

**CHALLENGES FACED BY HIV POSITIVE ADOLESCENTS ON ART
ATTENDING ART CLINIC AT KABIRA HEALTH CENTER III,
KABIRA SUB COUNTY, RAKAI DISTRICT**

**A RESEARCH REPORT SUBMITTED TO UGANDA NURSES AND
MIDWIVES EXAMINATIONS BOARD**

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ABSTRACT

The HIV positive adolescents attending ART clinic face various challenges in accessing these services which could potentially interfere with the objectives of ART and hence lead to negative consequences.

The purpose of this study was to identify the challenges faced by HIV positive adolescents on ART attending ART clinic at Kabira Health Center III, Kabira Sub County, Rakai District.

This study was conducted through a descriptive cross-sectional study design quantitative in nature at ART clinic, Kabira Health Center III for a period of two weeks using a convenient sampling method to select the participants.

Out of 89 participants who were enrolled to assess on challenges faced by HIV Positive adolescents on ART attending ART Clinic, 80% were in the age group of 16-18 years while the least 20% were in age group of 12-15 years. The health of a person relies on one's decision and life belongs to God. The findings of the study showed that 61% (54) of participants have never abandoned taking ARVs drug while 39% (35) said they have ever abandoned taking ARVs drug. About 51 (57%) participants do not get adequate supervision by health workers and few 38 (43%) get adequate supervision, 80% of the participants reported good rapport with health workers at the ART clinic and only 20% said had no good rapport.

Health workers should provide enough information to the HIV positive adolescents on ART regarding the reasons for positive living.

AUTHORIZATION

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DEDICATION

I dedicate this research report to my Parents Mr. John Kunihiro Kagoro and Mrs. Rose Kunihiro Kabalimu and my wife Mrs. Kanyiginya Harriet and Patience Betty plus my children Kobusobozi Rose Chayan, Busobozi Isaac Ashley, Kobusobozi Joy Leila and Kobusobozi jolly Leticia for the support they have always provided me with.

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LIST OF ABBREVIATIONS

AIDS	Acquired Immunodeficiency syndromes
ART	Antiretroviral therapy
ARV	Antiretroviral drugs
CDC	Center for Diseases Control
EMTCT	Elimination of Mother to Child Transmissions
<i>et al</i>	and others
Etc	excerpter
HAART	Highly Active Antiretroviral Therapy
HC/III	Health Centre III
HIV	Human Immunodeficiency Virus
KIU-WC	Kampala International University-Western Campus
MOH	Ministry of Health
WHO	World Health Organization

DEFINITIONS OF TERMS

Adherence or Compliance: is a medical term that means the degree to which a patient correctly follows medical advice.

Adolescents: according to Ugandan statutes, an adolescent is an individual aged between 12 and 19 years of age.

ART clinic: This is a special clinic concerned with giving HIV patients drugs/medication to manage the disease.

ARV drugs: These are drugs developed to manage and slow the progression of HIV infection among infected individuals.

Challenges: the situation of being faced with something that needs great mental or physical effort in order to be done successfully and therefore tests a person's ability

Client: This term is used to refer to patients attending HIV/AIDS services or any other medical services in general.

Health facility factors: Refers to issues related to the health facility including location, availability of services, health workers etc.

HIV positive: a state of having had a positive result in a blood test for the AIDS virus
HIV

Socio economic factors: This refers to an individual's ability to access and pay for health care services among other things in the community.

CHAPTER ONE

INTRODUCTION

1.1 Introduction of the study

HIV/AIDS remains a global problem and a public health priority. Human Immunodeficiency Virus (HIV) is a virus that causes Acquired Immunodeficiency Syndrome (AIDS), a condition in humans in which the immune system begins to fail, leading to life-threatening opportunistic infections (Chen *et al.*, 2014).

Studies on HIV infection trends show that adolescents stand a higher risk of contracting HIV than people of other demographics, marking an astonishing shift in the epidemic's infection patterns and 43% of new HIV infections are among monogamous relationships while 64% are among persons reporting multiple partnerships and their partners (Arthur *et al.*, 2013).

Antiretroviral (ARVs) have long been part of the standard care for people living with advanced HIV disease in industrialized countries, where it is primarily used to prevent illnesses such as *Pneumocystis jiroveci* pneumonia (PCP) and toxoplasmosis, while studies have also shown that ARVs prevent infections and prolong life in resource-limited settings (Bachmann, 2013).

Globally, in developed countries such as Sweden, France and United Kingdom, the rate of HIV among the adolescents continues to rise and in the last decade has gone up by 27%. For instance, all these countries are in the top 5 European countries with the biggest number of STI infections among 16 – 24 year olds and more than 20,000 new

cases of the disease in this age group in 2011 (Herida *et al.*, 2014). However, adolescents do not encounter many challenges in attending the ART clinic as the services are well provided and available/accessible and they are of good quality.

In Sub Saharan Africa, although countries such as South Africa and Nigeria have made significant progress in providing testing and treatment of most sexually transmitted diseases, the rate of infection of HIV among adolescents remains high and research shows that there is a 45% rise in HIV cases among adolescents (Ammassari *et al.*, 2012). Furthermore, adolescents often encounter many challenges in accessing ART services due to unavailability of services, long distances to health services as well as other health worker and health facility factors (Ssesanga *et al.*, 2012).

In East African countries such as Kenya and Tanzania, although testing and treatment services for HIV are provided at most health facilities, the rate of HIV infection among adolescents remains high. Furthermore, adolescents report facing various challenges in accessing ART services including inadequate knowledge about the services, perceived lack of privacy and confidentiality during the services as well as judgmental attitudes of health workers among others (Samwel *et al.*, 2011).

