

**FACTORS CONTRIBUTING TO ENROLLMENT OF HIV/AIDS PATIENTS  
IN ART CARE CLINIC IN KAMBUGA HOSPITAL  
KANUNGU DISTRICT UGANDA.**

**BY**

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UNIVERSITY**

**JULY, 2017.**

**DECLARATION**

I declare that the work presented in this book was personally done by me, the author, in Bushenyi – Uganda and has never been presented to any institution of learning for any academic award.

*Y. Crispino*

*08/08/2017.*

Signature

Date

ARIYO CRISPINO

RESEARCHER.

## **DEDICATION**

This book is dedicated to my dear parents Mr. Tukahebwa Didace and Mrs. Victoria Tukahebwa for their financial and spiritual support. My brothers Oleije Alex, Niwagaba Robert, and Amanyā prosper, my sisters Tumuhimbise Vasinah, Tumuheise Aurea, Turyahebwa Bibianah and Tukamushaba Scovia for their guidance love and encouragement.

## APPROVAL

This research report presented as factors contributing to enrollment of HIV/AIDS Patients in ART CARE CLINIC in kambuga hospital Kanungu district has been compiled and Organized by Ariyo Crispino under my supervision and is to be submitted for examination Purposes in partial fulfillment of the requirement of the award of a diploma in clinical medicine and community health.

*Tut*  
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*08/08/17*  
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Signature

Date.

TUTAMWEBWA THOMAS

## ACKNOWLEDGEMENT

In all things that I have learnt to acknowledge the fact that God is supreme. It goes with the saying that he is the reason i have come this far and to him we give the glory and honour.

My education that bore this piece of work is attributable to my parents iam grateful for numerous support they accorded to me in various ways to successfully complete this work.

Special acknowledgement goes to my supervisor Mr. Tutamwebwa Thomas for the tireless efforts and patience while guiding me through this project .He turned my views into intelligible concepts. No words can coin my gratitude.

Iam humbled and grateful for all the help and love accorded by different selfless individuals, families and classmates, inclusive. May God richly bless you.

## LIST OF ABBREVIATIONS

**AIDS.** Acquired immunodeficiency syndrome

**ART.** Antiretroviral therapy

**ARVs.** Antiretroviral drugs

**CD4.**Cluster of differentiation antigen designation.

**HIV.1.**Human immunodeficiency virus 1

**HIV.2.**Human immunodeficiency virus 2

**MOH .**Ministry of health

**NAID.** National association for information destruction.

**PLWHA.**People living with human immunodeficiency virus/ acquired immunodeficiency syndrome.

**UNAIDS.**United nations programme on Acquired immunodeficiency syndrome

**TB.**Tuberculosis.

**WHIO.** World health organization

## DEFINITION OF TERMS

**Antibody** .A substance in the body capable of destroying disease causing agent.

**Antigen.** Any substance which under favorable conditions can stimulate production of antibodies.

**Antiretroviral drugs.** Drugs used to boost the immunity of the Human immunodeficiency virus and can transmit it to others.

**Drug toxicity.** The quality of which the drug is poisonous.

**HIV positive.** The individual is infected with the Human immunodeficiency virus and can transmit it to others.

**Infection.** The successful invasion, establishment and growth of microorganisms in the body.

**Informed consent.** It means that an individual has been provided with essential information about HIV/AIDS and HIV testing, has fully understood it and based on this has agreed to undergo HIV test.

**Mortality.** Number of frequency of death.

**Side effect.**An extra and usually bad effect that a drug has.

## TABLE OF CONTENTS

DECLARATION .....	I
DEDICATION.....	II
APPROVAL .....	III
ACKNOWLEDGEMENT .....	IV
LIST OF ABBREVIATIONS .....	V
DEFINITION OF TERMS.....	VI
TABLE OF CONTENTS .....	VII
LIST OF TABLES .....	IX
ABSTRACT.....	X
CHAPTER ONE:INTRODUCTION.....	1
1.1 BACK GROUND .....	1
1.2 PROBLEM STATEMENT .....	2
1.3 STUDY OBJECTIVES.....	3
1.3.1 General Objective .....	3
1.3.2 Specific Objectives .....	3
1.4 RESEARCH QUESTIONS.....	3
1.5 JUSTIFICATION .....	3
1.6 CONCEPTUAL FRAME WORK.....	4
CHAPTER TWO:LITERATURE REVIEW .....	6
2.0 INTRODUCTION.....	6
2.1 FACTORS CONTRIBUTING TO ENROLLMENT OF PATIENTS TO ART CLINIC .....	6
2.2 PSYCHOSOCIAL FACTORS. ....	6
2.3 ECONOMIC FACTORS .....	7
2.4 HEALTH SYSTEM FACTORS .....	8
3.1 INTRODUCTION .....	9
3.2 STUDY DESIGN.....	9
3.3 STUDY AREA .....	9
3.4 STUDY POPULATION .....	9
3.4.1 SAMPLE SIZE DETERMINATION .....	9
3.4.2 SAMPLING PROCEDURE .....	9
3.5.1 Inclusion criteria .....	10
3.5.2 Exclusion criteria .....	10
3.6 RESEARCH INSTRUMENTS.....	10
3.7 DATA COLLECTION PROCEDURE.....	10
3.7.1 Data management.....	10



