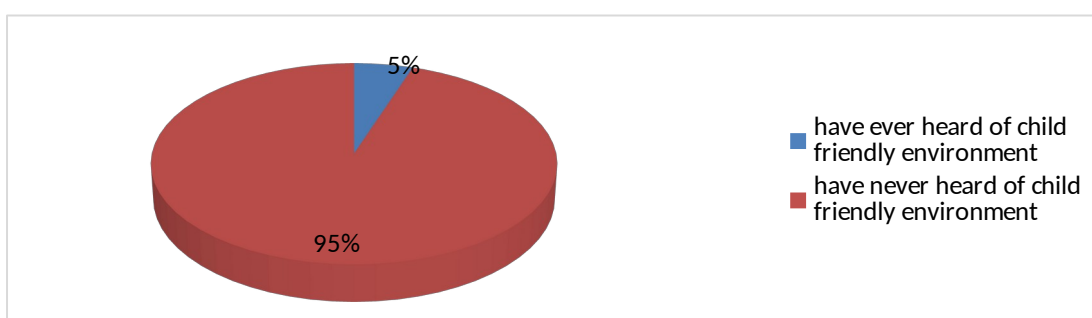
**Table 3: other people that take care of children apart from parents n=58**

<b>Other care persons</b>	<b>frequency</b>	<b>Percentage (%)</b>
<b>Aunts/ uncles</b>	<b>7</b>	<b>12.0</b>
<b>His Siblings</b>	<b>9</b>	<b>15.5</b>
<b>Teachers</b>	<b>8</b>	<b>13.7</b>
<b>Baby Seeters</b>	<b>3</b>	<b>5.1</b>
<b>Grand parents</b>	<b>10</b>	<b>17.2</b>
<b>others</b>	<b>2</b>	<b>3.4</b>
<b>None</b>	<b>23</b>	<b>39.6</b>

Majority(39.6%) of children have no other persons responsible for their care and safety except the parent and the caretaker in charge, these are followed by children taken care of by siblings(15.5%) where as baby seeters being least among other populations that takes care of children under five years.

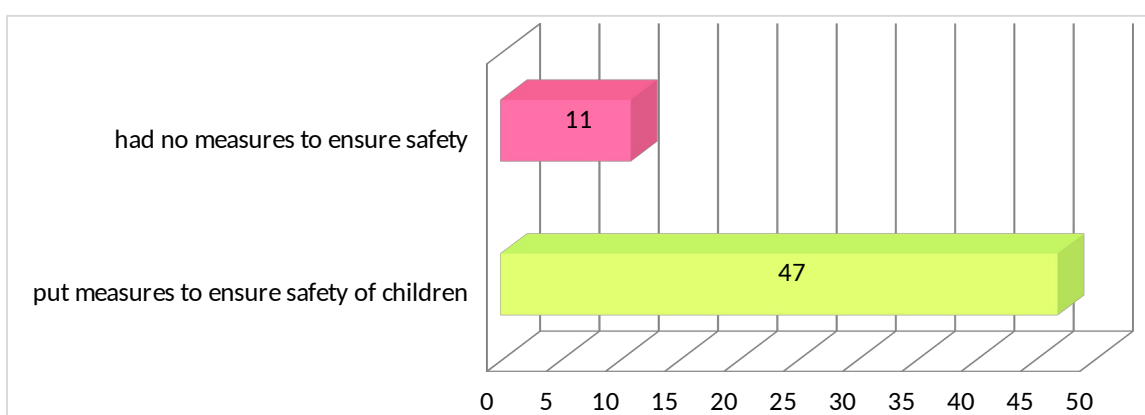
#### 4.4 Environmental factors associated with home accidents in under five years children.

**Figure 3: knowledge on child friendly environment, n=85**



Majority of parents and caretakers (95%) had never heard about child friendly environment, while a few (5%) had ever heard about it.

**Figure 4: Parents and caretakers efforts to ensure children safety n=58**



Majority of mothers and caretakers (81%) tried some measures to ensure children safety while only (18.9%) did not put safety measures for their children.

