KNOWLEDGE, ATTITUDE AND PRACTICE ON IMMUNIZATION AMONG CARE TAKERS IN NAMUWONGO

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A RESEARCH DISSERTATION SUBMITTED TO THE SCHOOL OF NURSING IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF BACHELORSDEGREE IN NURSING OF INTERNATIONAL HEALTH SCIENCES UNIVERSITY

NOVEMBER, 2015

DECLARATION

I **NAMULINDWA IMMACULATE** declare that this research dissertation is my original work and has not been presented to any University for academic award of a bachelor's degree in Nursing.

Researcher's Name: **NAMULINDWA IMMACULATE**

Signature…….

Date…….

APPROVAL

This research report by Namulindwa Immaculate titled **knowledge, attitude and practice on immunization among care takers of children below five Years in Namuwongo**, has been carried out under my supervision and it is now ready for submission to the board examiners of International Health Sciences University with my approval.

Supervisor's Name: **Mrs. OKECHO FLORENCE**

Signature……

Date……

DEDICATION

I dedicate my dissertation work to my family and many friends. A special feeling of gratitude to my loving parents, whose words of encouragement, and push for tenacity ring in my ears. My sisters and brothers have never left my side and are very special.

I also dedicate this dissertation to my many friends and church family who have supported me throughout the process. I will always appreciate all they have done. My supervisor, Mrs. Okecho Florence for the many hours of proofreading that she spent.

I dedicate this work and give special thanks to my best friend and husband, my wonderful son for being there for me throughout the entire baccalaureate program. Both of you have been my best cheerleaders.

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OPERATIONAL DEFINITIONS

Cohort: It is a group of subjects who have shared a particular event together during a particular time span.

Disease: It is a particular abnormal, pathological condition that affects part or all of an organism. It is often construed as a medical condition associated with specific symptoms and signs.

Fever: It is one of the most common medical signs and is characterized by an elevation of body temperature above the normal range of 36.5–37.5 °C (97.7–99.5 °F) due to an increase in the temperature regulatory set-point

Health: It is a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity (WHO).

Immunity: It is the state of having sufficient biological defenses to avoid infection, disease, or other unwanted biological invasion.

Immunization: Immunization is the process whereby a person is made immune or resistant to an infectious disease, typically by the administration of a vaccine.

Infant: It is typically applied to young children between the ages of 1 month and 12 months

Infertility: It is the inability of a person, animal or plant to reproduce by natural means. In humans, infertility may describe a woman who is unable to conceive as well as being unable to carry a pregnancy to full term.

Morbidity: It is the quality of being unhealthy

Mortality: It is the state of being mortal, or susceptible to death.

Total Fertility Rates: It is the average number of children that would be born to a woman over her lifetime if she were to experience the exact current age-specific fertility rates through her lifetime, and if she were to survive from birth through the end of her reproductive life.

Vaccine: It is a biological preparation that improves immunity to a particular disease

Vaccination: It is the administration of antigenic material (a vaccine) to stimulate an individual's immune system to develop adaptive immunity to a pathogen.

LIST OF ACRONYMS

AIDS:	Acquired Immune Deficiency Syndrome
BCG:	Bacillus Calmette–Guérin
DPT/DTaP:	Diphtheria, Pertussis Tetanus
EPI:	Expanded Program on Immunization
GAVI:	Global Alliance for Vaccines and Immunization
Hep A:	Hepatitis A
Hep B:	Hepatitis B
Hib:	Haemophilus influenza type b
KDHS:	Kenya Demographic and Health Survey
MDG:	Millennium Development Goals
MMR:	Measles, Mumps and Rubella
MoH:	Ministry of Health
NDHS:	Nigeria Demographic and Health Survey
NDP:	National Development Plan
NPI:	National Program on Immunization (Nigeria)
PCV:	Pneumococcal vaccine
RED:	Reaching Every District
SOS:	Sustainable Outreach Services
TFR:	Total Fertility Rates
UDHS:	Uganda Demographic and Health Survey

UNEPI: Uganda National Expanded Program on Immunization

UNICEF: United Nations Children's Fund

USE: Universal Education Program (Uganda)

WHO: World Health Organization

ABSTRACT

The study was carried out to determine the knowledge, attitude and practice on immunization among care takers of children below five Years in Namuwongo. Many challenges were faced, including accessibility, language barrier as well as intimidation, bearing in mind that Namuwongo is an informal urban settlement, home to many people who are internally displaced persons (IDPs) from zones of violence in Uganda or refugees who fled from neighboring countries such as DR Congo and South Sudan. These residents face many problems, such as unemployment, low quality shelter, high crime rates, drug abuse, poor and insufficient infrastructures and low literacy levels.

Problem: Namuwongo village is heavily populated and majority of her inhabitants dwell in congested environments prone to many vaccine preventable diseases. It is one of the suburbs in Kampala that has less educated residents with one health center therefore making it a barrier to utilization of immunization services. Therefore, in case this continues the nation will have persistent mortalities and morbidities.

Objective: To determine the knowledge, attitude and practice on immunization among care takers of children below five years in Namuwongo village.

Methodology: The study was carried out from the 25th October, 2014, to 15th November, 2014. 200 participants were interviewed using a researcher administered questionnaire, with the help of research assistants. A cross sectional, descriptive study was carried out to investigate the knowledge, attitude and practices towards immunization among the care takers of children who are below five years in Namuwongo community.

The data was collected using the researcher administered questionnaires that was presented to the respondents who consented and were willing to take part in the study. Pre-coded self administered questionnaires were administered by the researcher and the research assistants to collect data from the respondents.

The data was presented in tables, bars and pie charts.

Findings/Results: The study findings showed poor immunization practices among the care takers of children below five years in Namuwongo. The average was found to be 61% immunization coverage of children below five years in Namuwongo. The recommended immunization coverage by WHO is 90%. The finding of this study revealed discrepancies in poor immunization practices as compared to the recommended coverage. A low level of knowledge on immunization was demonstrated in Namuwongo community. However, the respondents showed a positive attitude towards immunization of the children, with a significant number of respondents believing that immunization protects children against deadly diseases.

Conclusions and recommendations:

The care takers should be educated about the immunization. The education should be based on the diseases the children should be immunized against, and the immunization schedule.

The attitude of the care takers should be boosted by putting more emphasis on the importance of immunization and the dangers of not immunizing the children below five years.

The care takers should be motivated through community based health education to take the children below five years for immunization according to the Uganda immunization schedule.

CHAPTER ONE

1.0 Back ground

The world health Organization defines immunization as the process by which a person is made resistant to infections through the administration of the vaccine. A vaccine stimulates the body's immunity to protect the person against subsequent diseases (WHO, 2014). Immunization has been a proven tool of eliminating and controlling life threatening diseases like poliomyelitis, tuberculosis, hepatitis, and other life threatening immunizable diseases. Immunization therefore has averted approximately two to three million deaths every year (WHO, 2014).

According to WHO standards, Immunization is very important to both children and adults. Therefore immunization is very vital in all stages of life. Infants and young children are most susceptible to vaccine preventable diseases because of their immature immune system that cannot fight against infections therefore they require timely immunization. Immunization directly protects who receive the vaccines. This can be done through herd immunity, immunization against very many infections and can also prevent the spread of diseases to the communities. The benefits of vaccination extend beyond prevention of specific diseases in individuals. They enable a rich, multifaceted harvest for societies and nations. Vaccination makes good economic sense, and meets the need to care for the weakest members of societies (WHO, 2008).

The World Health Organization has ensured the presence of immunization services across the world to eliminate and control the immunizable diseases since 1974, however the care taker of the children will make a decision whether to immunize their children or not. Therefore the consequences of not immunizing include the infection of the non-immunized children, infection of immunized children and adults, and inadequate elimination of specific infections. Therefore this has both social and financial implications on the individuals, families, communities and nations (California immunization coalition, 2006).

The most impressive thing is that the recent achievement on the reduction of global measles mortality from estimate of 750,000 deaths in 2000 to 197,000 in 2007. The global vaccination coverage in most regions is currently estimated to be averagely of more than 80% of their target populations with three Diphtheria, Pertusis and tetanus (DPT) vaccine doses. The coverage

however remains well short of the 2010 goal of 90% coverage especially in the Africa region which is estimated to be 74% and South Asia which is estimated to be 69% (International Health and Human Rights, 2009).

According to Center for disease control in the United states the immunization coverage in 2012, national vaccination coverage among children aged 19–35 months was 82.5% for ≥4 doses of diphtheria, tetanus, and Pertussis (DTaP), 92.8% for ≥3 doses of poliovirus vaccine, 90.8% for ≥1 doses of Measles, Mumps and Rubella (MMR), 89.7% for ≥3 doses of Hepatitis B (HepB), and 90.2% for ≥1 doses of varicella vaccine. Although this represents a decline in coverage from 2011 of 1–2 percentage points for diphtheria, tetanus, and Pertussis (DTaP), poliovirus, and Hepatitis B (HepB), coverage for these vaccines has remained high and stable for at least the past decade. Coverage with ≥4 doses of pneumococcal vaccine (PCV) decreased from 84.4% in 2011 to 81.9% in 2012. Coverage with the birth dose of Hepatitis B (HepB) increased from 68.6% in 2011 to 71.6% in 2012. Coverage with the full series of Haemophilous influenza type b (Hib), which steadily increased during 2009–2011 after a vaccine shortage that occurred from December 2007 to September 2009, was similar in 2012 at 80.9% compared with 2011. Similarly, coverage with ≥2 doses of hepatitis A (HepA) and rotavirus vaccine remained similar to 2011 levels at 53.0% and 68.6% in 2012, respectively. Coverage with the combined vaccine series (4:3:1:3*:3:1:4) was 68.4% in 2012, also similar to coverage in 2011 (CDC, 2013). However in 15 states it was noted that Measles Mumps and Rubella (MMR) had a low coverage of less than 90% a level that poses a warning to the public health in these states and United States of America at large (Preeti M, 2013).