3.7.2 Data analysis and presentation.....	10
3.8 ETHICAL CONSIDERATION.....	10
3.9 STUDY VARIABLES.....	11
3.9.1 INDEPENDENT VARIABLES .....	11
3.9.2. DEPENDENT VARIABLE.....	11
3.10 DISSEMINATION OF RESULTS .....	11
CHAPTER FOUR:FINDINGS OF THE STUDY.....	12
4.1 DEMOGRAPHIC CHARACTERISTICS OF THE PARTICIPANTS. ....	12
4.2: ASSOCIATION BETWEEN PSYCHOSOCIAL FACTORS AND ENROLLMENT OF HIV PATIENTS TO ART CARE CLINIC .....	13
4.3: ASSOCIATION BETWEEN ECONOMIC FACTORS AND ENROLLMENT OF HIV PATIENTS IN ART CARE CLINIC.....	14
4.4: ASSOCIATION BETWEEN HEALTH SYSTEM FACTORS AND ENROLLMENT OF HIV PATIENTS IN ART CLINIC. ....	14
CHAPTER FIVE:DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS.....	16
5.1 DISCUSSION .....	16
5.11 ASSOCIATION BETWEEN PSYCHOSOCIAL FACTORS AND ENROLLMENT OF HIV PATIENTS TO ART CARE CLINIC. ....	16
5.12 ASSOCIATION BETWEEN ECONOMIC FACTORS AND ENROLLMENT OF HIV PATIENTS TO ART CARE CLINIC .....	16
5.13 ASSOCIATION BETWEEN HEALTH SYSTEM FACTORS AND ENROLLMENT IN ART CARE CLINIC. ....	17
SHORT COMINGS .....	18
5.2 CONCLUSION.....	18
5.3 RECOMMENDATIONS .....	18
REFERENCES .....	20
APPENDICES .....	21
APPENDIX 1: KREJCIE AND MORGAN TABLE .....	21
APPENDIX 2: CONSENT FORM. ....	22
APPENDIX 3: QUESTIONNAIRE.....	23
APPENDIX 4: MAP OF UGANDA.....	25
APPENDIX:5. A MAP OF KANUNGU DISTRICT.....	26
APPENDIX 6 THE INTRODUCTORY LETTER .....	27

## LIST OF TABLES

TABLE 1: DEMOGRAPHIC CHARACTERISTICS OF THE PARTICIPANTS.....	12
TABLE 2: PSYCHOSOCIAL FACTORS ASSOCIATED WITH ENROLLMENT OF HIV PATIENTS TO ART CARE CLINIC .....	14
TABLE 3: ECONOMIC FACTORS ASSOCIATED WITH ENROLLMENT OF HIV PATIENTS IN ART CARE CLINIC.....	14
TABLE 4: HEALTH SYSTEM FACTORS ASSOCIATED WITH ENROLLMENT OF HIV PATIENTS IN ART CLINIC.....	15

## ABSTRACT

**Topic:** Factors contributing to enrollment of HIV patients in ART care clinic in Kambuga hospital Kanungu district.

**Specific objectives:** To determine association between psychosocial factors and enrollment of HIV patients in ART care clinic ,to determine association between economic factors and enrollment of HIV patients in ART care clinic, to determine association between health system factors and enrollment of HIV patients in ART care clinic.

**Methods.** The study used a cross-sectional design with quantitative approaches. The study used a sample size of 80 respondents. Questionnaire was used as an instrument to collect data. Descriptive statistics were used to present quantitative data and this involved the use of frequency tables.

**Results:** stigma, fear of disclosure, fear of side effects of drugs and fear of drug toxicities were some of the associated psychosocial factors. Patients inability to take time of work for clinic appointments, transport costs patients , food insecurity and inadequate patient resources were the associated economic factors while the associated health system factors included inadequate counselors ,staff shortages ,less frequent dispensing and long waiting hours by patients.

**Conclusion:** The association between psychosocial factors and enrollment of patients included stigma followed by fear of disclosure then fear of drug toxicities and finally fear of drug side effect. The association between economic factors and enrollment included patient's inability to take time of work for clinic appointments followed by transport costs then food insecurity and finally inadequate resources. The association between health system factors and enrollment included inadequate counselors followed by staff shortages then less frequent dispensing and finally long waiting hours.

**Recommendations:** It was recommended that continuous health education and empowerment of parents, religious leaders, teachers and those affected with HIV/AIDS should get involved in dissemination of information concerning HIV/AIDS. Also there is need to train and recruit more personnel for efficiency in management of the patient.