**Table 4: Measures used to ensure children safety, n=47**

<b>Measure for child safety</b>	<b>frequency</b>	<b>Percentage</b>
Rails on high heights	4	8.4
Keeping all sharps from reach of children	15	31.9
preventing the child to play from areas where other activities are taking place	16	34.0
Keeping chemicals organic and inorganic from reach of children	23	48.9
Ensuring that only adults take care of the children	2	4.2
Removed all scaring objects from child's playing compound	1	2.1
Properly covering potholes	2	4.2
Setting electric gargets and wires from reach of children	6	12.7
Keeping children away from cooking and food storage places	6	12.7
Daily inspecting mechanical conditions of a child's playing objects	1	2.1
Caution Instruction of older children regarding unsafe play and places	18	38.2
Others	8	17

Majority of parents (48.9%) keep chemicals away from children playing environment, whereas (34%) of parents ensure that children do not play from where other activities are taking place. However, monitoring mechanical conditions of playing objects, covering potholes in playing environment, ensuring that only adults take care of children and railing high heights are not practiced as only 2.1%, 4.2%, 4.2% and 8.4% practice these respectively.

## **CHAPTER FIVE**

### **DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS**

#### **5.0 Introduction**

The chapter presents a discussion, conclusions and recommendations of the study findings. The discussions were arranged in themes for easy follow up and how the issues were being noted and presented in the chapter 4 above and are compared with findings from other study findings in literature review from chapter two.

#### **5.1 Discussion of study findings.**

##### **5.1.1 Description of sample size**

Majority (59.3%) of children were females, the sex of children under study was not a key determinant in findings from the study, sex having no clear significance on occurrence of a home accident is contrary to Mohammed *et al`*(2015). finding in a study carried out to determine prevalence of home accidents among children under five in Khartoum in north Sudan that found out home accidents being

prevalent in both males and female children equally. The study finding was also contrary to Kool, (2011). finding in a study on prevalence and death related to home accidents in under five that found out that male children suffered home accidents and succumbed to them compared to their female counterparts.

0-12 month old children formed majority (34.6%) of the study population while 37-48months old children formed the least with (16.9%). This could be possibly because, childhood illnesses and child health care is much more vigorous in the first year of life that include growths monitoring, immunization and other health care services to these children hence making them dominate children population that was encountered within the hospital hence dominating in the study sample.

Majority of parents and caretakers (51.5%) did not know their children hobbies; this could be due to the fact that the study population which was dominated by neonates and infants who are in most cases not involved in active play. However apart from the young age of dominant study population, it could also be due to Africa mode of parenting where play and children leisure are not taken as vital areas to the upbringing of children hence parents do not give enough time to attend games with their children hence do not observe how they play to determine kinds of play what their children enjoy most. In order for children to enjoy play with assurance of safety, would need parental support in form of supplies and ensuring safe and child friendly environment contrary to Rsakul Catherine Mkhaliid, (2013).who in a guide to children safety included that a responsible parent, teacher, or child attendant is ought to know where the child under his/ her care troads most and set a safe atmosphere.

Among those whose hobbies were known, majority of children hobbies were active kind of play. That is; football (14.6%) and hide and seek (13.1%). These being physical games that require active involvement of body, are potentially risky for these children to sustain accidents in form of knocks, hits and collisions, falls among others hence require clear ergonomy to ensure safety of children thereby preventing home accidents.

### **5.1.2: Prevalence of home accidents in under five years children**

When parents and caretakers were required to state whether their children have ever been victims of home accidents, majority( 81%) of children had ever got a form of an accident while only 19% had never had an accident. This could be due to curious behavior of children under five as they like to explore, play, and prove their abilities and strengths. These added onto their poor instinct regarding safety and some dangerous movements and behaviors which expose them to being victims of home accidents and injuries because of poor ergonomy in play areas, poor mechanical conditions of playing objects, and laxed mode of parenting that leave these innocent children explore their world on their own with less safety valves. The finding is alarming compared to the rate in developed countries like Sweden and New Zealand where the rate of hospitalization of children aged 0-4 years from an injury sustained from home between 2000 -2010 was 737 per 100,000(0.8% of all children) populations per year. The most frequent cause of hospitalization being falls, scalds, poisoning and piercing/cuts (Gulliver 2015).