Similarly, in Uganda, Katabira *et al.* (2011), revealed that HIV infection among adolescents is on the increase despite the availability of testing and treatment services. Although ART services are well provided in various levels of health facilities, adolescents nevertheless face various challenges in accessing ART services and among these challenges include lack of sensitization, poor location of the services, stigma attached to using these services among many others.

1.2 Problem Statement

The introduction and subsequent promotion of ART and cotrimoxazole prophylaxis therapy by WHO in 2000 has worked to ensure that individuals exposed to HIV/AIDS live a longer and more fulfilling life and effective utilization and adherence to ARV is absolutely vital for the success of Highly Active Anti Retro Viral Therapy (HAART) and improvement of the quality of life of People Living With HIV/AIDS (PLWHA), especially among the adolescents (O'Brien *et al.*, 2011).

According to Uganda Demographic and Health Survey (UDHS, 2011), the HIV prevalence rate in Rakai is 12 percent, and even higher at the landing site where, according to statistics in the district's Health department, prevalence was about 30 per cent in 2010 while among adolescents, HIV prevalence is estimated at 25%. According to Health Management Information System (HMIS, 2015), an average of 42 adolescents attend ART services at the Kabira Health Center III every month.

However, HIV positive adolescents attending ART clinic face various challenges in accessing these services which could potentially interfere with the objectives of ART and hence lead to negative consequences (Mugavero *et al.*, 2010). HIV positive adolescents attending ART clinic face various challenges which affect the utilization and uptake of the services. It is upon this reason and background that the researcher will carry out a study to identify the challenges faced by HIV positive adolescents on ART attending ART clinic at Kabira Health Center III, Kabira Sub County, Rakai District.

1.3 Purpose of the study

The purpose of this study was to identify the challenges faced by HIV positive adolescents on ART attending ART clinic at Kabira Health Center III, Kabira Sub County, Rakai District in an effort to come with measures to alleviate the challenges faced and improve service utilization.

1.4 Specific objectives

- i. To assess the socio economic challenges faced by HIV positive adolescents on ART attending ART clinic at Kabira Health Center III, Rakai District.
- ii. To identify the health facility challenges faced by HIV positive adolescents on ART attending ART clinic at Kabira Health Center III, Rakai District.

1.5 Research questions

- i. What were the socio economic challenges faced by HIV positive adolescents on ART attending ART clinic at Kabira Health Center III, Rakai District?
- ii. What health facility challenges faced by HIV positive adolescents on ART attending ART clinic at Kabira Health Center III, Rakai District?

1.6 Justification of the study

The study would identify the particular challenges faced by HIV positive adolescents on ART attending ART clinic. This may assist the administration and health workers of Kabira Health Center III to come up with measures to alleviate the challenges faced by adolescents. The findings may also assist the Ministry of Health as well as policymakers' to understand the various challenges faced by HIV positive adolescents

on ART so as to come up with measures to alleviate the challenges and improve the utilization of ART services.

The study may provide a valuable point of reference for researchers carrying out similar studies in future thus contributing to the available literature on the challenges faced by HIV positive adolescents on ART attending ART clinic. The study was also part of accomplishing the Diploma in Nursing since it was a partial requirement to be fulfilled for the award.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter described the literature review cited by other scholars about the challenges faced by HIV positive adolescents on ART attending ART Clinic. The literature was presented in sequence of the specific objectives of the study and it commenced with the socio economic challenges faced by HIV positive adolescents on ART attending ART clinic.

2.2 Socio economic challenges faced by HIV positive adolescents on ART

The role for government health centers in provision of same-day voluntary HIV counseling and testing in Kenya that some of the social challenges faced by HIV positive adolescents attending ART clinic include lack of awareness/knowledge about the services provided (Arthur *et al.*, 2013)

In a study on the factors associated with non-adherence to highly active antiretroviral therapy in Nairobi, Kenya showed that the social challenges faced by HIV positive adolescents attending ART clinic include lack of partner support and encouragement (Samwel *et al.*, 2011).

Another study about HIV testing and the role of individual- and structural-level barriers and facilitators revealed that social challenges faced by HIV positive adolescents attending ART clinic included low level of education. It was further noted that

adolescents who had a low level of education attainment were often not able to explain their needs to health workers to get appropriate care. (Bond *et al.*, 2014).

According to study done by Coffee *et al.*(2012), about patterns of movement and risk of HIV infection in rural Zimbabwe that some of the social challenges faced by HIV positive adolescents attending ART clinic include fear of stigma from family and friends attached to HIV and its related services such as ART.

Sabaté (2010), revealed in a study about adherence to long term therapies that some of the social challenges faced by HIV positive adolescents attending ART clinic include poor sensitization and health education of adolescents about the benefits/advantages of ART services. Other challenges included area of residence as results showed that respondents who resided in rural areas faced many challenges in accessing ART services as compared to those in urban areas.

Nevertheless, Rennie *et al.* (2012), titled desperately seeking targets as well as the ethics of routine HIV testing in low-income countries revealed that some of the social challenges faced by HIV positive adolescents attending ART clinic include poor availability of transport means which makes it difficult to travel and access ART services.

Issiaka *et al.* (2011), document in a study about living with HIV as well as women's experience in Burkina Faso, West Africa that some of the economic challenges faced by HIV positive adolescents attending ART clinic include high cost of health care services as well as medication and transport to health facilities.

Another study by Dandona and Kumar (2009), about the economic analysis of HIV prevention interventions in Andhra Pradesh state of India to inform resource allocation noted that some of the economic challenges faced by HIV positive adolescents attending ART clinic include high cost of medication.