## CHAPTER ONE

### INTRODUCTION

#### 1.1 Back ground

Human immunodeficiency virus (HIV) is the cause of Acquired immunodeficiency syndrome (AIDS) and it is the leading cause of death in those aged 15 to 49 years. There are two types of HIV namely HIV -1 and HIV -2. HIV -1 is the most common worldwide and HIV 2 is the relatively uncommon however it dominates in the parts of western Africa. (Hiv.com, 2016)

Enrollment to Art clinic means the process by which HIV patients register to become plan participants with the ART sponsored benefits. According to the NAID an estimated 10.6 million people globally were living with HIV /AIDS as of December 1997 and the figure was projected to reach 20 million by year 2000. As of 2015, 40 million people globally were living with HIV and 17 million people were enrolled to treatment. In sub-Saharan Africa an estimated 25.5 million people were living with HIV and 12.7 million people were enrolled to treatment. (Hiv.com, 2016)

In Uganda an estimated 1.6 million people were living with HIV and an estimated 63,000 Ugandans died of HIV related illness. Promising signs were shown between years of 2005 and 2013 as the number of AIDS related deaths in the country is reported to have decreased by 19%. Nevertheless at the end of 2013 Uganda had 140,000 new cases of HIV infections accounting for the 7% of the world's total increase. Robust treatment and prevention initiatives have been implemented in recent years leading to improved conditions of people living with HIV. Due to the implementation of Antiretroviral treatment throughout the country there has been a gradual increase in the number of people living with HIV receiving treatment. However as of 2013 more than 60% of adults were still not enrolled on treatment. A number of key affected populations exist in Uganda who are at risk of HIV infection and a few of these populations include

- 1) Men who have sex with men in Uganda an estimated 13.2% in 2013
- 2) Adolescent girls and women aged between 15-24 was estimated 4.2% and 2-4% for men. In September 2010 a nationwide safe male circumcision policy and communication strategy was launched focusing on promoting voluntary safe male circumcision for all men above 15 years as



an essential health service .This has gained positive results between October 2012and September 2013 the number of circumcised men was 801678.Statistics from (UNAIDS, 2014) fast track report put condom use among people with multiple sexual partners at less than 30% in the same report condom use among sex workers was estimated between 30% to 50% among men who have sex with men at less than 30% (MOH, 2014)

ART survey in 2013 reported 1478 health facilities in operation in Uganda offering antiretroviral treatment and that by September 2013 nearly 800,000 people living with HIV were enrolled on treatment. According to the 2010 world health organization guideline for ART the proportion of all ART eligible people living with HIV that were on treatment by the end of September 2013 in Uganda was 69%. However introduction of 2013 who guidelines mean that ART access now only stands at 40% for adults and 22% for children (MOH, 2014)

## **1.2 Problem Statement**

Although the implementation of antiretroviral treatment throught the country has increased the number of people living with HIV on treatment, many people are still diagnosed with AIDS today. There is no cure and vaccine for the prevention of HIV/AIDS to date. According to ministry of health Uganda, in 2013, more than 60% of the adults living with HIV were still not on treatment (MOH, 2014)

People living with HIV still face AIDS related stigma and discrimination and many people cannot access sufficient HIV treatment and care.

Kambuga is not an exception, in a year 2015 out of 400 people who tested hiv,180 were HIV positive and only 80 were enrolled in antiretroviral care (*Kambuga medical laboratory records and inpatient medical records*, 2015). More so out of the 500 patients admitted on male ward in 2015, 100 males were HIV positive and were not enrolled to care on female ward out of 700 female patients admitted in 2015, 150 females were suffering from HIV related illness and 70 were not enrolled to care . Out of 30 mortality cases that occurred in the hospital 2015, 20cases were due to HIV and it was due to failure of the patients to enroll to care yet there was an ART clinic in the hospital. (*Kambuga medical laboratory records and inpatient medical records*, 2015).Reasons for the low enrollment despite the free Antiretroviral drugs and other ART

services still remain unknown, so this research will help in determining why few positive individuals accept to be enrolled in the ART care clinic in kambuga hospital.

### **1.3 Study Objectives**

#### **1.3.1 General Objective**

To assess the factors contributing to low enrollment of HIV/AIDS patients in ART care clinic in kambuga hospital.

#### **1.3.2 Specific Objectives**

1 To determine association between psychosocial factors and enrollment of HIV/AIDS patients to ART care clinic in Kambuga hospital

2 To determine association between economic factors and enrollment of HIV/AIDS patients to ART care clinic in Kambuga hospital.

3 To determine association between health system factors and enrollment of HIV/AIDS patients in ART care clinic in kambuga hospital.

### **1.4 Research Questions**

1 what is the association between psychosocial factors and enrollment of HIV patients to ART care clinic?

2 what is the association between the economic factors and enrollment of HIV patients to ART care clinic?

3 What is the association between health system factors that and enrollment of HIV patients to ART care clinic?

### **1.5 Justification**

The research will be of great importance to the nation, kanungu district, kambuga hospital more so kambuga as a community as it will try to probe the reasons why there is no enrollment into ART care clinic despite the free ARV drugs.

Service providers like the government of Uganda, non-governmental organizations like USAID will improve on the services offered in ART care clinic programme.

The data obtained will be used for future planning in the management of ART care programme in kambuga hospital .The ART care programme administrators and managers at the district and health unit will be informed about the factors contributing to the low enrollment of HIV patients to ART care clinic so that new plans and policies and strategies may be put forward to improve ART care enrolment.

**1.6 Conceptual Frame Work**

**INDEPENDENT VARIABLES**

**DEPENDENT VARIABLE**





### **Summary of the conceptual frame work.**

There are many factors which contribute to enrollment of HIV patients to ART care clinic

The factors can be grouped into psychosocial factors, health system factors, and economic factors. Concerning psychosocial factors if the patients are stigmatized, if they fear to disclose that they are HIV positive, there will be low enrollment. If the art drugs become toxic and affect the enrolled patients, few will enroll.