Majority (55.2%) of under five years children that had ever got an accident had occurred in home setting, followed by those in schools by 27.4% while accidents along the roads were least by (8.6%) mentioned among under five years children similarly to Mohammed *et al*, (2015) .who in his study to assess prevalence of accidents in under five in Khartoum found out that fall was most common and occurred in the home and mainly happened in the rooms. This could be possibly because this being preschool age, these spend most of their time at home, do most of their activities including play and leisure from home, and in case they have moved out of home, they are usually in a company of a parent, caretaker or any other adult whose responsibility is but not limited to ensuring their safety. Hence in case of any form of uncertainties, they are most likely to occur from home where least protective measures on these children are employed.

Falls, burns and cuts/pierces formed largest percentages of home accidents 67.2%, 37.9% and 25.8% respectively, while drowning, frosting and strain were not common in study population. This could be because of children involving in active forms of play which require more physicals than passive plays hence children being more exposed to fall during high speed runs, poor terrain of playing grounds. Burns, cuts and pierces being common could also be due to poor restriction of play areas that does not properly see all children refrained from playing near fire and other hot objects and fluids like kitchen and food storage areas. This could also be due to limited manpower in child upbringing which makes most mothers risk taking their children along with them in kitchen and food

stores as they carry on other family cores that sees their children mostly become victims of accidents that occurs in such areas. The result is contrary to findings of Xakhary *et al*(2010) in his study on prevalence of home accidents among under five years children that reported on accident and emergency at university of Benin teaching hospital where the most common accident cases in children under five reported were burns 16%, poisoning 11% ( Xakhary *et al*,( 2010) . The study findings are also contrary to Xiong Lili *et al's*, (2017). finding in china where the three leading home accidents were drowning (43.63%), suffocation (27.57% and traffic accidents (14.3%)

### **5.1.3 Parenting factors associated with home accidents in under five years children.**

Majority (70.6%) of parents and caretakers were not with their children at the time of accident. This could be because of duties that most rural parents have to attend to in order to earn a living require much time at work, preschool children spend most of their time at home. Being with no one to guide them in play and stopping them from dangerous kinds of play end up being victims of home accidents in absence of their parents. This finding is in line to Kaleedne mithinah, (2009)'s findings from a study to determine role played by parents presence in ensuring their children safety found out that 74% of injuries and home based accidents that had occurred in Canada from 2000-2007 occurred in absence of children's parents at the scene of accidents, and more that 50% of mothers that brought their children in hospital for health care after sustaining an accident did not fully know the details of what had happened to their children

Majority (81.0%) of parents and caretakers are peasants followed by businessmen (13.7%) and then civil servants (5.1%), an implication that these take long time at work, and are essentially unable to hire children caretakers to ensure their childrens' safety. Hence they move with children in their working areas or leave their children under self care while they are at work all that puts their children at greater risk of accidents. This finding is similarly to Xiong's,(2017). findings who concluded that Childhood accidents and injuries are global problem, especially in low and middle income countries. Deaths due to home accidents in under five years children were 3.4 times higher in such countries compared to their developed counterpart where in 2013 alone, 324,000 children from 0-59 months are estimated to have succumbed to home accidents and injuries worldwide This is true in relation to Hhellen, (2012).whose findings on research about parents work condition versus childhood accidents of children under their care concluded that casual laborers parenting children under age of five were found frequently having cases of home injuries and among the under five years children compared to those that do office or public service work( Hhellen, K 2012).

Majority (39.6%) of children have no other persons responsible for their care and safety except the parent and the caretaker in charge. This implies that in case of their parents or responsible caretakers absentia, they are not safeguarded by anyone, and if this is to be avoided, parents/caretakers have to go with them even in areas like work places, cooking places where their safety is put under great compromise due to various accidental uncertainties that occur in such places similarly to finding by Peeden, (2009). that Children have a very limited ability to

react quickly and properly in an emergency situation as well as they acquire little control over their environment, which increase the risk of accidents and death.