Jebet, Onkware and Ntabo (2011), mention in their study about socio-cultural factors that perpetuate the spread of HIV among women and girls in Keiyo District, Kenya that some of the economic challenges faced by HIV positive adolescents attending ART clinic include lack of employment opportunities. This was further revealed to lead to risky practices and dependence on partners with increased exposure to HIV and other STDs as a potential outcome.

Another study by Charlebois *et al.* (2010), about removing barriers to knowing HIV status: same-day mobile HIV testing in Zimbabwe noted that some of the economic challenges faced by HIV positive adolescents attending ART clinic include lack of stable employment, which hence forces some adolescents into risky practices such as prostitution, further increasing the spread of HIV among adolescents.

Nakagwa *et al.* (2012), mention in their study about the processes and outcomes of HIV serostatus disclosure to sexual partners among people living with HIV in Uganda that some of the economic challenges faced by HIV positive adolescents attending ART clinic include rampant poverty among adolescents which made it difficult for them to afford some basic needs, thus failing to maintain recommended nutrition and lifestyle while on ART.

Similar findings are presented by Bikaako-Kajura *et al.* (2013), whose study about the changes in sexual behavior and risk of HIV transmission after antiretroviral therapy and prevention interventions in rural Uganda revealed that some of the economic challenges faced by HIV positive adolescents attending ART clinic among the adolescents include poverty. It was further noted that unemployed adolescents relied on support from their partners and since they did not want to lose this support by refusing to have unprotected sex with their lovers, this contributed to increased occurrence of HIV among adolescents.

2.3 Health facility challenges faced by HIV positive adolescents in ART clinic

The barriers to antiretroviral adherence as well as the importance of depression, abuse, and other traumatic events that some of the health facility related challenges faced by HIV positive adolescents in ART clinic included lack of clear health education and sensitization about the importance of adherence as well as the dangers of poor adherence (Mugavero *et al.*, 2010).

Hogan and Salomon (2010), in their study about the prevention and treatment of human immunodeficiency virus/acquired immunodeficiency syndrome in resource-limited settings, findings showed that some of the health facility related challenges faced by HIV positive adolescents in ART clinic included unavailability of medication at their local health centers and units.

In a study about the cost-effectiveness of antiretroviral treatment in Khayelitsha, South Africa, findings showed that some of the health facility related challenges faced by HIV

positive adolescents in ART clinic included lack of supervision and follow up by health workers to ensure adherence to medication as well as other lifestyle changes such as nutrition (Cleary and McIntyre, 2012).

A study about the cost-effectiveness and cost evidence for HIV/AIDS care and treatment in resource constrained settings, where 243 HIV patients were surveyed showed that some of the health facility related challenges faced by HIV positive adolescents in ART clinic included lack of resources like few health workers, few benches for seating on etc, leading to unavailability of health workers and long waiting time to receive services (DeMaria *et al.*, 2008).

Hausler and Sinanovic(2012), study about the costs of measures to control tuberculosis/HIV in public primary care facilities in Cape Town, South Africa noted that some of the health facility related challenges faced by HIV positive adolescents in ART clinic included perceived/actual lack of privacy and confidentiality.

Galarraga and Colchero (2009), state in a study about HIV prevention cost-effectiveness, findings showed that important health facility related challenges faced by HIV positive adolescents in ART clinic included not getting explanations about the real and perceived effects of the medication and thus help patients alleviate any fears they held about the medication which would have led to non-adherence.

Byakika-Tusiime *et al.* (2007), reveal in a study about the discontinuation and modification of highly active antiretroviral therapy in HIV-infected Ugandans, including prevalence and associated factors, revealed that important health facility

related challenges faced by HIV positive adolescents in ART clinic included the distance to the health facility, whereby patients sometimes failed to get their medication on time due to the distance to the health facility.

2.4 Summary of the reviewed literature

Some of the social challenges faced by HIV positive adolescents attending ART clinic include lack of awareness/knowledge about the services provided, poor sensitization and health education of adolescents about the benefits/advantages of ART services, poor availability of transport means which makes it difficult to travel and access ART services, lack of resources like few health workers, few benches for seating on among others, leading to unavailability of health workers and long waiting time to receive services.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter presented study design and rationale, study setting in geographical terms, study design, population, sample size determination, sampling procedure, inclusion criteria, study variables, research instrument, data collection procedures, data management, data analysis and presentation, ethical considerations, limitations of the study and dissemination of results.

3.2 Study design and rationale

This study was conducted through a descriptive cross-sectional study design quantitative in nature. This study design was selected because it aid in rapid data collection and allowed a snap short interaction with a small group of respondents at one point in time thus allowing conclusions across a wide population to be drawn. The study design was used to examine Challenges faced by HIV Positive Adolescents on ART attending ART Clinic at Kabira H/CIII. It took a period of two weeks.

3.3 Study setting and rationale

The study was conducted at ART clinic, Kabira Health Center III which is found in Kabira Sub County, Rakai District in Central Uganda Which was created in 1980. It borders Lyantonde District to the North West, Lwengo District to the north, and Masaka District to the north east, Kalangala to the east, the Kagera region in the

republic of Tanzania to the south, Isingiro and Kiruhura districts to the North West. Its headquarters lie 65kms southwest of Masaka, the largest city in the sub-region

It comprises four former counties of Masaka District established in 1986, when Buganda Kingdom was sub-divided into districts. The main language is Luganda. Rakai District is divided into administrative units of Kakuuto, Kooki and Kyotera counties, Rakai Town, Kyotera and Kalisizo town councils.