In India the coverage of immunization in India among children between 12 – 23 months in urban 60% of the children are fully immunized, while coverage among urban poor children is a dismal 60%. The variations in interstate on immunization coverage shows gaps that call for rethink on allocation of resources strengthening process to improve the coverage of immunization in India (Agarwal, et al, 2010).

According to Brown et al 2012, the immunization coverage in Sub-Saharan Africa was 71% coverage, three regions which account for global coverage. This shows some discrepancies in immunization coverage in comparison to the World Health Organization target of 90% coverage.

However this coverage shows great advances in immunization since 2000 which was 52% the Sub Saharan region need to improve the coverage to the targeted 90% global coverage by the World Health Organization (Brown et al, 2012).

Nigeria is ranked top in infant mortality and low immunization coverage has been the major cause of increased infant mortality rates. According to Beacon the coverage of Immunization in 2011 was 47%, which was unacceptable in relevance to the Millennium Development Goals that have a deadline of 2015 (Beacon, 2013). On the other hand the study done by Diddy A. in 2011, the coverage of immunization in rural areas was lower than the coverage in urban areas. His study revealed that the children in rural areas were 42% less likely to be immunized than those in urban areas (Diddy A., 2011).

According to the World Health Organization the immunization coverage in Kenya was 47% by the year 2013. However this still calls for improved coverage of immunizing the remaining 17% children. This report recommended for the mass campaign to immunize the un-immunized children (WHO, 2013).

According to Bbaale E., the immunization coverage of Uganda in the year 2013 was 50%. This is a worrying figure to every child below five years and the general population (Bbaale E., 2013). This coverage is very far from the recommended 90% by the World Health Organization. There are no studies that have been done in Namuwongo to determine the immunization coverage.

1.2 Problem statement

Immunization is the best way of curbing immunizable childhood diseases like poliomyelitis, measles, mumps, rubella, diphtheria, tuberculosis, and hepatitis. Every child is supposed to be immunized against all these diseases to make their body resistant to these diseases. The World Health Organization therefore came up with a programme to immunize all the children since 1978. The programme has improved the immunization coverage across the globe since 1978 up to now. However the complete immunization of all children has not been achieved. Immunization against these diseases is one way that can eliminate these diseases and reduce the infant mortality rates that have been high in the past decades.

In Uganda the immunization coverage which once was one of the best in East Africa and Sub-Saharan Africa has deteriorated. The coverage of immunization in Uganda is 50% which is very far from the WHO target of 90% (Bbaale, 2013). Poor coverage has been associated to increased rates mortalities of children below five years. Increased mortality rates will affect the nation economically, politically and socially. The disease burden of diseases that can be immunized is 75% in Uganda (Uganda DHS, 2011). In case this continues the nation will have persistent mortalities and morbidities. The low coverage has therefore called for more attention and therefore the researcher sought to assess the knowledge, attitude and practices towards immunization among caretakers of children below five years. Namuwongo village is heavily populated and majority of her inhabitants dwell in congested environments prone to many vaccine preventable diseases. Namuwongo is one of the suburbs in Kampala that has less educated residents with one health center therefore making it a barrier to utilization of immunization services.

1.3 Justification

Uganda, like other countries subscribing to the WHO policies, is under pressure to eradicate vaccine preventable diseases. This is done through complete vaccination of every child under five against the now 9 killer diseases. The current messages are inclined towards polio eradication and measles elimination as well as pneumococcal (PVC) vaccine introduction into routine immunization program. It is expected that upon declaration of polio virus eradication, there will be a massive switch from the use of oral polio vaccine (OPV) to inactivated polio vaccine (IPV). The idea of new vaccines (PCV) and new vaccine modes (IPV) brings on board caretaker based concerns like the multiplicity of injections administered to their beloved children at ago and the fear of adverse events following immunization (AEFI). Therefore end-user based studies on immunization status, knowledge and attitudes should enable identification of community based barriers to vaccination services at a critical stage.

This study will serve as a sensitization platform for caretakers of under-fives regarding routine immunization practices, immunizable diseases, and key messages, importance of adverse events following immunization (AEFIs), immunization centers and standard practices before and after vaccination. The study results will be used by policy makers and policy implementers of

Namuwongo village to design specific caretaker based strategies to uplift and maintain high levels of vaccination coverage during special national immunization days (NIDs) and routine immunization compliance in the area. The same results can be potentially extrapolated to applicability in different city suburbs of Kampala. This study will as well be essential for completion of a bachelor's degree in nursing (BNS) at International health sciences university (IHSU) Kampala.

1.4 Objectives

1.4.1 Major objective

To determine the knowledge, attitude and practice on immunization among care takers of children below five years in Namuwongo village.

1.4.2 Specific objective

i. To determine the knowledge level of care takers of children below five years regarding immunization in Namuwongo village

ii. To identify caretakers' attitudes on immunization in Namuwongo village

iii. To assess the practices of caretakers towards immunization of children under five years in Namuwongo village

1.5 Research questions

i. What is the knowledge level for caretakers of children under five years, regarding immunization in Namuwongo village?

ii. What are the caretakers based attitudes that influence compliance and lack of compliance to complete vaccination of under-fives in Namuwongo village?

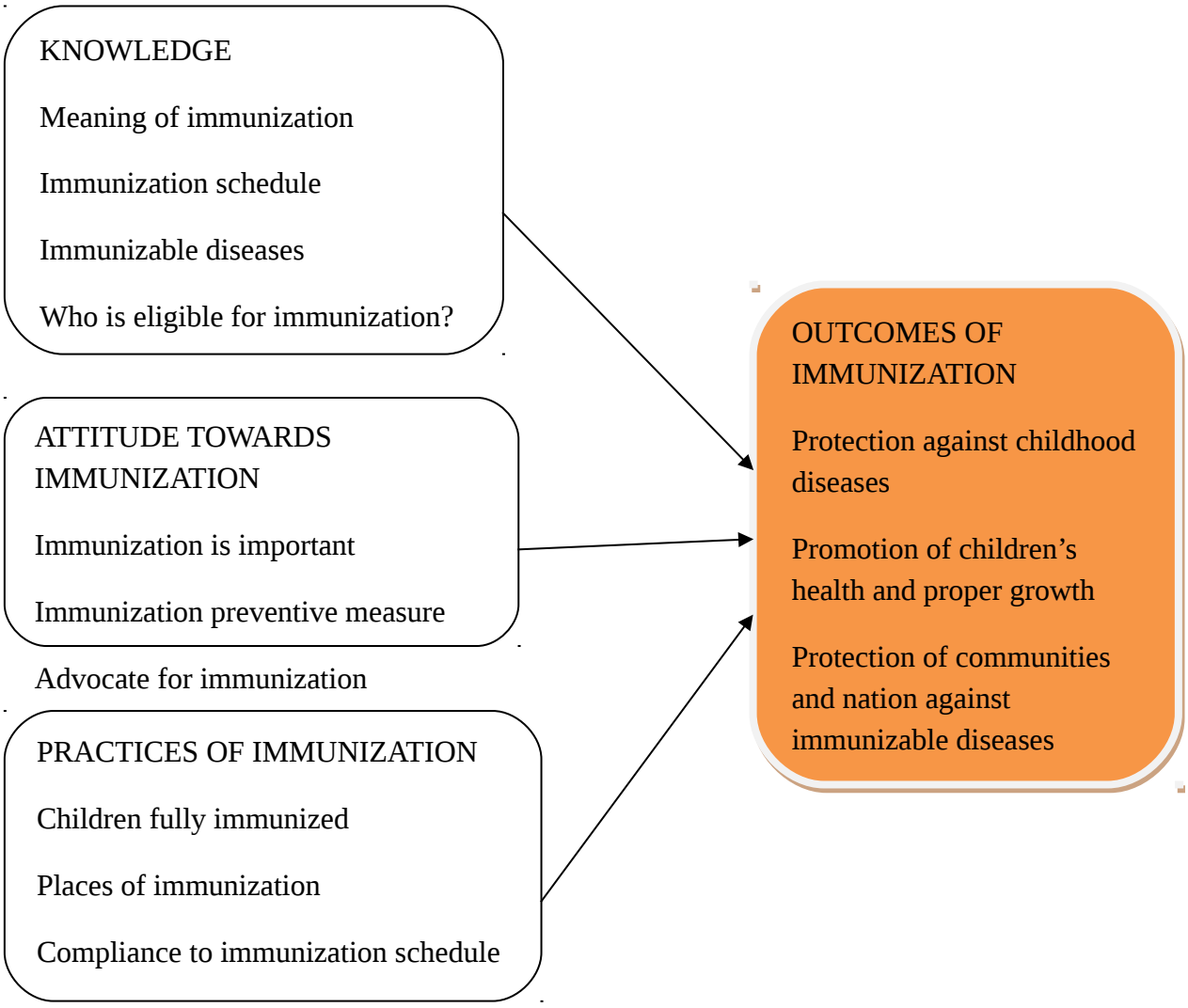
iii. Do caretakers of under-fives in Namuwongo village exercise recommended practices towards immunization?

1.6 Scope

The study was carried out in Namuwongo to determine the knowledge, attitude and practices towards immunization among care takers of children below 5 years. The study will only be

carried in Namuwongo community and will strictly collect data on immunization among care takers who have children below five years.

1.7. Conceptual Framework



1.7.0. Explanation of conceptual framework

The framework has four variables. There are three independent variables and one dependent variable.