These are followed by children taken care of by siblings (15.5%) where as babysitters being least among other populations that takes care of children under five years. Children have less knowledge and strengths to protect their fellows, they too being playful and curious will mostly at times leave these under fives uncared for hence exposing them to accidents. Children being weak also expose them to falls while they carry their siblings by shoulders or backs in case they cannot adequately bear much weight

#### **5.1.4 Environmental factors associated with home accidents in under five years children.**

Majority of parents and caretakers (95%) had never heard about child friendly environment, while a few (5%) had ever heard about it an implication that they never knew well what to do in order to ensure a friendly and safe environment for their children hence leaving them exposed to environment related injuries and accidents.

Since there is a scarce information among parents and caretakers on child friendly environment that can reduce home accidents, improving on public sensitization and through health education could greatly reduce home accidents similarly to an implementation that was done in china as reported by Lancet *et al* (2015) where a program that included development of surveillance of public information and education, environmental improvement,, and product safety development was

employed to reduce home accidents in under five through injury surveillance was a pre-requisite in curbing home accidents.( Lancet T, 2015).

Majority of mothers and caretakers (81%) employed some measures to ensure children safety while only (18.9%) did not put children safety measures. Despite the fact that child friendly environment wasn't yet even news among most of the parents and caretakers of under five years children, still they employed measures of child safety which could be from instinct from previous traumatic experiences observed or heard underwent by children under their care that could have stimulated them to carry out protection measures to children that were under their care at time of research study, an indicator that home accidents is not just a study topic but a community and family problem on the ground that parents have been suffering.

Majority of parents (48.9%) keep chemicals away from children playing environment, whereas (34%) of parents ensure that children do not play from where other activities are taking place. However, monitoring mechanical conditions of playing objects, covering potholes in playing environment, ensuring that only adults take care of children and railing high heights are not practiced as only 2.1%, 4.2%, 4.2% and 8.4% practice these respectively. Doing the former can potentially reduce home accidents in under five years children similarly to UCG 2016 care and

### **5.3: Conclusion from the Study findings.**

Male and female children equally participated in the study, majority children being aged between 0-12 months. However, the dominant age group in study

population did not guarantee dominant age for home accident. Home accidents occurred equally in both sexes equally.

Parents and caretakers did not know their children's hobbies, and therefore did less in ensuring safe environments and children safety during children playing time due to lack of clue on where and what kind of play their children were likely to do. Those whose hobbies were known to their parents and caretakers enjoyed mostly active form of play including football, hide and seek, and dodge ball which are mostly associated with accidents due to their high physicality and energy requirement.

Majority of children under five have ever got an accident, majority of accidents in under five years children occurred within homes followed by within schools. Falls and burns were the most prevalent forms of home accidents in under five years, while frosting, drowning and others were rare.

Most accidents in under five occurred in absentia of their parents/ caretakers. The absentia were justified by the low social class of peasant parents being the majority, with long working hours and tedious daily schedules where they earn less hence they could not afford even hiring children caretakers to ensure safety. Apart from parents, siblings of under five children were the other leading participants in children care of those children that had ever got a home accident. While the siblings are weak to carry and protect their fellows from accidents, they also have less insight on most risky areas for accidents in under five. Hence instead of protection, they expose them to home accidents.

Little was known about child friendly environment, though natural instinct triggered parents and caretakers to carry out some child protection measures. Measures employed to ensure children safety included keeping chemicals and medicines away from children, and ensuring children do not play from where other activities are being carried out. However, parents did not inspect mechanical conditions of children playing toys, did not cover potholes and side rail high heights, and they did not ensure that adults take care of the young rather than their siblings who may also be vulnerable and inadequate in providing child protection and child safety.