For the economic factors, if the patients have inadequate resources, they will not have enough food and will not afford transport costs and hence low enrollment. For the health system factors, if there are not enough health service providers and counselors to health educate patients, patients will delay on ART clinic and thus low enrollment as they are not health educated. Other factors like cultural norms do not believe in medical drugs but in herbal medicine and hence will discourage people from enrolling to care. If there is bad climate like heavy rains, and sunshine there will be low enrollment



## CHAPTER TWO

### LITERATURE REVIEW

#### **2.0 Introduction**

This chapter deals with the contributions of various scholars on the subject under investigation. The literature is analysed basing on the themes developed from objectives and research questions.

#### **2.1 Factors contributing to enrollment of patients to ART clinic**

According to (Wilkins, 2012), factors contributing to enrollment of the patients to ART care clinic are categorized into psychosocial, health systems and economic factors. The psychosocial factors include stigma, fear of disclosure and fear of drug toxicities. Long clinic waiting times and shortage of health care workers were the main reported health system factors. Transport costs, distance to health facilities, food shortage, patient related time constraints and employed patients unable to take time of work for clinic appointments were the economic factors.

#### **2.2 Psychosocial factors.**

HIV stigma remains a major problem of the Aids epidemic in sub-Saharan Africa as people fear impending social stigma including blame, isolation and abuse. HIV infection and stigma interact cyclically creating and reinforcing economic and social exclusion for individuals living with HIV (Nicole.CK, 2008)

According to (Walker, 2008) stigma is a wide consensus that HIV related stigma compromises well being of people living with the diseases. The level of felt and anticipated stigma is intense and affects all dimensions of living with HIV/AIDS particularly disclosure and treatment. The intensity of HIV/AIDS related stigma can threaten to compromise the value of ART thus impacting on the daily lives of people living with HIV.

According to (Nicolette, 2007.) fear of disclosure to the child and others also is responsible for the low enrollment to ART clinic. Many ART centers require a treatment supporter ad that older children be informed of their own HIV positive status before taking ART as a way of encouraging enrollment. Care takers are required to disclose their child serosatus to the treatment

supporters for biological parents disclosing the child's status means disclosing their own. This has been found to hinder or delay uptake mainly due to stigma.

Many people often believe and research shows that people are experiencing side effects of drugs even when they are not. The side effects of drugs range from minor dizziness to muscle pain and heart palpitations that prompt the patients to stop taking their medicine which can increase their health risk (Reddy, n.d.)

According to the study done in Malawi, fear of ART drug toxicities and interactions was a limiting factor to ART uptake in HIV/TB co infected patients. Drug toxicities overlap with those due to TB drugs and cotrimoxazole (Kumwenda, 2011)

### **2.3 Economic factors**

Low and middle income countries are characterized by several deficits in infrastructure notably inadequate transport. As most patients who attend public ART facilities have no private transport. They rely chiefly on public means which are in many cases expensive and unsafe and in some areas unavailable. Limited incomes characteristics of patients in low income countries may in some cases preclude even using public transport. Thus if ART clinics are located far from residential townships patients have to walk which may require considerable effort particularly if they feel unwell (Kagee, A, Le Roux M, 2007)

In a qualitative study which was conducted in Uganda Tanzania and Botswana, participants reported that they were unable to afford food needed to satisfy their increased appetites following commencement of treatment especially in early stages of treatment when their bodies needed extra nutrition to regain lost weight and strength. Food insecurity may affect the regularity of ART doses as some patients take their medications only when they have food available (Hardonetal, 2007)

In context of high unemployment in many low income countries, Many patients lacking regular employment make themselves available as day laborers to employers willing to pay them a wage. Often the need for day's wages eclipses the potential benefit of ART clinic visit. The distinctive to seek clinic contacts exacerbated if the patients are asymptomatic and have to wait for many hours to interact with health provider in order to receive a supply of medication more



over frequent absences from work create conditions under which employers may terminate employment. The threat of losing employment for this reason often impedes ART clinic enrolment (Kagee, A, Le Roux M, 2007)

#### **2.4 Health system factors**

Staff shortages, long waiting hours by patients and less frequent dispensing has been found to reduce patient enrollment to ART. Long lines that people spend whenever they take children may interfere with their work and hence low enrollment to ART (Wilkins, 2012). Many clinics in African countries have long patient waiting times. Inadequate infrastructure and insufficient staff .severe staff shortages in public health clinics in several instances have necessitated only cursory exchanges between patients and their providers. When personnel available they may find themselves poorly prepared for the demands of ongoing relationships with patients who may be chronically ill (Frontiers, 2007)

Patients receiving treatment had problems including lining up and waiting many hours before they could collect their medication and being fearful of attack by criminals while waiting in queues. Some patients in an attempt to reduce the frequency of clinic visits would decrease their doses so that their supplies would last longer Thus the way public health clinic are organized may determine the nature and the level of access that patients have.(Breen A , Swartz L, Joskaj, Flisher AJ, 2007)

In an effort to alleviate the burden placed on professional health care workers lay counselors have been employed to assist with pre and post test HIV counseling yet in the context of competing demands on resources insufficient emphasis is often placed on adequate training and ongoing supervision and support for personnel and counseling is reduced to dissemination of information rather than processing of patients emotions and cognition to alleviate distress and alter long standing behavior patterns including no enrolment (Rohleder P, 2005)

## **CHAPTER THREE**

### **METHODOLOGY**

#### **3.1 Introduction**

This chapter presents the Study design , study area, study population, sample size determination, sampling procedure, inclusion criteria, , exclusion criteria, research instruments, data collection procedure, data management, data analysis and presentation, pilot study, ethical considerations , study limitation and dissemination of results.