Kabira health Center III offers many health care services including child health services, HIV/AIDS management services, general patient management, laboratory services, nutrition services, antenatal and postnatal services, EMTCT program as well as RCT services among many others. The study setting is selected because it is well known to the researcher and it is representative enough of other health facilities in the region.

3.4 Study population

The study included HIV positive adolescents' aged 12-18 years attending ART Clinic services at Kabira H/CIII, Kabira Sub County Rakai District. It is only focused on the HIV positive adolescents as they often encounter various challenges in attending ART services.

3.4.1 Sample size determination

The sample size for the Participants at Kabira H/CIII were calculated using Sloven

(1962) formula which state $n = \left(\frac{N}{1+N(e)^2} \right)$

Where; n =desired sample size,

e = fixed error accepted at 5% = 0.05

N = Target population, $N=115$ (number of Adolescents on ART)

In this case, 95% confidence level and 5% acceptable limit of error.

$$n = \left(\frac{115}{1 + 115(0.05^2)} \right)$$

$$n = 89$$

Therefore, the sample size, $n=89$ participants

The sample size was 89 participants of HIV positive adolescents' aged 12-18 years attending ART Clinic services at Kabira H/CIII, Kabira Sub County Rakai District.

3.4.2 Sampling procedure

The researcher used convenient sampling method to obtain the sample size for the study whereby the researcher would simply select all the available potential respondents who would meet study criteria and include them in the study. This was continuing until the total of 30 participants to be interviewed per day was achieved.

3.4.3 Inclusion criteria

The study considered only HIV positive adolescents attending ART Clinic services at Kabira H/CIII, Kabira Sub County Rakai District who were present during the data collection days and were free and willing to voluntarily consent to participate in the study.

3.5 Study variables

3.5.1 Dependent variable

HIV Positive Adolescents on ART attending ART clinic at Kabira Health Center III, Rakai District.

3.5.2 Independent variables

Socio economic challenges faced by HIV positive adolescents on ART attending ART clinic at Kabira Health Center III, Rakai District.

The health facility challenges faced by HIV positive adolescents on ART attending ART clinic at Kabira Health Center III, Rakai District.

3.6 Research instruments

Data were collected using an approved semi-structured questionnaire, which consisted of both open and closed ended questions. This tool was selected because the study it involve mixed groups of respondents and not all the respondents were literate and able to read, write and understand English used to develop the questionnaire.

3.7 Data collection procedures

Before commencing data collection, the researcher would first be introduced by the health centre administrator to the in-charge of the ART clinic who in turn introduced the researcher to the participants. The researcher distributed the questionnaire to HIV positive adolescents at the ART clinic at Kabira Health Center III. This was to improve

efficiency and confidentiality during data collection. The researcher sampled 10 participants per day for a total of 89 participants.

3.7.1 Data management

Data collected were verified and proof read before leaving the area of study to ensure that there were no mistakes or areas left blank, and if any were found, they were corrected before leaving the area of study.

3.8 Data analysis and presentation

The collected data would first be analyzed manually by the use of papers and pens and tallying, after which the researcher presented them in tables, graphs and pie charts generated by Microsoft Excel version 2013.

3.9 Ethical considerations

A letter of introduction was obtained from Kampala International University, introduced the researcher to the administration of Kabira Health Center III and sought for permission to carry out the study. After permission was granted, the administrator introduced the researcher to the in-charge of the ART clinic who in turn introduced the researcher to the respondents. Respondents were assured of maximum confidentiality and only numbers instead of names were used to identify the participants. The study would only commence after the objectives of the study have been well explained to participants and they had freely consented to participate in the study.

3.10 Limitations of the study

The researcher expected to encounter financial constraints in gathering information from the internet and libraries and printing costs. The researcher overcomes this limitation by drawing up a budget which was strictly followed to utilize the available means.

The researcher was also most likely to encounter time constraints in the course of the study, balancing the research study and other demanding works. The researcher overcomes these limitations by drawing up a timetable which was strictly followed to overcome the time barriers.

3.11 Dissemination of the results

The approved results were forwarded to the followings;

- i. Uganda Nurses and Midwives Examination Board as partial fulfillment of the award of Diploma in Nursing Sciences
- ii. Kampala International University-Western Campus School of Nursing Sciences
- iii. Library of Kampala International University-Western Campus

CHAPTER FOUR

RESULTS AND FINDINGS

4.1 Introduction

This chapter consists of data which was manually analyzed by the use of papers and pens and tallying then, presented them in tables, graphs and pie charts generated by Microsoft Excel version 2013 and brief explanations as per the objectives socio-economic and health facility challenges faced by HIV positive adolescents on ART attending ART clinic at Kabira Health Center III, Rakai District. A total of 89 participants was enrolled to be assess on challenges faced by HIV Positive adolescents on ART.

Table 1: social demographic data of 89 participants who participated in the study

Variables		Frequency (n=89)	Percentage
Age	16-18	71	80%
		18	20%
	Male	49	55%
	Female	40	45%
Marital status	single	46	52%
	Married	36	40%
	Divorced	7	8%
Level of education	No formal education	8	9%
	Primary	49	55%
	Secondary	24	27%
	University	8	9%
occupation	Peasant farmer	30	33.7%
	Housewife	22	24.7%
	Self-employed	29	32.6%
	Professionals	8	9%

Source: Primary data

According to the results on table 1 above out of 89 participants, 80% of HIV positive adolescent were in the age group of 16-18 years while 20% were in age group of 12-15 years, 33.7% were peasant farmer, 32.6% self-employed, 24.7% housewife and 9% were professionals. 49 (55%) were male followed by 40 (45%) who were female. 49 (55%) of HIV positive adolescents attained primary level education, followed by 24 (27%) secondary level education, 8 (9%) had reached university level and 8 (9%) had no formal education. 52% (46) of HIV positive adolescent were single followed, 40% (36) were married and 8% (7) divorced.