#### **5.4: recommendations from the study findings.**

##### **To Bushenyi district health department.**

I recommend that capacity building in injury and accident prevention be intensified at all levels ranging from health facilities, community extension workers and at family levels in order to create adequate awareness on dangers of childhood accidents and injuries, as well as awareness on child friendly environment so as to curb down childhood injuries.

##### **To KIU-TH hospital**

Recommend that a clear and evidence based health education topics on childhood injury and under five years injury prevention be emphasized in all departments that involve child health care in order to create awareness among mothers and caretakers so as to impact the community with knowledge and skills that can help in order to create children safety and child safe environment.

##### **To parents, teachers and caretakers**

I recommend that all parents and caretakers ensure their children safety by creating a clear ergonomic setting within play areas of children, all parents and caretakers get involved in their children play in order to ensure safety.

I also recommend that parents involve other adult family members in caring for the children, providing them with safe environment, and ensuring safety during play so that their children safety and health is assured.

I recommend that parents and caretakers refrain from habits of leaving the care and safety of under fives to the fellow minors who are themselves physically weak, liaises fair, and curious about anything hence end up exposing under fives to dangers and accidents than ensuring safety.

I recommend those parents that do not give time to observing and protecting their children during play to do so as it will help them in discovering what their children likes as far as play is concerned there by creating an easier way of setting accident prevention measures during children play.

## **IMPLICATION TO NURSING PRACTICE**

### **To practicing nurses in KIU-TH and others health facilities**

All practicing nurses especially those caring for under five years children should ensure that child safety and child friendly environment are included among the health talks they share with the parents and caretakers especially those whose children have been victims of home accidents in order to create awareness and pool of knowledge among mothers of children under their care in order to avoid re-occurrence of these environment related injuries and accidents.

### **Nursing education**



Ergonomy and child health and safety should be much emphasized in all courses of occupational health, not forgetting ergonomic setting in leisure and play fields in order to increase knowledge and capacity of health workers in reducing injuries and accidents.

### **Nursing research**

Problem focused researches should be conducted regarding play and its relationship with injuries and home accidents so as to generate information on which kinds of play that are mostly associated with injuries and home accidents in under fives in order to ensure extra safety so as home accidents in these games are reduced or if possible eradicated completely.

## REFERENCES

- Alfred Kastipar, Legginah mendi, Elizabeths lasaan, Eirene Dilasia, James Roberts, Maxiwel suezi, Louis Khani(2011). Prevalence of accidental poisoning in citizens of Nepal province of southern India. Population study (University of India). 2011, 42 (2): 121-64. 10.1480/00374720902062099 Geneva, WHO publication.
- Guliver P (2015) the epidemiology of home injuries to under five years children in New Zealand. N Z Journal 2015 PMID 15782868[Pubmed journal].
- Hhaellen Khathura (2012) Parental work in relation to child health and safety. Lancet 2012; 380: 149–56.ISSN: 2381-7038 (Print); ISSN: 2381-7046 (Online)
- Kaleedne Methinah(2009). Role of parents and children care taker in prevention of childhood illnesses and injuries. Kaleedne textbook of home based child care 1<sup>st</sup> edition. Philadelphia PA Elsevier; 2009 chapter 17.
- Kanale symptom( 2012). Extended family, parenting and child upbringing and safe gurdng. Children care practices at home in extended families of south southwestern india) DOI: 10.1186/1471-2431-13-198.
- Khasnabis, C. (2009) World Report on Child Injury

Kool B(2011) Deaths and hospital admissions among children in new Zealand. N  
Z med journal. PMID: 22237564[Pubmed indexed for medline]

Lancet T(2015) Global, regional and national incidences, prevalence and years  
lived with disability for 301 acute and chronic diseases and injuries in 188  
countries 1990-2013: a systematic analysis of global burden of disease study.  
Lancet 2015, 386(9995):4244-4249 vol 5.

Lili X, Jian H, Liping L, Zhiyu L, Hua W(2017) epideiology of injury brelated  
deaths in under five years children in Hunan province in china 2009-2914.  
Plos ONE 12(1) e0168524.doi 10.1371/journal.pone.0168524/.