#### **3.2 Study design.**

The study design was descriptive cross sectional employing quantitative data collection method.

#### **3.3 Study area**

This research was conducted in Kambuga hospital, Kanungu district western Uganda. Kambuga hospital is located 20km from Kanungu town. It is a government hospital. The hospital provides medical, surgical, obstetrics and gynecological services, pediatric and HIV care department. It has both inpatient and outpatient services with a bed capacity of 150 beds across all the wards/departments. Transport system in the area is inadequate as there are only murram roads which are difficult to pass especially in the rainy season. Kambuga is basically inhabited by Bahororo and Bakiiga who speak Ruhororo and Rukiiga

#### **3.4 Study population**

The study included health service providers of Kambuga hospital.

##### **3.4.1 Sample size determination**

The sample size was 80respondents, and it was determined by Morgan’s table appendix one

##### **3.4.2 Sampling procedure**

The researcher first utilized stratified sampling procedure to group the health service providers into strata according to their qualifications. After creating the sub groups for the respondents, simple random sampling technique was used to select the respondents of each group. Pieces of paper with the words Yes and No were folded and placed in an enclosed box then shaken afterwards. Potential respondents were invited by the researcher to pick the piece of the paper

from the enclosed box. Each group had a separate box and a respondent who picked a paper with Yes was requested to participate.

### **3.5.1 Inclusion criteria**

All health service providers who were present in the hospital on the days of data collection and who consented to take part in the study.

### **3.5.2 Exclusion criteria**

All health service providers who were absent in the hospital on the days of data collection.

### **3.6 Research instruments**

A structured questionnaire was used as a tool for gathering information. The structured questionnaire is preferred in this study because a lot of information can be collected over a short period of time.

### **3.7 Data collection procedure.**

Data was collected through close-ended self-administered questionnaires.

#### **3.7.1 Data management**

This included cross checking data before leaving the area of the study to ensure that there were no mistakes and in case of a mistake it was to be collected before leaving the area of study.

#### **3.7.2 Data analysis and presentation.**

Analysis of data using descriptive statistics of software was done and presented in frequent distribution tables .

### **3.8 Ethical consideration**

Approval to conduct research was sought from office of the administrator school of allied health sciences Kampala international university and from the Medical supretendant of Kambuga hospital. While in the field confidentiality was observed as participants had to consent first before participating in the study.

### **3.9 study variables**

#### **3.9.1 Independent variables**

These were the psychosocial, economic and health system factors.

#### **3.9.2. Dependent variable**

This was the low enrollment of HIV patients in ART care clinic.

### **3.10 Dissemination of results**

A copy of results will be forwarded to the school of allied health sciences at Kampala international university western campus for record keeping and another copy to kambuga hospital for future reference.

## CHAPTER FOUR

### FINDINGS OF THE STUDY

#### 4.1 Demographic characteristics of the participants.

80 respondents were interviewed using a structured questionnaire and their demographic characteristics were as follows. Most of the respondents were in the age group of 31 to 35 years and the majorities were females. Majority of the respondents were Catholics and many of them had certificate level of education and most of them were nurses. Most of the respondents were married.

**Table 1: Demographic characteristics of the participants.**

VARIABLE	FREQUENCY	PERCENTAGE
<b>Age</b>		
18-20	06	7.5
21-25	14	17.5
26-30	16	20.0
31-35	24	30.0
36-40	15	18.75
41-45	05	6.25
<b>Sex</b>		
Male	30	37.5
Female	50	62.5
<b>Religion</b>		
Catholics	39	48.75
Protestants	32	40.00
Moslems	5	6.25o
Others	4	5.00
<b>Education</b>		
Certificate	43	53.75
Diploma	30	37.5

Bachelors	6	7.5
Others	1	1.25
<b>Occupation</b>		
Clinical officer	6	7.5
Nurse	32	40
Midwife	24	30
Lab technician	14	17.5
Medical officers	4	5.0
<b>Marital status</b>		
Single	27	33.75
Widowed	6	7.5
Separated	1	1.25
Married	46	57.5

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**Source: Primary data**

#### **4.2: Association between Psychosocial factors and enrollment of HIV patients to ART care clinic**

From the results 40(50%) respondents indicated that fear to impede social stigma was the major psychosocial factor associated with enrollment of HIV patients to ART care clinic .Followed by 20(25%)respondents indicated that fear of patients to disclose that their HIV positive was the second psychosocial associated with low enrollment14(17.5%)respondents indicated that patients do not enroll due to fear of drug toxicities followed by 6(7.5%) respondents indicated that patients fear side effects of the ART drugs.