1.7.1 Independent variables

Knowledge

Knowledge is defined as the facts, information and skills acquired through education experience or the theoretical and practical understanding of a subject (Oxford, 2014). Knowledge in this framework has been conceptualized as a factor that can promotes utilization of immunization. The framework shows that the caretaker who has knowledge about immunization is more likely

to immunize the children who are below 5 years. The knowledge in this case involves the understanding of immunization, diseases that can be immunized and the immunization schedule of Uganda.

Attitude

Attitude is defined as the way someone thinks, feels and behaves towards someone or something (Marriam W., 2014). In this study the attitude will be the way the care takers think, feel, and behave towards immunization. This will involve the way they think, feel and behave towards immunization as a tool used to curb the immunizable deadly diseases. It also involves being good advocates of immunization.

Practices

Practice is the actual application or use of an idea or method as opposed to the theories related to it (Oxford, 2014). Practice in this study will be actual utilization of immunization services by the care takers amid the theories and myths that have been posed on immunization. This will check the care takers strict use of the immunization schedule and the absolute immunization of the children below five years.

1.7.2. Dependent variable

Outcome of immunization

This study has one independent variable that is the outcome of immunization**.**

Immunization is the process of administration of the vaccine to the human body to elicit the immune system to synthesize specific antibodies against the specific infection.

The major objective of the World Health Organization to introduce immunization services worldwide was to reduce and combat some diseases that can be prevented through immunization. These diseases are deadly once the children contract them. Both children and adults can be at risk of contracting the disease. Therefore immunization is meant to reduce the rate of infections, promote the health of the children, communities and the nations.

CHAPTER TWO: - LITRATURE REVIEW

2.0 Introduction

This chapter entails the literature on immunization coverage. This chapter will compare the various studies that have been done on the knowledge attitude and practices towards the immunization of children below five years.

2.1 Knowledge

According to the oxford dictionary knowledge is defined as the skills and information acquired through experience and education (Oxford, 2013). This study will explored the knowledge on immunization. The knowledge of immunization includes the understanding of the immunization schedule, understanding what immunization means, importance of immunization, the immunizable diseases, the available centers of immunization and the dangers of not immunizing the children below five years.

In his study Zahrani J., to determine the knowledge attitude and practices towards immunization among mothers in the Kingdom of Saudi Arabia showed that mothers did not have adequate knowledge about immunization. The knowledge was dependent on age, and education level. Older mothers were less likely to have knowledge about the immunization than younger mothers and the mothers who were less educated had less knowledge about immunization (Zahrani J, 2013).

According to the study done by Ahmed S, et al. in 2013 to determine the mothers awareness and knowledge of under 5 years children regarding immunization in Mihia in Egypt city, the study revealed low knowledge levels and awareness among the mothers who took part in the study. There was low level of knowledge and awareness among the mothers where by only 75% of the mothers mentioned tuberculosis, measles and hepatitis vaccines while 25% did not know any vaccinations (Ahmed S., et al, 2013). The fact that higher number mentioned the vaccines they never mentioned all of them and this percentage is not satisfactory in comparison to the immunization goals of the World Health Organization of 90% immunization.

A study done in the United Arabic Emirates by Grinva F et al, depicted a good level of knowledge among the mothers who attended the antenatal care and wards in Al Ain in United

Arabic Emirates had little knowledge about the immunization. More than 85% knew about the childhood vaccinations that prevent the life threatening diseases, and 62% were aware about the lifelong protection (Grinva F et al, 2011).

In India the knowledge levels of mothers in urban and rural areas was determined by Mahalingam et al in 2014 and found out the knowledge level of mothers in urban areas was higher to the knowledge of mothers in rural areas. The mothers' knowledge on the significance of immunization was assessed and the mothers from urban areas had 75.6% in contrast to the mothers in rural areas that had 62.69%. The majority (91.89%) of the mothers had knowledge on when to start the immunization in contrast to the 44.44% of mothers in rural areas who had knowledge on when to start immunization. This clearly shows that most mothers in rural areas did not know when the immunization is initiated. Concerning the safety of the vaccines and the vaccine administration, the majority of both mothers from urban and rural areas believed that the vaccines were safe (Mahalingam et al, 2014).

A study carried out in Canada by Ritvo et al 2003 on the determination of the knowledge of the vaccines showed low levels of knowledge on vaccines. Most adults did not understand how vaccines work and never knew why they were vaccinated when they were young. In this study only 32.1% of the respondents endorsed the use of vaccines in contrast to the majority 67.9% who did not endorse vaccination (Ritvo, 2003). Although this study was not done on caretakers but all adults, it clearly shows that the level of knowledge of both caretakers and those who were not care takers is too low. Therefore among these adults there were the care takers who took part in the study and the study concentrated on adults who were either potential or actual care takers that means at one point they could be care takers and couldn't see how important the vaccination is to the children below five years.

In their study Omotara B.A., et al in 2012 to determine the knowledge of immunization they found out that the stakeholders were knowledgeable on the schedule of immunization, the importance of immunization, and the site of administration of the vaccines. The study involved various stakeholders on the and all of them had adequate knowledge on immunization of children because it protects them from deadly immunizable diseases like poliomyelitis (Omotara B.A., et al, 2012).

A study carried out in Davao city by Sylvia C. and Joan L. in 2011 showed that majority 93% of the mothers were aware of the immunization but only 75.8% were correct about the knowledge of immunization. The parents either did not get enough information from health workers or they did not grasp the complete information about immunization. The knowledge involved whether the parents knew that their children were supposed to be immunized, the availability of the immunization services, and importance of immunization and the cost of the services. The mothers therefore showed inaccurate levels of knowledge about immunization (Sylvia C. et al, 2011).

2.2 Attitude towards immunization

Attitude in this study has been defined as the way the care takers feel, think and behave towards the immunizing of the children below five years. A positive attitude towards immunization has therefore been conceptualized to have an influence on the immunization of the children below five years and this depends on the attitude of the care takers.

A study done in Al-Beida city in Libya to determine the knowledge attitude and practices of mothers towards immunization by Bofarraj M, showed a positive attitude towards immunization. He described it to be a positive attitude towards immunization since 80.5% of the mothers showed a favorable attitude towards in contrast to the remaining 19.5% who never showed a positive attitude towards immunization. This attitude therefore had a significant association to the immunization practices of the children who were below five years. The study therefore found out that among the positive attitude mothers, 86.33% of their children were fully immunized against the 13.67% who were partially immunized while the negative attitude mothers 58.97% of their children were fully immunized against 41.1% who were not fully immunized (Bofarraji, 2008).

According to Path et al in 2002 carried a study in Cambodia to determine the knowledge attitude and practices of immunization and revealed a positive attitude that promoted the utilization of the immunization services in Cambodia. The attitude was highly supported by the high levels of knowledge in shaping the attitude of the people of Cambodia. The positive attitude was found in both the health workers and the residents (Path et al, 2002).

In their study Quidai W, et al, on the knowledge attitudes and practices towards immunization in Ethiopia showed a positive attitude with above 90% of the respondents favoring the immunization and had beliefs that it prevents the diseases. This was an encouraging attitude for Ethiopia but half of the respondents could not recommend immunization to other people. One respondent however believed that immunization is harmful and 36% feel that it can be harmful. Despite the massive believe that immunization is important the respondents showed some negative believes about the harm associated to immunization (Quidai W, et al, 2007).

In Pakistan a study done by Asim M. et al, showed a negative attitude towards immunization among the parents who had taken their children for immunization. The parents claimed that immunization had various side effects. The fact that the side effects were reported in this study the advantages of immunization outweighed the side effects. Most mothers reported the side effects of fevers, wound on the injected site, pus at the site of injection and pain at the site of injection. The mothers took these side effects seriously and they had an impact on the utilization of the immunization services even when they knew about the advantages of immunization. In relevance to the attitude there was also insufficient knowledge about immunization of the children (Asim M., et al, 2012).

According to Barbra B et al in their study to determine the knowledge, attitudes and practices of not taking the hepatitis vaccine among children in Butte County in California showed a negative attitude and inadequate knowledge about the immunization program. The mothers believed that there were increased risks of contracting hepatitis when the child is vaccinated against hepatitis. They felt that their children would better be not vaccinated against the hepatitis to reduce the chances of not falling sick from hepatitis (Barbara B., et al, 2003). The insufficient knowledge and negative attitude, adversely affected the immunization program against the hepatitis.

2.3 Practices of immunization

Practice of immunization is very important because it is the one to determine the benefits of immunization. The children, families, communities and nations will always reap these benefits of immunization if all the care takers take the immunization practice seriously. The practice however must be supported by various factors which include the knowledge about immunization, the positive attitude towards immunization, availability of immunization services, proper

handling of the care takers by the immunization service providers and breaking all other barriers of immunization. Various studies have been done to assess the practices of the care takers on the immunization practices and utilization of these services that can prevent eradicate preventable diseases therefore reducing on the mortality rates and morbidity which will ensure healthy generations and better world free from disease and its effects.

According to Harris H, et al, 2002 in their study the practices of immunization did not achieve the 95% target by the ministry of health in New Zealand. The fact is that the immunization did not acquire the set goal there was immunization above 80% among the children in New Zealand. This was not meeting the required standards despite the positive attitude towards immunization among the respondents who took part in this study. The practices however were hindered by the misunderstanding that breastfeeding and balanced diet would reduce the chances of contracting the diseases. That means that mothers believed that breastfeeding and proper diet could replace immunization. The practices however could be better if these misunderstandings and beliefs were changed through educational programs (Harris H, et al, 2002).