Malgardhi Feles, Kamen Sorriano, Jumbo Jackiah, and Elsier Keshi(2014)  
ergonomy in work and play places as injury and accident prevention measure.  
Journal of international occupational health and occupational therapy.  
JOH&T. 2014;116 Suppl:49–59. doi: 10.1111/j.1471-0528.2009.02328.x.  
[PubMed] [Cross Ref]

Mohammed Ahmed Waled Amen , Sawsan Mustafa Abdalla, Elsadig Yousif  
Mohamed, Osman Babiker Osman, Hamdi Nouri Najeeb Alnsairat (2015)  
Home Accidents Rate Among Under-Five Children and Predisposing Factors  
in Khartoum. International Journal of Preventive Medicine Research

Paul Pilkington , and Julie Mytton (2015) Epidemiology of Unintentional Child  
Injuries and accidents in the Makwanpur District of Nepal: A Household  
Survey. Int. J. Environ. Res. Public Health **2015**, 12, 15118–15128;  
doi:10.3390/ijerph121214967 [www.mdpi.com/journal/ijerph](http://www.mdpi.com/journal/ijerph).

Peden, M. (2008) World report on child injury prevention. Prevention. Geneva, WHO journal.

Puspa Raj Pant, Elizabeth Towner , Matthew Ellis , Dharma Manandhar ,

Rsakul Catherine Mkhaliid (2013) role of parents , teachers and children attendants in preventing childhood injuries. A UNICEF publication on child health and safety. (<http://www.unicef.int/whr/2013/en/>, accessed 3<sup>rd</sup> Jan 2018).

Salmo Dekhe , Mujirburi addedeji, Timotheo Kamen, Sildhined Langhi, Rosemary Pathureh, Kheisha Nkeitha faizolo, Furahah Pozaari, Jonathan faruz(2012) Hokme setting for preventing childhood injuries in developing countries. a systematic review. Bull World Health Organ. 2012;88:658–666B. doi: 10.2471/BLT.09.069369

UCG(2016)Uganda clinical guideline .management of trauma and injuries. Chapter 1 pp 77-107.

UNICEF (2014). Global report on children injuries and child friendly environment. 2014;33:409–11. [PubMed]Vol. 1, No. 5, 2015, pp. 267-269 <http://www.aiscience.org/journal/ijpmr>.

Xakhary futual, Festin koladhi, Moshad mussuh, Istikah kasitikli, Gostolazt Fartz(2010) case report on incidence of accidents and emergencies in children at Benin university teaching hospital. 6; 7:7. Human resources and the quality of emergency care in children. African medical journal study 2010, 62 (2): 131-54. 10.1080/00324720802022089.

**APPENDIX I: CONSENT FORM FOR CHILD BEARING AGE  
MOTHERS**

I have been provided with information concerning this study titled “**Factors associated with home accidents among under five years children**” to help me understand it. The implications, duration, purpose, voluntary nature and inconveniences or risks that may be reasonably expected have been explained to me.

I have been given the opportunity to ask questions concerning the study and these have been answered to my satisfaction. I have been informed that even if my child do not participate in the study, there will be no penalty attached.

I have been made to understand that at any time if I feel uncomfortable with my child participating in the study, I can voluntarily retrieve my ascent on his/her behalf without any negative implication or punishment being imposed on me.

I confirm that I am happy and voluntarily taking part in the study.

<b>Participant’s name.</b>	<b>Signature</b>	<b>Date</b>
Researcher	Signature	Date

**Appendix II: STUDY PARTICPANTS QUESTIONNAIRE**

Questionnaire No.....

Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

Dear respondent.

I am **Nammanda Annet** from Kampala International University school nursing conducting a research study “**factors associated home with accidents among children under five years**”. You are kindly requested to answer the following questions and your answers will be treated with utmost confidentiality.