4.2 Socio-demographic challenges faced by HIV positive adolescents

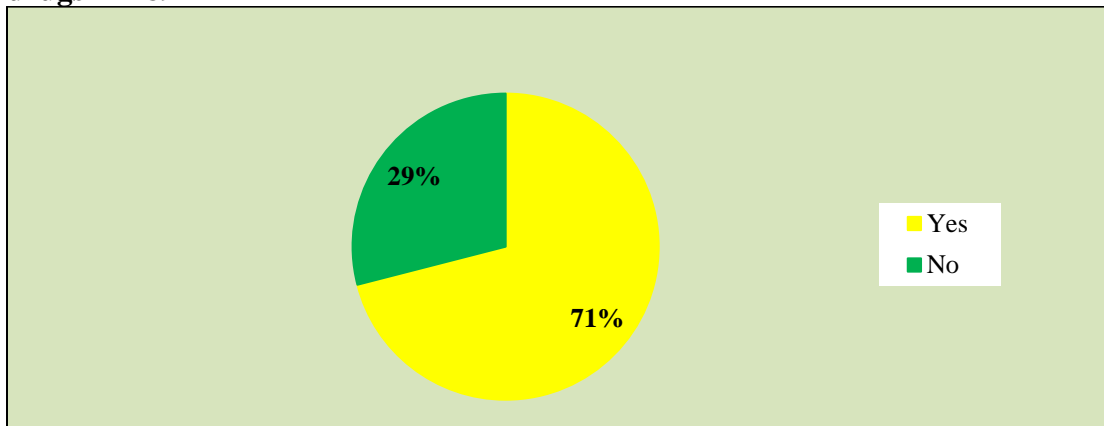
Table 2: Duration of HIV positive adolescent on ARVs

Duration	Frequency (n)	Percentage /(%)
Less than 1 year	18	20
1-3 years	45	51
4 years and above	26	29
Total	89	100

Source: primary data

Table 2 revealed that of 89 HIV positive adolescent, 45 (51%) had been on ARVs for 1-3 years, 26 (29%) for 4 years and above while 18 (20%) for less than 1 year.

Figure1: A pie-chart showing whether participants have problem on taking drugs n= 89



Source: Primary data

From figure 1 above, results indicated majority of the HIV positive adolescents 71% (63) had problems on taking ARVs while 29% (26) did not have any problem.

Table 3: Distribution of HIV positive adolescent problem on taking ARVs

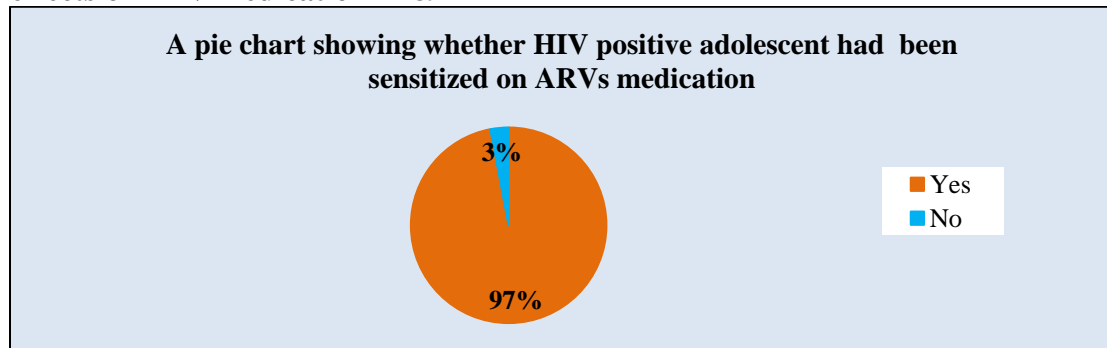
Variables	Frequency (n)	Percentage / (%)
Forgetfulness	18	28.6
Lack of support	20	31.7
High cost of medication	12	12.7
Others (vomiting, lack of appetites)	17	27.0
Total	63	100.0

Source: Primary data

Results in table 3 showed that out of 63 participants who said they had problem on taking ARVs, 20 (31.7%) said had lack of support, 18 (28.6%) forgetfulness, 17

(27.0%) had other problems like vomiting, lack of appetites and 12 (12.7%) said high cost of medication.

Figure 2: A pie chart showing whether participants had been sensitized on side effects of ARV medication n=89



Source: Primary data

From figure 2 above, results revealed that out of 89 participants 97% (86) said they have been sensitized on ARVs medication side effects while only 3% (3) said they had not.