**Table 2: Psychosocial factors associated with enrollment of HIV patients to ART care clinic**

VARIABLE	FREQUENCY	PERCENT
Fear of disclosure	20	25
Drug toxicities	14	17.5
Social stigma	40	50
Fear of side effects	06	7.5

Source: Primary data

**4.3: Association between economic factors and enrollment of HIV patients in ART care clinic.**

From the results, 30(37.5%) respondents indicated that the major economic factor associated with enrollment of patients was that patients are unable to take time of their work for clinic appointments. This was followed by 26(32.5%) respondents who indicated that patients incur a lot transport costs to hospitals to ART clinics. 14(17.5%) respondents indicated that inadequate resources limits patients to enroll to care. 10(12.5%) respondents indicated that food insecurity limits the patients to enroll to care.

**Table 3: Economic factors associated with enrollment of HIV patients in ART care clinic.**

VARIABLE	FREQUENCY	PERCENT
Inability to take time for work	30	37.5
Transport costs	26	32.5
Inadequate resources	14	17.5
Food insecurity	10	12.5

Source: Primary data

**4.4: Association between Health system factors and enrollment of HIV patients in ART clinic.**

From the results, 26(32.5%) respondents indicated that inadequate counselors to counsel patients to enroll was the major health system factor associated with enrollment. This was followed by 24(30%) respondents who indicated that the staff shortages also was second health system factor which associated with enrollment of patients. Also 16(20%) respondents indicated that less

frequent dispensing was the third factor associated with enrollment. Then 14(17.5%) respondents indicated that patients have to wait for many hours thus low enrollment.

**Table 4: Health system factors associated with enrollment of HIV patients in ART clinic.**

VARIABLE	FREQUENCY	PERCENTAGE
Long waiting hours	14	17.5
Staff shortages	24	30
Inadequate training of counselors	26	32.5
Less frequent dispensing	16	20

Source: Primary data

## CHAPTER FIVE

### DISCUSION, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Discussion

Findings in the previous section are discussed here in line with the study objectives outlined in chapter one.

#### 5.11 Association between psychosocial factors and enrollment of HIV patients to ART care clinic.

Majority of respondents (50%) indicated that fear to impede social stigma was the major psychosocial factor associated with enrollment of HIV patients to ART care clinic thus the findings were in agreement with Katherine (2016) who noted that people do not enroll to ART due to fear to impede social stigma including blame.

Also 25% of the total respondents indicated that fear of patients to disclose that their HIV positive was the second psychosocial factor associated with enrollment which was in line with Nicolette (2007) who noted that fear of disclosure to the child and to other people is responsible to low enrollment to ART care.

Further, 17.5% of the total respondents indicated that patients do not enroll due to fear of drug toxicities which was in agreement with the study done in Malawi by Kumwenda (2011) who found out that fear of the of ART drug toxicities and interactions was a limiting factor to ART uptake.

Then 7.5% respondents indicated that patients fear side effects of the ART drugs thus the findings were in agreement with Sumathi (2014) who noted that side effects of drugs prompt patients to stop taking their medicine.

#### 5.12 Association between economic factors and enrollment of HIV patients to ART care clinic

Majority of respondents 37.5% indicated that major economic factor associated with enrollment of patients was that patients are unable to take time of their work for clinic appointments thus findings were in agreement with Kagee et al 2007 who noted that the threat of loosing employment for often impedes ART clinic enrolment.

Further, 32.5% of the total respondents indicated that patients incur a lot of transport costs to hospitals to ART clinics thus findings were in agreement with Kagee et al 2007 who noted that most patients who attend public ART facilities have no private transport they rely chiefly on public means which are in many cases expensive and unsafe and in some areas unavailable.

Then 17.5% of the total respondents indicated that inadequate resources limit patients to enroll to care and also 10 (12.5%) respondents indicated that food insecurity limits the patients to enroll to care thus findings were in agreement with the study done in Uganda Tanzania and Botswana by Hardon et al 2007 and found out that patients were unable to afford food needed to satisfy their increased appetites following commencement of treatment.

### **5.13 Association between health system factors and enrollment in ART care clinic.**

From the results 32.5% of the total respondents indicated that inadequate counselors to counsel patients to enroll was the major health system factor associated with enrollment thus findings were in agreement with Rohledler and Swartz 2005 who noted that counseling is reduced to dissemination of information rather than processing of patients' emotions and cognition to alleviate distress and alter long standing behavior patterns including no enrollment.

Further, 30% of the total respondents indicated that staff shortages also was second health system factor associated with enrollment of patients this was in line with Medicines sans frontiers 2007 who noted that severe staff shortages in public health clinics in several instances have necessitated only cursory exchanges between patients and their providers and thus low enrollment.

Then 20% of the total respondents indicated that less frequent dispensing was the third factor associated with enrollment which was in agreement with Williams and Wilkins (2012) who noted that less frequent of ART drugs dispensing has been found to reduce patient enrollment to ART. Then 17.5% of the total respondents indicated that patients have to wait for many hours thus low enrollment and this was in agreement with Breen et al 2007 who noted that patients had problems including lining up and waiting many hours before they could collect their medication and being fearful of attack by criminals while waiting in queues.

### **Shortcomings**

The target population of the study was supposed to be the HIV patients who tested positive and are not enrolled however these patients were impossible to obtain a reason to why the researcher used health service providers as the respondents to assess the factors contributing to low enrollment of patients in ART care clinic.