**A: SOCIO-DEMOGRAPHIC CHARACTERISTICS**

1 **Tick right** in response to character corresponding to your child

SEX	Male	
	Female	
Age	00-12 months	
	13-24 months	
	25-36 months	
	37-48 months	
Hobbies	Swimming	
	Football	
	Dodge jump	
	Hide and seek	
	Domestic cores	
	High jump	
	Others specify	.....
	None of the above	

**B: PREVALENCE OF HOME ACCIDENTS IN UNDER FIVE YEARS CHILDREN**

2. (a) does that child you have ever got an accident? If yes, continue and give the scene of accident, if No, ignore. **Tick right in correspondence to your answer.**

Yes	
No	
<b>If yes, where was the scene of accident?</b>	
At home	
At school	
Along the road	

Others specify	
----------------	--

b) Which type of accident did the child get?

Fall	
Burn	
Drowning	
Strain/sprain	
Poisoning	
Mechanical hits	
Cut/pierces	
Frosting	

**C: PARENTING FACTORS ASSOCIATED WITH HOME ACCIDENTS  
IN UNDER FIVE YEARS CHILDREN**

3 (a) Where you personally staying with your child when he got home accident?

b) What kind of work do the parent/caretaker do?

Peasants		
Farmers		
Civial servants		
Busness woman		

c) Apart from the biological parents, who else takes responsibility to care and safeguard this child?

<b>Aunts/ uncles</b>	
<b>His Siblings</b>	
<b>Teachers</b>	
<b>Baby seeters</b>	
<b>Grand parents</b>	
<b>others</b>	
<b>None</b>	

d) Have you ever heard about child friendly environment?



Yes

No

**D: ENVIRONMENTAL FACTORS ASSOCIATED WITH HOME ACCIDENTS IN UNDER FIVE YEARS CHILDREN.**

4 (a) Have you ever heard about child friendly environment?

Yes

No

b) Have you put some measures to ensure that your child's environment is child friendly?

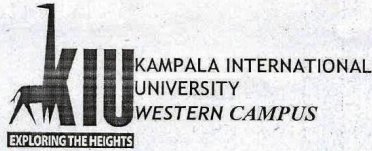
Yes

No

b) Which of the following do you have in place to ensure your child's safety?

Rails on high heights	
Keeping all sharps from reach of children	
preventing the child to play from areas where other activities are taking place	
Keeping chemicals organic and inorganic from reach of children	
Ensuring that only adults take care of the children	
Removed all scaring objects from child's playing compound	
Properly covering potholes	
Setting electric gargets and wires from reach of children	
Keeping children away from cooking and food storage places	
Daily inspecting mechanical conditions of a child's playing objects	
Caution Instruction of older children regarding unsafe playa and places	
Others specify .....	

## APENDIX III: AUTHORISATION LETTER



KAMPALA INTERNATIONAL  
UNIVERSITY  
WESTERN CAMPUS

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*

Date: 09<sup>th</sup>/Feb. /2018

To: PRINCIPAL NURSING.....  
OFFICER KIU - TH.....

Dear Sir/Madam,

**RE: NAMANDA ANNET                      DNS/E/6897/163/DU**

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

She is recommended to carry out her data collection within two weeks from the time of approval as a partial requirement for the award of the Diploma in Nursing Science.

Her topic is: **FACTORS ASSOCIATED WITH PREVALENCE OF HOME ACCIDENTS IN CHILDREN LESS THAN FIVE YEARS ATTENDING KAMPALA INTERNATIONAL UNIVERSITY TEACHING HOSPITAL.**

Any assistance rendered to her will be highly appreciated.

Thank you in advance for the positive response.