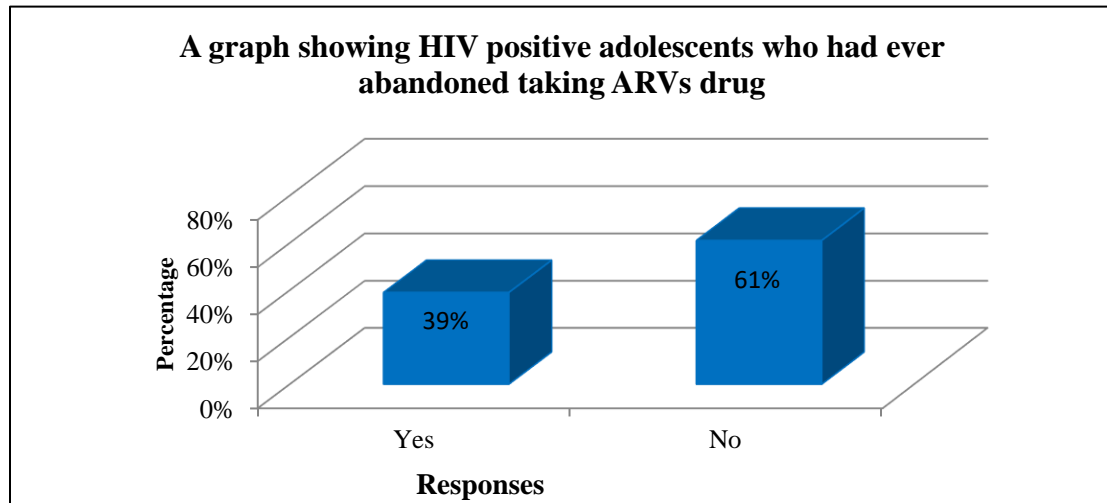
Table 4: Participants who have ARVs adherence community/peer support groups' motivator

Variables	Frequency (n)	Percentage
Yes	87	98%
No	2	2%
Total	89	100%

Source: Primary data

From table above, results indicated that out of 89 participants 87 (98%) said they had ARVs adherence community/peer groups motivator while 2 (2%) said they do not have.

Figure 3: A graph showing participants who had ever abandoned taking ARVs drug n=89



Source: primary data

Figure 3 above shows out of 89 participants 61% (54) had never abandoned taking ARVs drug and 39% (35) had ever abandoned taking ARVs drug.

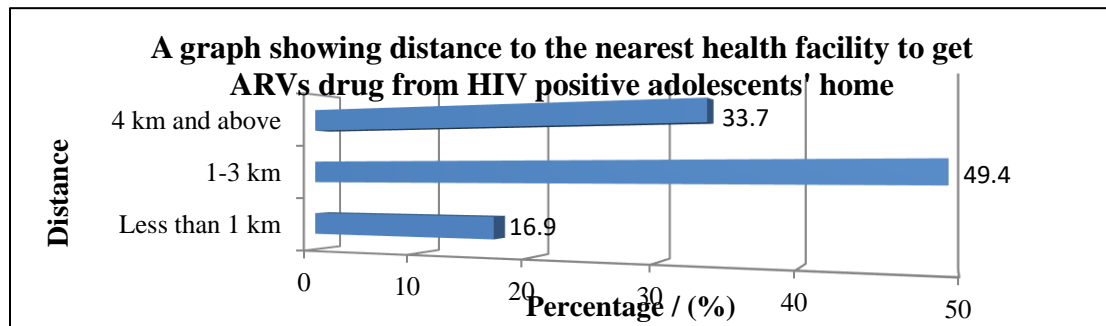
Table 5: Reason for abandoning of ARVs medications by participants

Variables	Frequency (n)	Percentage
Lack of transport	18	51.4%
Fear of partner to know status	15	42.9%
Forgetfulness	2	5.7%
Total	35	100.0%

Source: primary data

From table 5 above results indicated out of 35 participants, 18 (51.4%) said they lacked transport while 15 (42.9%) said fear of their partners to know their status and 2 (5.7%) forgetfulness.

**Figure 4: A graph showing distance to the nearest health facility to get ARVs drug
n=89**



Source: Primary data

The results in figure 4 above showed that, majority of the participants 49.4% (44) of HIV positive adolescents reside at distances of 1-3 km from the health facility followed by 33.7% (30) reside 4 km and above from health facility and few 16.9% (15) reside less than 1 km.

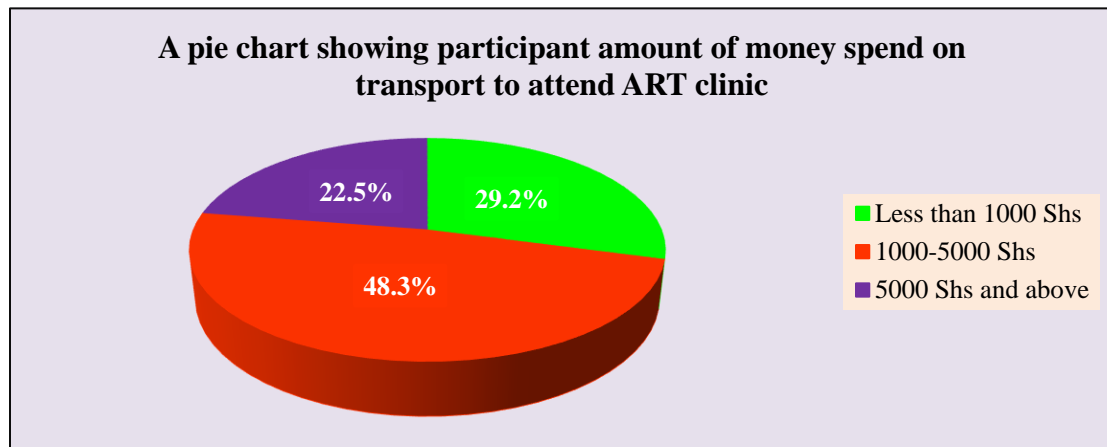
Table 6: Means of transport used by participants to get to the health facility

Variables	Frequency (n)	Percentage / (%)
Footing	17	19
Bicycle	37	42
Motorcycle	24	27
Other (taxi)	11	12
Total	89	100

Source: Primary data

From the table 6 above, results indicated that out of 89 participants 37 (42%) use bicycle as means of transport to get the health facility, 24 (27%) use motorcycle, 17 (19%) foot and 11 (12%) use other means (use taxi).