According to the study carried out in Bengal in India in 2013 by Roy S, et al, the practices were satisfactory compared to the goal of the United Nations. Assessment of the immunization schedule compliance the BCG, OPV, DPT Hep B and measles the coverage was around 90% percent which is the World Health Organization goal. The study however found out that the respondents were not adequately knowledgeable about the vaccination. The study found out that the third dose was below 90% that is OPV and DPT. The complete immunization was seen among the Muslims and Hindus and the literate groups showed complete immunization against the illiterate groups who had incomplete immunization (Roy S, et al, 2013).

A study conducted in Jabapur in India to determine the knowledge attitude and practices towards breastfeeding, and immunization among mothers attending antenatal care services found out that the mothers practices towards immunization was satisfactory with all the mothers who were booked getting all the tetanus toxoid injection. The fact that the immunization was not done on the children it does give too much view on how the mothers could respond to the immunization of their children (Harnangle R, et al, 2013).

CHAPTER THREE: - METHODOLOGY

3.0 Introduction

This chapter includes the following, research design, study population, inclusion criteria, exclusion criteria, data processing and analyzing, ethical consideration and administration approval, quality control and the plan of dissemination.

3.1 Study Design

A cross sectional, descriptive study was carried out to investigate the knowledge and practices towards immunization among the care takers of children who are below five years in Namuwongo community.

3.2 Study area.

The study area was Namuwongo suburb of Kampala city. It is an area of Kampala located southeast of the city centre, approximately 5 kilometers from the city centre. Here, there is an informal urban settlement that is home to between 7,000 to 10,000 people. Many of these people are internally displaced persons (IDPs) from zones of violence in Uganda or are refugees who fled from neighboring countries such as DR Congo and South Sudan.

In Namuwongo, 90% of households live below the absolute poverty line – the highest percentage of the slums in Kampala. Residents face many problems, such as unemployment, low quality shelter, high crime rates, drug abuse, poor and insufficient infrastructures and low literacy levels.

Namuwongo is bordered by Kisugu, Muyenga, and Bukasa. It is highly populated place, with people from, upper, middle and lower social classes. Most people stay in the highly populated slum called Soweto. Soweto is along the railway line. Soweto is highly populated with poor housing conditions and poor living conditions more especially during the rainy season the drainage system from other parts of Namuwongo end up in Soweto. The other parts of Namuwongo are not highly populated and have better housing and living conditions. There is only one public health facility in Namuwongo and various private health facilities. The public health facility is Kisugu health center, while the private health facilities include International hospital Kampala, Kairos, Savior medical center, Friends medical center among others.

However most of these health facilities do not offer immunization services except International Hospital Kampala and Kisugu health center.

3.3 Study population

The study population was care takers of children below five years. A care taker in this study is someone who will be responsible for the needs of these children and final decision makers concerning their health care. This involved mothers, fathers and all guardians who take up the parental responsibilities and obligations.

3.4 Source of data

The researcher used researcher administered questionnaires to collect quantitative data about the knowledge, attitude and practices towards immunization from the care takers of children below five years in Namuwongo Kampala. The information was primarily provided by the parents and/or the care takers who have been living with the children.

3.5 Selection Criteria

3.5.1 Inclusion criteria

All the care takers who had children who are below 5 years were included in this study. The care takers ranged from parents and those guardians who take up parental responsibilities were included in this study.

3.5.2 Exclusion criteria

This study did not include care takers who were mentally ill, care takers who refused to participate were excluded as well.

3.6 Sample size calculation

The sample size was calculated using the Kish and Leslie formula (1965) as shown below:

n= z2 pq/d2.

Where by

n = The sample size

z = The statistical certainty chosen (confidence interval 95%) or 1.96.

p = Proportion of the population sampled set at 0.07

q = (1-p) is the difference between 1 and p that is the probability care takers who don't immunize.

d = The precision desired or tolerated maximum value of relative sampling error (0.05).

Therefore n=200.

3.7 Sampling design

The sampling design was purposive sampling design, since the data collected involved care takers who had children below five years the respondents were identified and interviewed.

3.8 Study variables

3.8.1 Dependent variable

Outcomes of immunization

This study has one independent variable that is the outcome of immunization. Where by immunization is the process of administration of vaccines into the human body to trigger the immune system to synthesize antibodies against that specific disease causing micro-organism. Therefore the outcome of immunization depends on various factors which in this study will be the knowledge, attitude and the practices of immunization. Proper knowledge on the meaning of immunization, benefits of immunization, and consequences of not immunizing with positive attitude and strict immunization practices as per the immunization schedule will lead to good outcomes of immunization. The outcomes of immunization involve proper health for children, and protection of children communities and nations against infections.

3.9. Independent variable

The following variables will be the independent variables of this study**:**

3.9.1 The Knowledge about immunization

Knowledge is defined as the information and skills acquired through experience or education (Oxford dictionary, 2013). The knowledge about immunization therefore included the meaning of immunization, the immunization schedule, the benefits of immunization, the diseases to be immunized against and the consequences of not immunizing the children.

3.9.2 Attitude towards immunization

The oxford dictionary defines attitude as the way someone feels, thinks and behaves towards something or someone (Oxford dictionary, 2013). This study focused on the way care takers think, feel and behave towards immunization. A positive attitude towards immunization increases the likelihood of the care takers behavior of seeking the immunization services while a negative attitude reduces the likelihood of care takers behavior of seeking immunization services.

3.9.3 The practices of immunization

The practices of immunization will therefore include the number of times the children have been immunized, complete adherence to the immunization schedule, the number of children below five years that have been immunized. The practices of immunization may be affected by various factors but this study will only explore the knowledge and attitude.

3.10 Instruments and measures

The data was collected using the researcher administered questionnaires that was presented to the respondents who consented and were willing to take part in the study. Pre-coded self administered questionnaires were administered by the researcher and the research assistants to collect data from the respondents. The questionnaires had sections and sub-sections to collect data from the care takers of children below five years in Namuwongo community.

3.11 Data management

The coding was established for data processing and analysis using Statistical Package for Social Sciences (SPSS) version 16. The data was checked for completeness and consistency, before it was processed. The entered data was processed and analyzed using Statistical Package for Social Sciences (SPSS) version 16. The results were entered in open office spreadsheet so as to produce good quality tables, bars, and pie charts, for a bivariate description of the statistics.

3.12 Data collection methods

This study used structured questions to collect quantitative data from the respondents. It was researcher administered questionnaires. The research used purposive method to get the respondents for interview.

3.13 Quality control issues

The research assistants were trained on how to introduce themselves, carry out sampling, interviewing, and questionnaire administration. The training equipped them with the knowledge and skills to carryout tasks of sampling, giving clear introduction to the interviewee and performing the interview accurately and correctly according to the developed procedure. The researcher and the research assistants checked and pre-tested the questionnaire, on the completeness, accuracy and consistency before the next respondent was interviewed.

3.15 Ethical issues

Permission to conduct the study was sought from the International Health Sciences University, School of Nursing, the research department and the Local Council chairman 1 at Namuwongo community. Informed verbal and written consent was obtained from respondents. Strict confidentiality was maintained all through data collection and analysis. The collected data was restricted to the principal investigator only.

3.16 Limitations to the study

Some respondents were not honest to disclose their personal information especially the respondents who did not comply with the immunization schedule. Some respondents did not answer the questionnaires fully. Some care takers refused to take part in the study. Some care takers did not have enough immunization information about the children. A pilot study of 15 questionnaires was carried out at Kansanga to reduce the percentage of bias, before the actual study was done, to ensure validity and reliability.

3.17 Plan for dissemination

The findings of this study will be disseminated to the administration of International Health Sciences University and Kisugu health center.

CHAPTER FOUR: - RESULTS

4.0. Introduction

This chapter presents the statistically analyzed data from the study and the interpretation of the information obtained. The sample size of this study was 200 respondents who took part in giving data about knowledge, attitude and practices towards immunization of children below five years of age. The data was analyzed using the Statistical Package for Social Sciences (SPSS) version 16, a computer software for statistical analysis and it was transferred to Microsoft office excel to produce good quality table, pie charts and bar graphs. The respondents of this study were representative view of care takers of children below five years.

4.1. Demographic characteristics

Table 1: Socio-demographic characteristics

Age	N=200	Percent
10-20 Years	17	8.5
21-30 Years	84	42
31-40 Years	59	29.5
41-50 Years	36	18
51 and above	4	2
Total	200	100
Sex		
Male	33	16.5
Female	167	83.5
Total	200	100
Tribe		
Muganda	76	38
Munyankole	33	16.5
Musoga	34	17
Acholi	8	4
Others	49	24.5
Total	200	100
Religion		
Catholic	68	34
Protestant	62	31
Muslim	22	11
Others	48	24
Total	200	100
Marital status		
Single	70	35
Married	121	60.5
Divorced	9	4.5
Total	200	100

On the above table (Table 1), the socio-demographic results as they have been summarized majority (42%) of the respondents were between (21-30) years of age while the minority (2%) was 51 years and above. The female dominated in this study with 83.5% while the men were few with 16.5%. The majority (38%) of the respondents were from Buganda tribe and the minority (4%) group was the Acholi tribe. In terms of religion the major (34%) religion was Catholic and

the minor (11%) religion that took part in this study was the Islam religion. Majority (60.5%) of the respondents were married while few (4.5%) were divorced.