Balukh Yostah

**RESEARCH COORDINATOR**  
Tel: +256782-835901/756-013899  
Email: [balyos766@gmail.com](mailto:balyos766@gmail.com)

*PNO's OFFICE  
Please allow the bearer  
to collect data for her  
research.  
Thank you!*

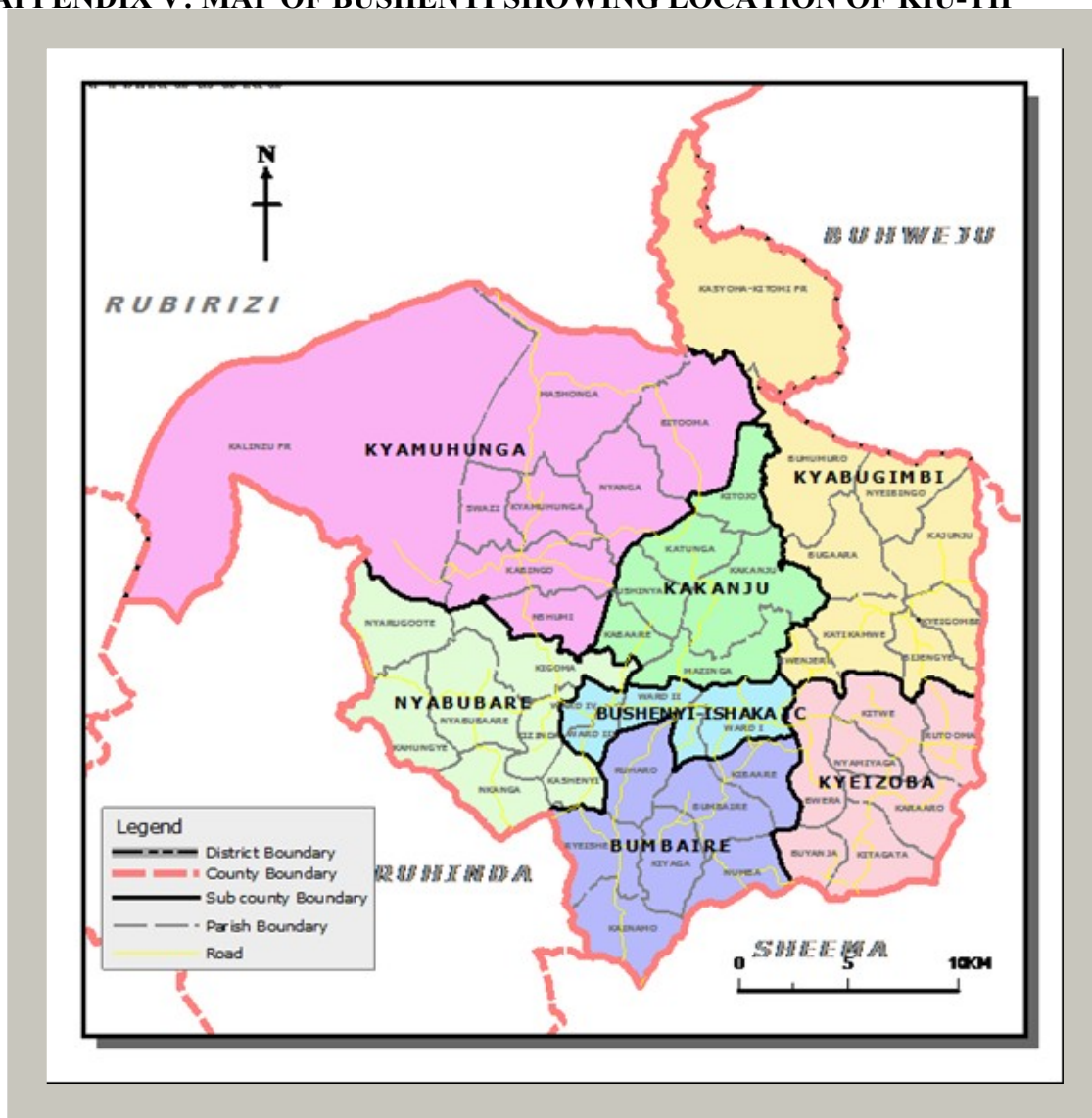


*"Exploring the Heights"*

**APPENDIX IV: A MAP OF UGANDA SHOWING BUSHANYI WHERE  
KIU- TH THE STUDY AREA IS LOCATED**



**APPENDIX V: MAP OF BUSHENYI SHOWING LOCATION OF KIU-TH**



THE LOCATION OF KIU-TH