Figure 5: A pie chart showing amount spend on transport to attend ART clinic n=89



Source: primary data

From figure 5 above, data indicated majority of participants 48.3% spend 1000-5000 Shillings on transport while 29.2% spend less than 1000 Shillings and least 22.5% spend 5000 Shillings and above.

4.4 Health facility challenges faced by HIV positive adolescents

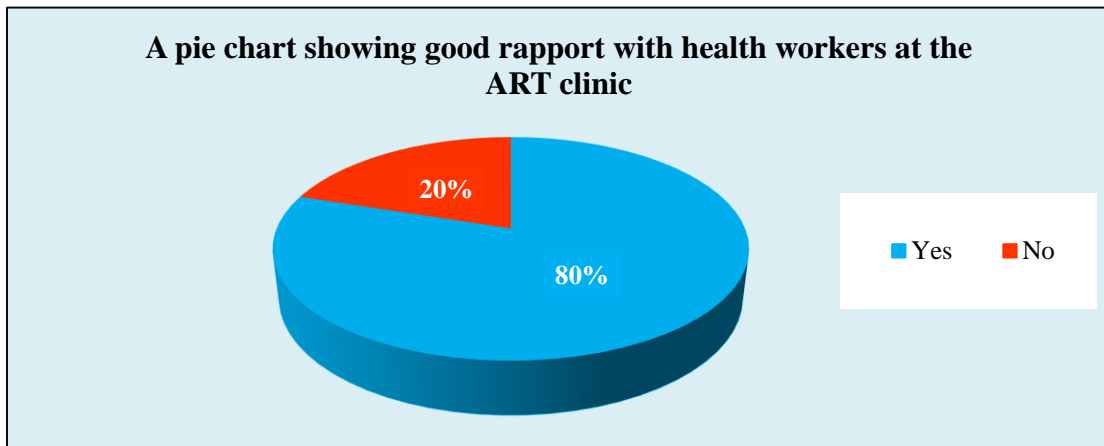
Table 7: Whether participants get adequate supervision by health workers

Response	Frequency (n)	Percentage
Yes	38	43%
No	51	57%
Total	89	100%

Source: Primary data

From above table data indicated 51 (57%) of the participants do not get adequate supervision by health workers and 38 (43%) get adequate supervision.

**Figure 6: A pie chart showing good rapport with the health workers at ART clinic
n=89**



Source: primary data

Data in figure 7above, shows80% of participants reported good rapport with health workers at the ART clinic and20% said had no good rapport.

Table 8: Whether participants always find ARVs when gone to health facility

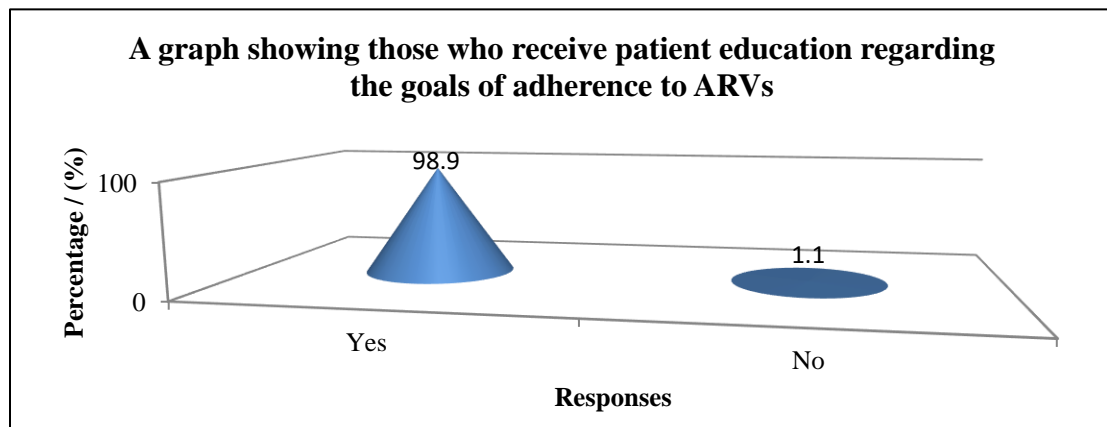
Variable	Frequency (n)	Percentage / (%)
Sometimes	26	29
Always	62	70
Never	1	1
Total	89	100

Source: primary data

From table 8 above results showed out of 89 participants 62 (70%) said always, followed by 26 (29%) sometimes and 1 (1%) reported never.

Figure 7: A graph showing those who receive patient education on goal of adherence to ARVs

n=89



Source: primary data

From figure 8 above, data indicated that out of 89 participants 98.9% said YES they received patient education regarding the goal of adherence to ARVs and 1.1% said NO did not.