### **5.2 Conclusion**

This study has openly demonstrated the magnitude of a variety of the factors responsible for the low enrollment of HIV patients to ART care clinic in Kambuga hospital Kanungu District.

The association between Psychosocial factors and enrollment of HIV patients in ART care clinic included fear to impede social stigma followed by fear of patients to disclose that their HIV positive. Then fear of drug toxicities followed by fear of side effects of the ART drugs.

The association between economic factors and enrollment of patients included patient's inability to take time of their work for clinic appointments followed by a lot of transport costs to ART clinics. Then inadequate resources followed by food insecurity.

The association between health system factors and enrollment of HIV patients included inadequate counselors to counsel patients to enroll followed by staff shortages. Then less frequent dispensing followed by patients waiting for many hours in long lines.

### **5.3 Recommendations**

There is need for continuous sensitization on facts about HIV/AIDS, ARVS and importance of services offered in ART care so that people are appropriately updated of the present undertakings. In addition to outreach and static health education, it could occasionally be through radio talks as this captures a large population.

Efforts should be made to increase the number of centers or out reaches that test and dispense ARVS in order to make treatment readily accessible to subjects especially those living in hard to reach areas. This will contribute to increase in ART care enrollment.

The MOH should train and recruit more health workers in order to render satisfactory services and reduce on the time taken at the health facility by the health service users.



There should be good counseling to people with misconceptions and fears to help them understand and begin ART.

There should be reimbursement for transport costs, decentralization of services within communities or home based care, the latter being less expensive for patients compared with travel to clinics.

Empowerment of those affected and infected with HIV/AIDS by encouraging them to openly participate in sensitization and giving testimonies of their lives to the community. This would help in overcoming the stigma of the scourge of HIV/AIDS.

To encourage community building capacity in supporting HIV/AIDS individuals especially those who are unable to get the essential basic needs like food and medical care.

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## APPENDICES

### APPENDIX 1: KREJCIE AND MORGAN TABLE

<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	100000	384

Note.—*N* is population size.  
*S* is sample size.



**APPENDIX 2: CONSENT FORM.**

Dear participant Iam ARIYO CRISPINO a student of Kampala international university perusing a diploma in clinical medicine and community health doing a research to assess factors contributing to the low enrollment of HIV/AIDS patients in ART CARE clinic .Iam asking you to take part in this study in case you don't understand any word I will explain. Your answers will not be discussed and all matters will be treated confidential .You are free to participate or not.

Yours

ARIYO CRISPINO

.....

Researcher.

## APPENDIX 3: QUESTIONNAIRE

### Section A: Identification Of Respondents

Respondent number.....village .....

1 Sex

1 Female

2 male

2 Age  in years

3 What is your religion?

1 catholic

2 protestant

3 Moslem  4 others  specify.....

4 What is your education level?

1 certificate

2 Diploma

3 Bachelors

4 others

5 What is your occupation?

1 nurse

2 clinical officer

3 medical officer

4 midwife

5 laboratory technician

6 What is your marital status?

1 married

2 single

3 Widow

4 separated

Section B: psychosocial factors

1) Point out the psychosocial factor associated with enrollment to ART care clinic

- a) Patients fear to disclose that they have HIV/ AIDS after testing positive
- b) Drug toxicities scare patients to enroll to the care.
- c) HIV patients fear to impede social stigma including blame isolation and abuse
- d) Fear of side effects of ART drugs limits HIV patients from enrollment

Section C: economic factors

2) Point out the economic factor associated with enrollment to ART care clinic

- a). Patients have to move long distances to referral hospitals to pick ART drugs.
- b). Employed patients are unable to take time of work for clinic appointments
- c) Patients have to incur a lot of transport costs to travel to ART care center.
- d) The food insecurity limits patients to enroll to the care
- e). Inadequate patient resources is a limiting factor to enrollment to care

Section D: health system factors.