Table 2: Knowledge about immunization

Heard about immunization	N=200	Percent
Yes	200	100
Source of information		
Friend	42	21
Media	37	18.5
Health center	105	52.5
Others	16	8
Total	200	100
Meaning of immunization		
Administering vaccine to prevent	96	48
Routine injecting children	50	25
Is a birth control measure	38	19
Others	16	8
Total	200	100
Immunizable diseases known		
All of them	42	21
Some of them	113	56.5
None of them	45	22.5
Total	200	100
Which is immunizable		
Malaria	77	38.5
Typhoid	77	38.5
Tuberculosis	46	23
Total	200	100
How many visits are made		
Ten visits	78	39
Eight visits	29	14.5
Six visits	60	30
Four visits	33	16.5
Total	200	100

On the above table (Table 2), all the respondents said they had heard about immunization of children who are below five years. Majority (52.5%) of the respondents heard about immunization from the health centers, while few (8%) heard from other sources which included learning in class, hearing in workshops, seminars and news papers. Majority (48%) of the

respondents knew the meaning of immunization which is the administration of a vaccine to prevent diseases against the minority (8%) who had other meanings of immunization which included those who were not sure and those who did not know the meaning of immunization. Majority (56%) of the respondents knew some of the immunizable diseases while few (21%) knew all the immunizable diseases. Majority (38.5%) of the respondents said malaria and typhoid were immunizable diseases while few (23%) said tuberculosis is the immunizable disease. Majority (39%) said the immunization visits made are ten while (14.5%) said eight visits.

Table 3: Attitude towards immunization of children below 5 years

Immunization protects	N=200	Percent
Yes	153	76.5
No	47	23.5
Total	200	100
Un-immunized get diseases		
Yes	153	76.5
No	47	23.5
Total	200	100
Immunization important		
Yes	175	87.5
No	25	12.5
Total	200	100
Immunization necessary		
Yes	183	91.5
No	17	8.5
Total	200	100
Advice to immunize		
Yes	156	78
No	44	22
Total	200	100
Make immunization compulsory		
Yes	150	75
No	50	25
Total	200	100
Fine to punish defaulters		
Yes	131	65.5
No	69	34.5
Total	200	100
Government played good role		
Yes	138	69
No	62	31
Total	200	100
Good services		
Yes	120	60
No	80	40
Total	200	100

The results in table 3 above show that the majority (76.5%) said that immunization protects children from deadly diseases while few (23.3%) said that immunization does not protect

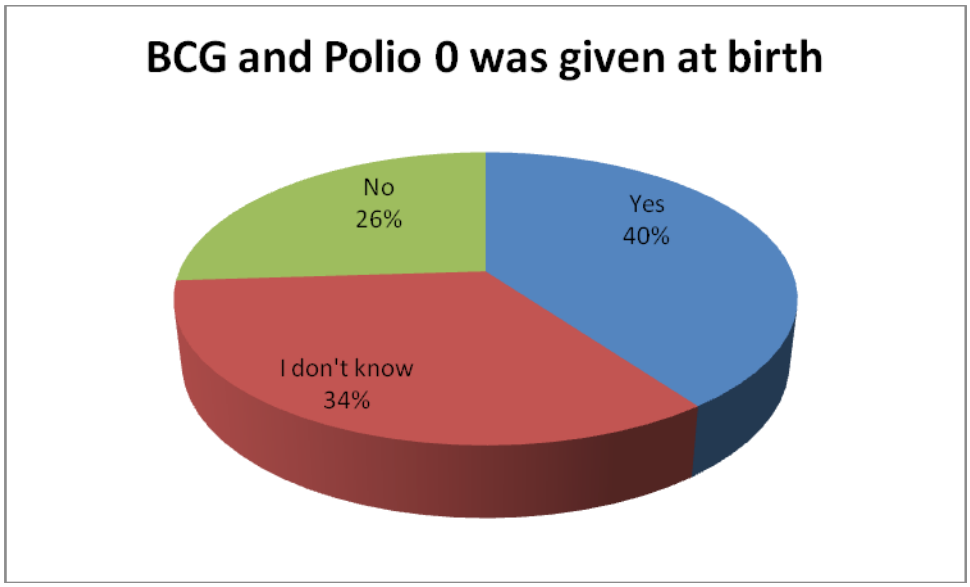
children against deadly diseases. Majority (76.5%) of the respondents said that the children who are not immunized will contract deadly diseases unlike few (23.5%) who said that those who are not immunized will not contract deadly diseases. Majority (87.5%) said immunization is important to every child below five years while few (12.5%) said immunization of children below five years is not important. Majority (91.5%) of the respondents said that immunization of children is necessary while few (8.5%) of the respondents said immunization is not necessary. Majority (78%) of the respondents said they could advise someone to immunize children while few (22%) of the respondents said they could not advise anyone to immunize children. Majority (75%) said that immunization of children should be made compulsory while few (25%) said immunization of children should not be made compulsory. Majority of the respondents (65.5%) said that those who don't immunize their children should be punished by the law while few (34.5%) said that those who don't immunize their children should not be punished by the law. Majority (69%) of the respondents said that the Government has done enough to improve immunization services against few (31%) who said that the Government had not done enough to improve immunization services. Majority (60%) said that Namuwongo has good immunization services unlike few (40%) who said Namuwongo doesn't have good immunization services.

Table 4: The practices of immunization of children below five years

Immunized all children	N=200	Percent
Yes	145	72.5
No	55	27.5
Total	200	100
Immunized according to schedule		
Yes	95	47.5
No	105	52.5
Total	200	100
If NO what reasons do you have		
I forgot	41	20.5
I could not get the services	4	2
I felt it was not necessary	21	10.5
I did not have fare to the hospital	12	6
Others	122	61
Total	200	52.5

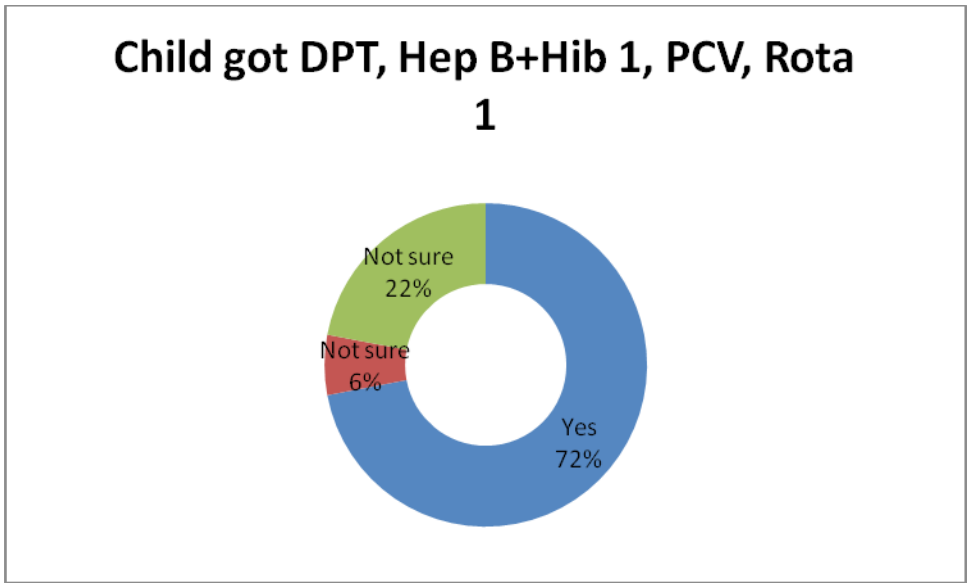
The results in table 4 above show that the majority of the respondents, 145(72.5%) said that all the children below five years were immunized while few, 55 (27.5%) said that all the children below five years were not immunized. Majority (52.5%) of the respondents said the children were not immunized according to the immunization schedule while few (47.5%) said the children were not immunized according to immunization schedule. Majority (20.5%) of the respondents said they forgot to take the children for immunization while few (2%) said they did not have access to immunization services.

Figure 1: BCG and Polio 0 was administered at birth



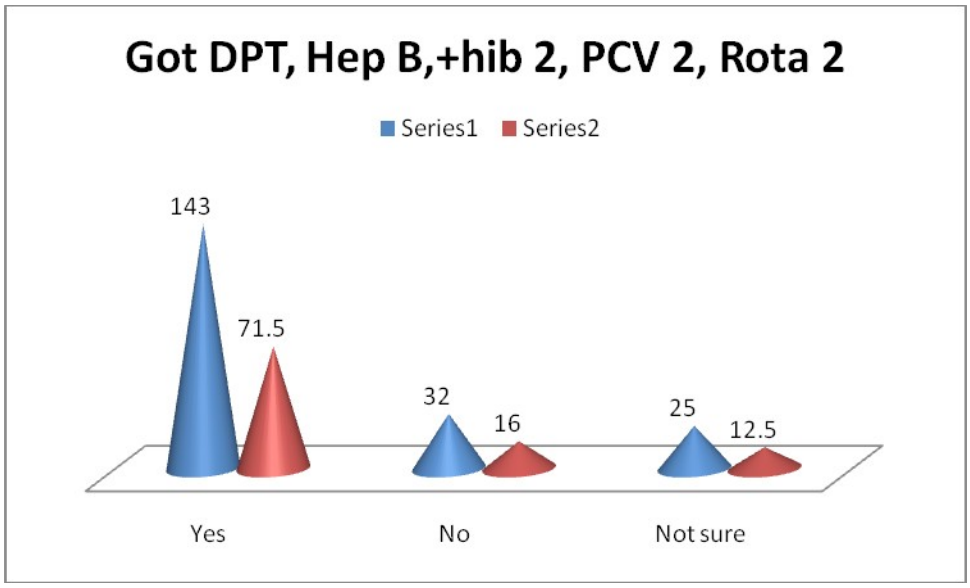
The results in figure 2 above, show that the majority (40%) said the children got BCG vaccine at birth while (34%) did not know whether the children got BCG or not and (26%) said they did not get the BCG vaccine.