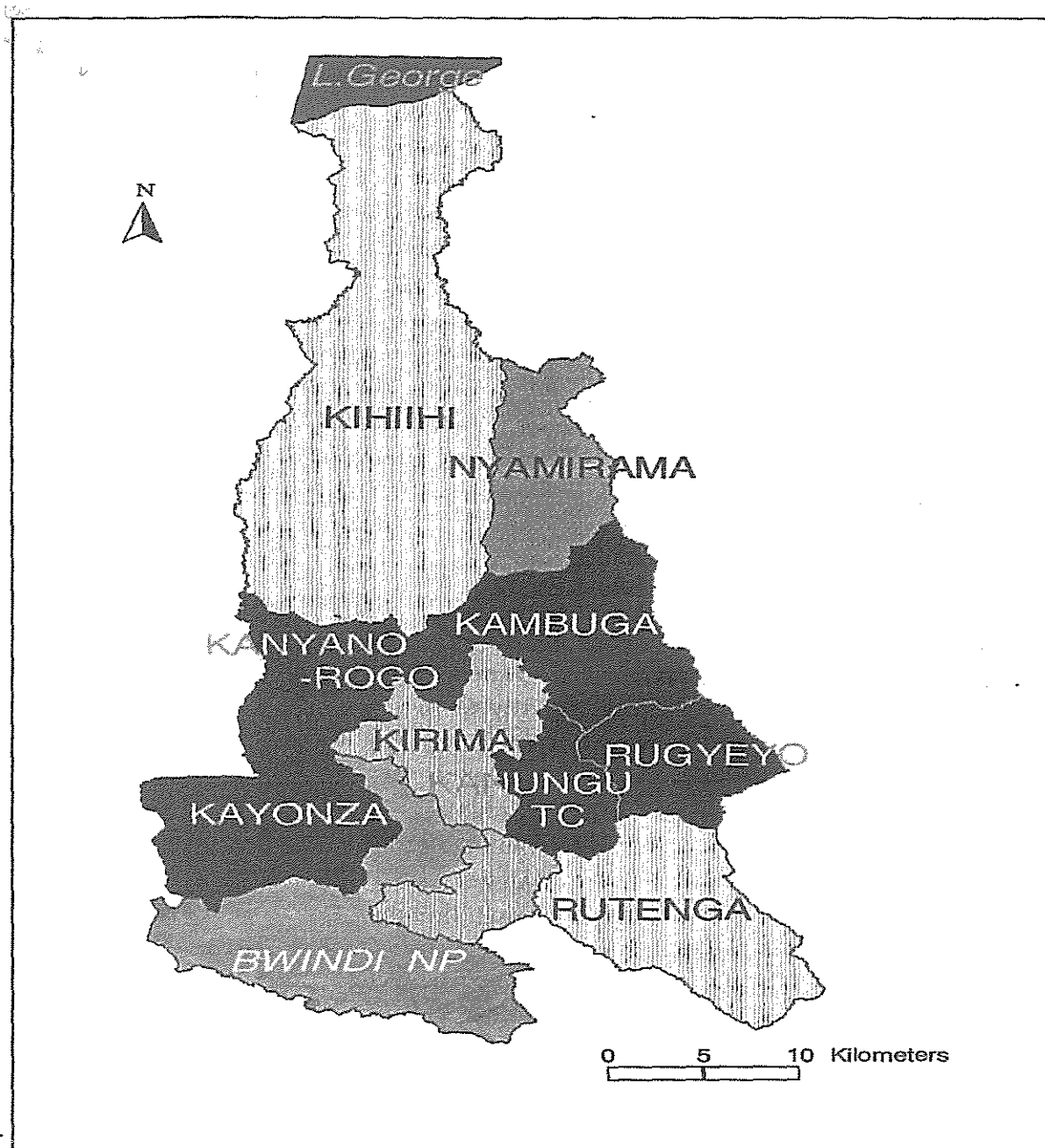
3) Point out the health system factor associated with enrollment to ART care clinic

- a) Patients have to wait for many hours at the ART clinic.
- b). There are staff shortages working in ART clinic.
- c). There is inadequate training of lay counselors.
- d) Less frequent dispensing has reduced patient enrolment to care

## APPENDIX 4: MAP OF UGANDA

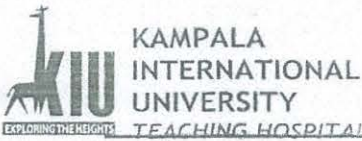


APENDIX:5. AMAP OF KANUNGU DISTRICT





## APPENDIX 6 THE INTRODUCTORY LETTER



School of Allied Health Sciences (SAHS) Ishaka,  
P.O. BOX 71 Bushenyi,  
Tel: 0703786082/0773786082  
Email: christinekyobuhaire@gmail.com

### OFFICE OF THE ADMINISTRATOR –SAHS

3<sup>rd</sup> April 2017

The Medical Supretendant Kambuga Hospital  
KANUNGU DISTRICT

Dear Sir/ Madam,


#### SUBJECT: DATA COLLECTION

Academic research project is an Academic requirement of every student pursuing a 5 year Diploma in Clinical Medicine & Community Health (DCM) of Kampala International University- Western Campus (KIU-WC). DCM program is housed in the School of Allied Health Sciences (SAHS).

The students have so far obtained skills in Proposal writing especially chapter one, Three & Questionnaire design. The student's topic has been approved by SAHS Research Unit and is therefore permitted to go for data collection alongside full proposal & dissertation writing. As you may discover the student is in the process of full proposal development. However, the student MUST present to you his questionnaire and his research specific objectives that he wishes to address. We as academic staff of Allied Health Sciences are extremely grateful for your support in training the young generation of Health Professionals. I therefore humbly request you to receive and allow the student **MR. ARIYO CRISPINO** Reg.No. **DCM/0078/143/DU** in your hospital to carry out his research. His topic is hereby attached. Again we are very grateful for your matchless support and cooperation.

Topic: **FACTORS CONTRIBUTING TO THE LOW ENROLLMENT OF HIV/AIDS PATIENTS IN ART CARE CLINIC IN KAMBUGA HOSPITAL- KANUNGU DISTRICT UGANDA.**

Sincerely yours,

 02 APR 2017  
Christine Kyobuhaire, Administrator- SAHS

CC: Dean SAHS  
CC: Associate Dean SAHS  
CC: Coordinator, Research Unit- SAHS  
CC: H.O.D Dept. Public Health  
CC: H.O.D Laboratory Sciences  
CC: Coordinators; TLC & DEC



*Exploring the Heights*