Figure 2: Child got second dose of DPT, Hep B+ Hib 1, PCV and Rota 1



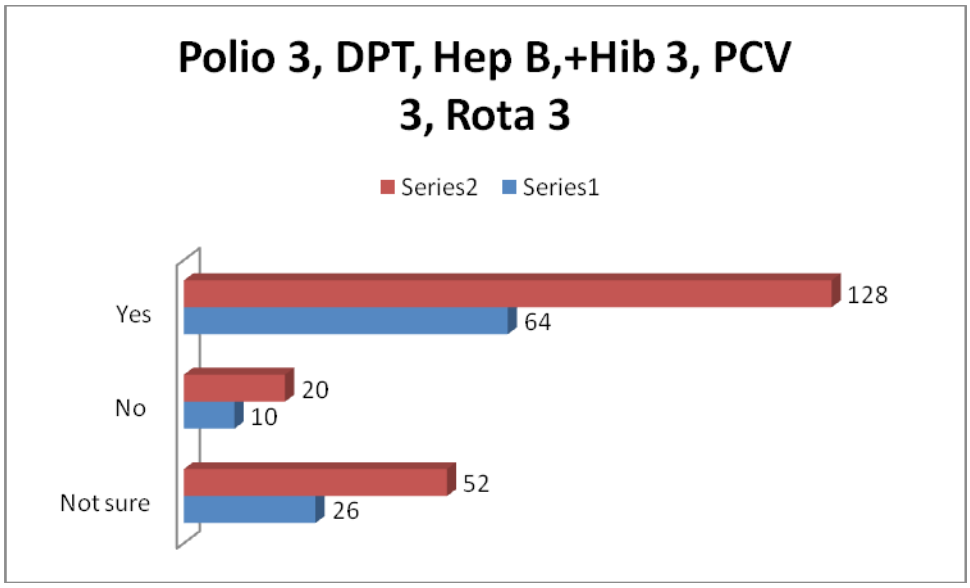
The results in figure 3 above, show that the majority (72%) of the respondents said the children got the second vaccine while (22%) said they were not sure whether the children got the second dose of vaccine or not and few (6%) said the children did not receive the second dose of immunization.

Figure 3: The third dose of immunization was administered



The results in figure 4 above, show that the majority (71.5%) of the respondents said the children got the third dose of vaccine while some of the care takers (16%) said the children did not get the third dose and few(12.5%) said they were not sure whether the children were immunized for the third dose or not.

Figure 4: Fourth dose of immunization was administered



The results in figure 5 above, show that the majority (64%) of the respondents said the children got the fourth dose of vaccine while some of the caretakers (26%) said they were not sure whether the children got the fourth dose or not and few (20%) said the children did not get the fourth dose of vaccine.

Table 5: Practices of immunization (per the disease) of children below five years

Received Vitamin –A at 6 months	N=200	Percent
Yes	121	60.5%
No	29	14.5%
Not sure	50	25%
Total	200	100%
Got measles vaccine at 9 months		
Yes	116	58%
No	29	14.5%
Not sure	55	27.5%
Total	200	100%
De-wormed at one year		
Yes	117	58.5%
No	25	12.5%
Not sure	58	29%
Total	200	100%

The results in table 5 above, show that the majority, 121 (60.5%) of the respondents said the children got vitamin A at the age of six months, with the least, 29 (14.5%) saying that the children did not get vitamin A at the age of six months. Majority of the respondents,116(58%)

said the children got measles vaccine at 9 months with the least, 29(14.5%) did not get the measles vaccine at 9 months. Majority of the respondents, 117(58.5%) said the children were dewormed at the age of one year with the least, 25(12.5%) saying that they did not deworm the children at the age of one year.

CHAPTER FIVE: - DISCUSSION

5.0. Introduction

This chapter consists of detailed discussion of the findings of the results. Items of the findings are discussed according to the statement of the problem, specific study objectives, to answer the research questions and these findings have been compared to other researcher's findings reviewed in the relevant literature previously.

5.1. Knowledge of immunization

The knowledge of the respondents was measured using whether the respondents had heard about immunization, the meaning of immunization, the knowledge of diseases children are immunized against, and the number of immunization visits made during immunization.

The respondents showed low level of knowledge about immunization. The average knowledge about immunization was estimated to be 45% which is less than average. The knowledge of immunization was also measured using the number of years immunization services have been available since they were introduced. The respondents were expected to have high level of knowledge that is above 75% because immunization services have been practiced for more than three decades and therefore immunization is not a new ideology. This finding was in contrast to Grinva F et al, (2011) in the United Arabic Emirates where by respondents depicted a good level of knowledge among the mothers who attended the antenatal care and wards in Al Ain in United Arabic about the immunization. More than 85% knew about the childhood vaccinations that prevent the life threatening diseases, and 62% were aware about the lifelong protection. Contrast findings have been reported by in India by Mahalingam et al (2014) where by majority of the mothers who took part in the study in urban areas showed high level of knowledge in comparison to those who were in rural areas. The mothers from urban areas had 75.6% in contrast to the mothers in rural areas that had 62.69%.

Against this expectation the respondents never had the good knowledge they were expected to have. This could be attributed to various factor for example the knowledge level of the respondents and the social class of the respondents, and the immunization services which have been taken as routine without educating the people about the benefits of immunization and the consequences associated to failure to immunize the children. Similar findings were reported in

Saudi Arabia by Zahrani J., (2013) to determine the knowledge attitude and practices towards immunization among mothers in the Kingdom of Saudi Arabia showed that mothers did not have adequate knowledge about immunization. The knowledge was dependent on age, and education level. Older mothers were less likely to have knowledge about the immunization than younger mothers and the mothers who were less educated had less knowledge about immunization.

All the respondents had heard about immunization. The health facilities had played a very vital role in disseminating information about immunization as more than half of the respondents heard about immunization at the health facilities. Other sources of information about immunization included learning in class, hearing at the workshops, hearing from friends, and the media.

Despite the fact that all the respondents had heard about immunization and majority of the respondents knew the correct meaning of immunization, the remaining number of the respondents who did not know the correct meaning was less than half of the respondents who took part in the study. The respondents who knew the correct meaning said “it is the process of administering a vaccine to prevent diseases”. On the other hand those who did not know the meaning of immunization said “it is just a routine”, others said “it a birth control measure” and others did not know what immunization meant. Similar findings were reported in Canada by Ritvo et al (2003) which showed low levels of knowledge on vaccines. Most adults did not understand how vaccines work and never knew why they were vaccinated when they were young. In this study only 32.1% of the respondents endorsed the use of vaccines in contrast to the majority 67.9% who did not endorse vaccination.

The respondents showed low level of knowledge on the diseases that children below five years are immunized against as more than half of the respondents knew some of the diseases while less than a quarters did not know the diseases children are immunized against. On the other hand those who knew all the diseases were less than one quarter and they were the least in number. The respondents were further asked select one of the diseases that children are immunized against. The respondents further exhibited their poor level of knowledge. This was seen when less than one quarter selected tuberculosis as the disease that children are immunized against while the rest of the respondents wrongly selected malaria and typhoid. This finding was in line with Ahmed S., et al, 2013 in Egypt which revealed low level of knowledge and awareness

among the mothers where by only 75% of the mothers mentioned tuberculosis, measles and hepatitis vaccines while 25% did not know any vaccinations.

This is in agreement with the study done in Uganda by E. Bbale in 2013, which the results revealed the slightly over 50% of children in Uganda were fully immunized. He associated the factors towards immunization compliance with the maternal education, especially on post-secondary education levels. In his study in Eastern Uganda, Dr.Divyashree Shetty found out that for all vaccinations (BCG, polio 0-3 and DPT-HB-Hib1-3) women with some secondary education achieved higher vaccination coverage for their infants than women with a primary education and vaccination coverage dropped steadily from BCG (the first vaccination) to DPT-HB-Hib 3, more so for those with only primary education.

5.3. Attitude towards immunization

The attitude towards immunization was measured using the respondents' behaviors, views and thinking about immunization. This involved if immunization protects against killer diseases, whether immunization reduces chances of contracting infections, importance of immunization, necessity of immunization, the quality of immunization services available and any punishment against defaulters was relevant.

The respondents showed positive attitude towards immunization of children below five years. The attitude has been estimated to be 70% of the population. A significant number of respondents believed that immunization protects children from deadly diseases. On the other hand less than one quarter of the respondents showed a negative attitude towards immunization; they believed that immunization does not protect children against deadly diseases. This finding is similar to Quidai W, et al, 2007 in Ethiopia which showed a positive attitude with above 90% of the respondents favoring the immunization and had beliefs that it prevents the diseases (Quidai W, et al, 2007). In addition to this more than three quarters of the respondents said that immunization reduces the chances of contracting the diseases in contrast to less than one quarter who said that immunization does not reduce the chances of contracting the deadly diseases. Similar finding have been reported in Saudi Arabia by Bofarraji, 2008 where the care takers had a positive attitude towards immunization of children the attitude was estimated to be 78%. Contrast findings were reported in California in the United States of America by Barbara B., 2003 where

mothers believed that there were increased risks of contracting hepatitis when the child is vaccinated against hepatitis. They felt that their children would better be not vaccinated against the hepatitis to reduce the chances of not falling sick from hepatitis.

A massive number of respondents believed that immunization is very important to children who are below five years and they further affirmed that immunization of children below five years is necessary. This was against the few respondents who believed that immunization of children is not important and not necessary. The respondents were asked to explain how important immunization is to the children and majority of the respondents said it protects the children against diseases. While other respondents did not know how important immunization is to the children. Contrast finding was seen in Pakistan according to a study done by Asim M, et al, 2012, which showed a negative attitude towards immunization among the parents who had taken their children for immunization. The parents claimed that immunization had various side effects. The fact that the side effects were reported in this study the advantages of immunization outweighed the side effects.

The respondents showed positive attitude towards advising other people to immunize the children who are below five years. This was shown when a significant proportion of the respondents said they could advise other people to immunize children below five years in contrast to few respondents who said they could not advise others to immunize the children.

The respondents showed a positive attitude towards immunization when three quarters of the respondents said that immunization of children should be made compulsory against the few who said that immunization should not be made compulsory. Similarly more than half of the respondents said that those care takers who don’t immunize the children should face the legal punishment. This once was proposed in the year 2013 by the republic of Uganda to help in promoting immunization practices. However the number of respondents who accepted punishment of care taker was slightly lower than those who said immunization should be made compulsory.

More than half of the respondents said the government had done enough to ensure availability and good quality of immunization services. On the other hand there are those who said the government had not done enough in ensuring immunization services. The fact is that the

government has done much in ensuring that immunization services are available even in rural areas and these services are free. On the same note more than half of the respondents said that the immunization services in Namuwongo are good. This was against the few respondents who felt the immunization services in Namuwongo are not good.

5.4. Practices towards immunization

The practices of immunization were measured using the immunization schedule where by the respondents were expected to report whether children got the vaccines according to the Uganda immunization schedule. The immunization schedule starts immediately after birth where the baby is supposed to receive BCG vaccine. This study stopped at the age of one year where the children get only deworming tablets or syrup.

The study findings showed poor immunization practices among the care takers of children below five years in Namuwongo. The average was found to be 61% immunization coverage of children below five years in Namuwongo. The recommended immunization coverage by WHO is 90%. The finding of this study revealed discrepancies in poor immunization practices as compared to the recommended coverage. Similar findings were reported in New Zealand by Harris H, et al, 2002, where by the immunization coverage did not achieve the 95% target by the ministry of health in New Zealand. The fact is that the immunization did not acquire the set goal there was immunization above 80% among the children in New Zealand. This was not meeting the required standards despite the positive attitude towards immunization among the respondents who took part in this study.

Less than three quarters of the respondents said that all the children they were taking care of were fully immunized, and more than half followed the immunization schedule. Those who did not follow the immunization schedule had various reasons why they did not follow the schedule. Majority of them forgot the dates they were supposed to go back, others did not have the fare to the health center others said they did not use to stay with the children and few said they could not access the immunization services.

More than half of the respondents did not get the BCG vaccine at birth this could be probably the mothers were weak after delivery and they could not pay enough attention to this or some care takers were not available during delivery and therefore they did not know whether it was given

or not given. More than half of the respondents said the children got the second dose of vaccine. This number is higher than the number of children who got the BCG vaccine. It could be due to some children may have missed the vaccine if they suspected to have HIV which contra-indicates BCG vaccine. The number of respondents who were not sure was higher than the number of respondents who knew the second dose was not given. Contrast findings were reported in India by Roy S, et al, 2013, by the practices were satisfactory compared to the goal of the United Nations. Assessment of the immunization schedule compliance the BCG, OPV, DPT Hep B and measles the coverage was around 90% percent which is the World Health Organization goal. The study found out that the third dose was below 90% that is OPV and DPT. The complete immunization was seen among the Muslims and Hindus and the literate groups showed complete immunization against the illiterate groups who had incomplete immunization.

More than half of the respondents said that the children got the third and the second dose of immunization respectively. On the other hand some respondents did not know whether children got the third and fourth dose respectively against those who did not get the third and fourth dose respectively. More than half of the respondents said the children got vitamin A at the age of six months, in contrast to few who said the children did not get vitamin A at the age of six months. In addition to this more than half of the respondents said the children got measles vaccine at the age of nine months and they were de-wormed at the age of one year. On the other hand less than half of the respondents did not get measles vaccine and de-worming tablets or syrup respectively. Contrast findings were reported in India by Jabapur, 2013, where by immunization was satisfactory with all the mothers who were booked getting all the tetanus toxoid injection. The fact that the immunization was not done on the children it does give too much view on how the mothers could respond to the immunization of their children.

CHAPTER SIX: - CONCLUSIONS AND RECOMMENDATIONS

6.0. Introduction

This chapter consists of the conclusion drafted from the study and the recommendations made by the researcher basing on the findings of the study.

6.1. Conclusion

The findings of this study revealed low levels of knowledge on the types of the diseases the children below five years are immunized against, the immunization schedule, the number of visits to be made during immunization, and average knowledge on the meaning of immunization.

The respondents showed a positive attitude towards the immunization of the children below five years. The respondents showed appropriate attitude on the importance of immunization, the necessity of immunizing the children below five years, advising the other care takers to immunize the children and the services offered at the health centers.

The findings of the study showed that the practices were good but did not meet the desired standards recommended by the World Health Organization. The World Health Organization recommends 90% coverage.

6.2 Recommendations

The researcher therefore draws the following recommendations from this study:

The care takers should be educated about the immunization. The education should be based on the diseases the children should be immunized against, and the immunization schedule.

The attitude of the care takers should be boosted by putting more emphasis on the importance of immunization and the dangers of not immunizing the children below five years.

The care takers should be motivated through community based health education, to take the children below five years for immunization according to the Uganda immunization schedule.

6.3 Recommendations for further studies

Further studies should be done on the following:

i. The factors influencing low immunization coverage of children below five years.

ii. The coverage of immunization of children below five years both in rural areas and urban areas.

iii. Comparative studies about the knowledge attitude and practices of immunization of children below five years in rural and urban areas.

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APPENDIX 1:- CONCENT FORM

Topic under study: The knowledge attitude and practices towards immunization among the care takers of children below five years.

Questionnaire No ….....

Date ….....

Introduction and consent

My name is Immaculate of International Health Sciences University, pursuing Bachelors of Nursing Science. I would like to request you to kindly take part in the above mentioned study by responding to the questions that I am going to ask you. This research is a basic requirement for study purposes. The participation in this study is free and voluntary, the information you will provide will be confidential, and will serve the purpose of this study. Taking part and responding to these questions will take you the minimum of ten and a maximum of fifteen minutes. Taking part in this study by giving your information will serve as a prove that you took part in the study.

Date……

Sign……

APPENDIX 2:- QUESTIONNAIRE

SECTION A:

SOCIO-DEMOGRAPHIC FACTORS

Age of the respondents

…….

Sex/gender:

Male..... Female.....

Tribe.....

Muganda…….. Munyankole…….

Musoga……. Acholi……..

Others…….

Religion:

Catholic..... Protestant.....

Muslim..... Others (specify).....

Marital status

Single..... Married.....

Divorced…….Widowed……

KNOWLEDGE OF IMMUNIZATION

Have you ever heard about immunization of children below five years?

A.YES…….. B. NO……..

If YES above where did you hear it from?

Friend…….

B. TV…….

Radio……..

Health center……

Others (Specify)…….

What is the meaning of immunization?

Process of administering a vaccine to prevent diseases……

Is just a routine of injecting children.....?

Immunization is a birth control measure……..

Other(Specify)

……

……

……..

How many diseases do you know that children below five years are immunized against?

All of them……

Some of them……

None of them…….

Which of the following diseases is immunizable?

Malaria…….

Typhoid……

Tuberculosis……

How many visits is a child supposed to make to the hospital to complete immunization schedule in Uganda?

10 Visits

8 Visits

6 Visits

4 visits

Is immunization important in preventing deadly diseases among children below five years?

YES

NO

In case the children are not immunized do you think they may contract the deadly diseases?

YES……

NO…….

ATTITUDE TOWARDS IMMUNIZATION

According to you, do you think immunization is important to every child below 5 years?

YES……

NO…….

If YES above, how important is immunization to children below five years.

……
……
……

Would you advice any parent/ caretaker to immunize their children?

YES……

NO…….

Do you think it is good for the government to make immunization compulsory to all children?

YES……

NO…….

Do you think the parents who don’t immunize their children should be punished by law?

YES……

NO…….

Do you think immunization is important to every child below five years?

YES……

NO…….

If YES above how important is immunization to children below five years?

……
……
……

Do you think it is necessary to immunize all the children below five years?

YES…….

NO……..

Do you think the government has played its role to ensure proper immunization services of children below 5 years?

YES……

NO…….

Do you think the immunization services offered in health centers in Namuwongo are of the required standards?

YES……

NO…….

PRACTICES TOWARDS IMMUNIZATION

Have you immunized all your children?

Yes

No

If NO above what reason (s) do you have for that?

……
……
……

Are all your children immunized fully according to the immunization schedule?

Yes

No

If No above what reasons do you have for not immunizing them fully?

I forgot

I could not get the services

I felt it was not necessary

I did not have fare to the hospital

Others (Specify)……

Did the child get the first dose at of (BCG) at the time of birth?

Yes

No

I don’t know

Did the child get the second dose of immunization at four weeks if he/she is above four weeks?

Yes

No

Not sure

Did the child get the third dose at ten weeks if he/she is above ten weeks?

Yes

No

Not sure

Did the child get the fourth dose at fourteen weeks if he/she is above fourteen weeks?

Yes

No

Not sure

Did the child get vitamin A at six months if he/she is above six months?

Yes

No

Not sure

Did the child get measles vaccine at 9 months if he/she is above 9 months?

Yes

No

Not sure

Did the child de-worm at one year if he/she is one year and above?

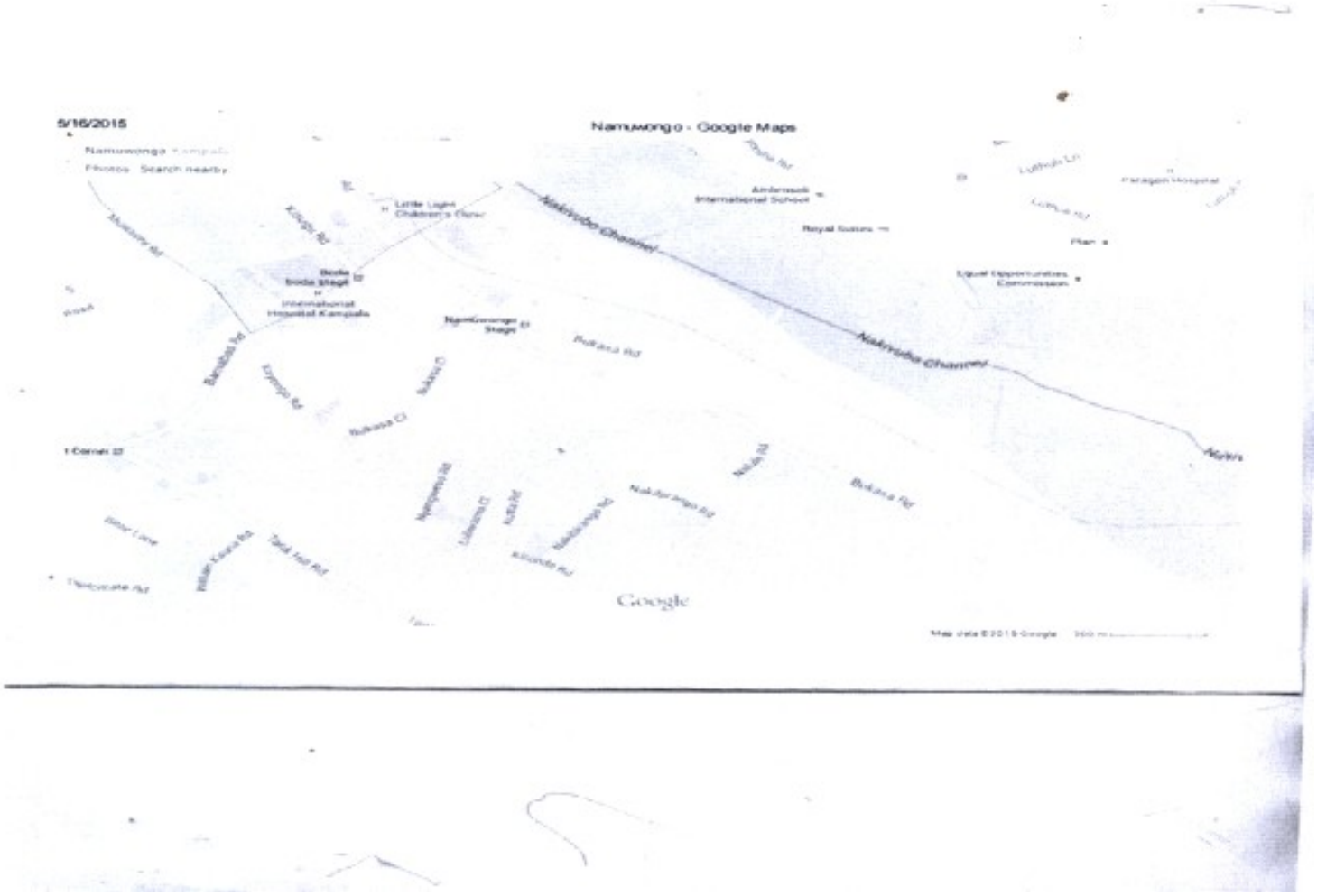
Yes

No

Not sure

THANK YOU FOR PARTICIPATING IN THIS STUDY

APPENDIX 3:- MAP OF NAMUWONGO



APPENDIX 4:- INTRODUCTORY LETTER

IHSU

IHSU INTERNATIONAL HEALTH SCIENCES UNIVERSITY

PART OF INTERNATIONAL MEDICAL GROUP

Office of the Dean, School of Nursing

Kampala, On the 5th day of August, 2014

TO WHOM IT MAY CONCERN

Re: Assistance for Research

Greetings from International Health Sciences University.

This is to introduce to you **Namulindwa Immaculate** Reg. No. **2011-BNS-TU-024,** who is a student of this University. As part of the requirements for the award of a Bachelor of Nursing Sciences of this University, the student is required to carry out field research for the submission of a Research Project.

Immaculate would like to carry out research on issues related to: **Knowledge, attitude and practice on immunization among caretakers of children below five years in Namuwongo village**

I therefore request you to render her such assistance as may be necessary for her research.

I, and indeed the entire University are thanking you in anticipation for the assistance you will render to her.

Sincerely Yours,

International Health Sciences University
05 AUG 2014
SCHOOL OF NURSING
P. O. Box 7782, Kampala (U)

MRS. WAFULA ELIZABETH

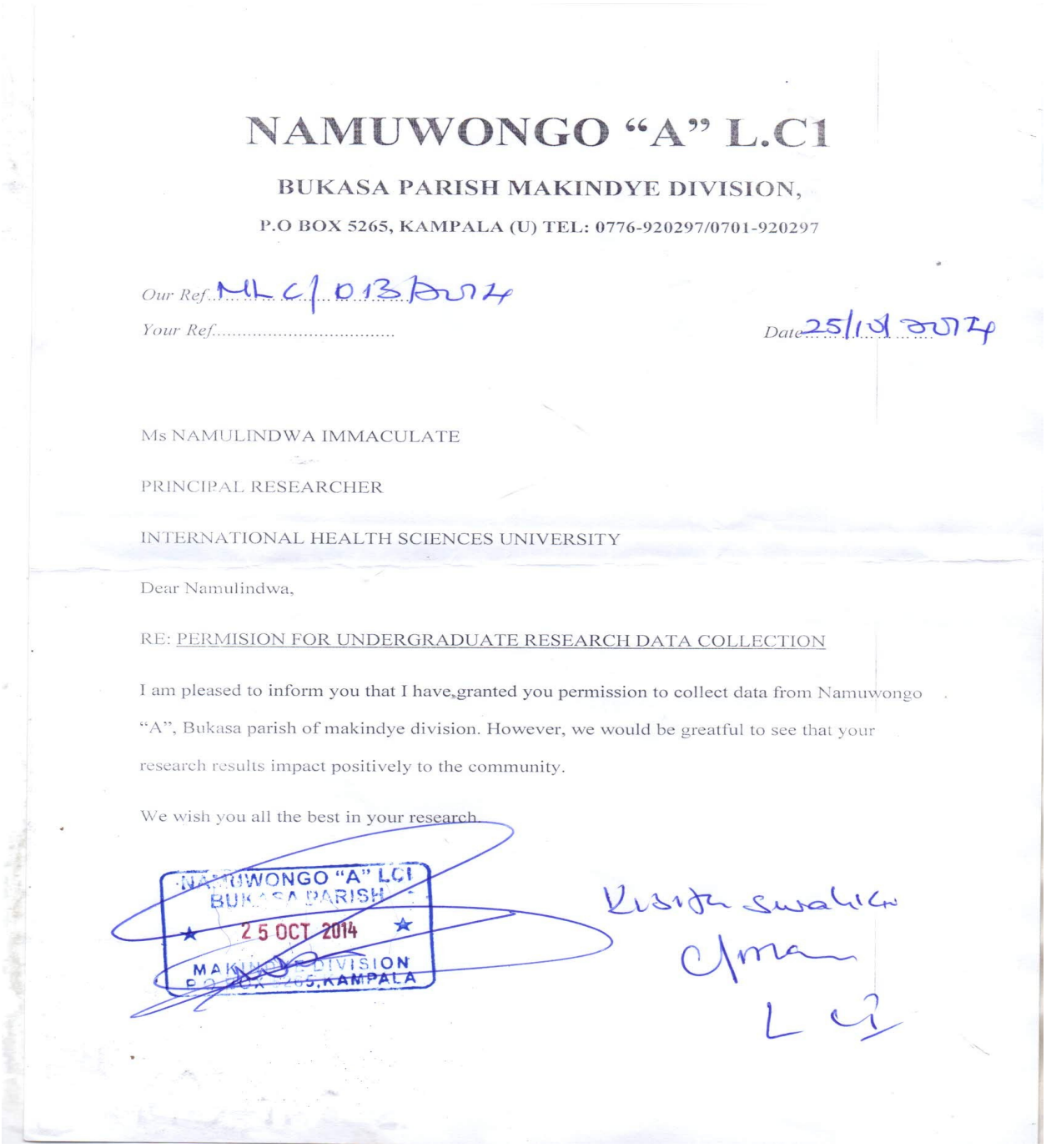
DEAN

MAKING A DIFFERENCE IN HEALTH CARE

International Health Sciences University
P.O. Box 7782 Kampala | Uganda | East Africa
Tel: (+256) 0312 307 400 | E-mail: vc@ihsu.ac.ug | web: www.ihsu.ac.ug

APPENDIX 5:- CORRESPONDENCE

L.C1 NAMUWONGO



NAMUWONGO "A" L.C1

BUKASA PARISH MAKINDYE DIVISION,

P.O BOX 5265, KAMPALA (U) TEL: 0776-920297/0701-920297

Our Ref. NLC/013/2014

Your Ref......

Date 25/10/2014

Ms NAMULINDWA IMMACULATE

PRINCIPAL RESEARCHER

INTERNATIONAL HEALTH SCIENCES UNIVERSITY

Dear Namulindwa,

RE: PERMISION FOR UNDERGRADUATE RESEARCH DATA COLLECTION

I am pleased to inform you that I have granted you permission to collect data from Namuwongo "A", Bukasa parish of makindye division. However, we would be greatful to see that your research results impact positively to the community.

We wish you all the best in your research.

NAMUWONGO "A" LCI
BUKASA PARISH
25 OCT 2014
MAKINDYE DIVISION
P.O.BOX 5265, KAMPALA

Visit Swahili

L C 1