Table 9: Participants' waiting time to receive drugs at the health facility

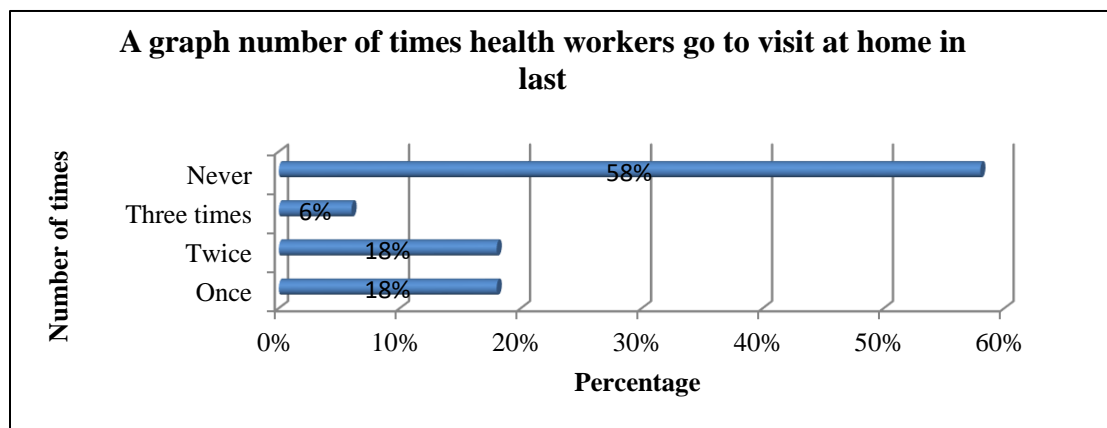
Variable	Frequency (n)	Percentage
Less than 1 hour	4	4.5%
2-3 hours	27	30.3%
More than 3 hours	58	65.2%
Total	89	100.0%

Source: primary data

Data in table 9 above, revealed that out of 89 participants 65.2% spend 2-3 hours to receive drugs followed 30.3% spend more than 3 hours and only 4.5% said spend less than 1 hour waiting to receive drugs.

Figure 8: A pie chart showing number of times health workers go to visit participants at home in the last year

n=89



Source: Primary data

Data from figure 9 above shows, 58% of participants said they had never been visited, 18% said they had been visited twice, 18% twice and only 6% had been visited three times.

CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATION

5.1 Introduction

This chapter presents the discussion of study findings, conclusion and implications to nursing practices on socio-economic and health facility challenges faced by HIV positive adolescents on ART attending ART clinic at Kabira Health Center III, Rakai District.

5.2 Discussion

5.2.1 Demographic data

The study was carried out in area where the natives were Baganda in central part of Uganda. In figure 1 result, data showed that out of 89 participants who were enrolled to be assessed on challenges faced by HIV Positive adolescents on ART attending ART Clinic, 80% were in the age group of 16-18 years while the 20% were age group of 12-15 years. In table 1 above data indicated most participants 49 (55%) were male followed by 40 (45%) who were female. Fifty two percent (46) of HIV positive adolescent were single followed by 40% (36) who were married and least 8% (7) divorced, single participants were many because they are of the young reproductive age.

Nearly, 49 (55%) of HIV positive adolescents attained primary level education followed by 24 (27%) attained secondary level education, 8 (9%) had university level and 8 (9%) had no formal education. Results showed 33.7% of HIV positive adolescent

were peasant farmer, 32.6% self-employed, 24.7% were housewife and few 9% who were professionals.

5.2.2 Socio-demographic challenges faced by HIV positive adolescents

According to table 2 above the study revealed that HIV positive adolescent, majority 45 (51%) had been on ARVs for 1-3 years, 26 (29%) for 4 years and above while 18 (20%) for less than 1 year.

Results in figure 3 indicated data of 89 HIV positive adolescents 71% (63) said that they have problems on taking ARVs while 29% (26) said do not have any problem. Of 63 participants who said they had problem on taking ARVs, 20 (31.7%) said lack of support, 18 (28.6%) forgetfulness, 17 (27.0%) said others (that vomiting, lack of appetites) and 12 (12.7%) said high cost of medication. These findings corresponded with Issiaka *et al.* (2011), document in a study about living with HIV as well as women's experience in Burkina Faso, West Africa that some of the economic challenges faced by HIV positive adolescents attending ART clinic include high cost of health care services as well as medication and transport to health facilities.

Data in figure 4 indicated that out of 89 participants 97% (86) said they had been sensitized on ARVs medication side effects while only 3% (3) said they had not been sensitized on medication side effects, this showed a very good utilization of the HIV/AIDS services in this area however in table 5 above, of 89 participants 87 (98%) said they have ARVs adherence community/peer groups motivator while few 2 (2%) said they do not have, these big percentage is in contradiction to that of Sabaté

(2010), who found out that some of the social challenges faced by HIV positive adolescents attending ART clinic include poor sensitization and health education of adolescents about the benefits/advantages of ART services.

According to the Figure 5 above, majority of participants 61% (54) had never abandoned taking ARVs drug and least 39% (35) said they had ever abandoned taking ARVs drug. This is in line with a study done by Coffee *et al.* (2012), about patterns of movement and risk of HIV infection in rural Zimbabwe that some of the social challenges faced by HIV positive adolescents attending ART clinic include fear of stigma from family and friends attached to HIV and its related services such as ART. Table 5 above showed of 35 participants 18 (51.4%) said they lacked transport while 15 (42.9%) said fear of partner to know their status and 2 (5.7%) forgetfulness slightly in agreement with Rennie *et al.* (2012), Nakagwa *et al.* (2012), who found out that some of the economic challenges faced by HIV positive adolescents attending ART clinic include rampant poverty among adolescents which made it difficult for them to afford some basic needs, thus failing to maintain recommended nutrition and lifestyle while on ART.

Nevertheless, The figure 7 above, majority 49.4% (44) HIV positive adolescents reside at distances of 1-3 km from the health facility followed by 33.7% (30) reside 4 km and above from health facility and few 16.9% (15) reside less than 1 km meanwhile on table 7 above, majority 37 (42%) use bicycle as means of transport to get the health facility, 24 (27%) use motorcycle, 17 (19%) foot and few 11 (12%) other (use taxi). This concurs with Sabaté (2010,) who found out that other challenges included area of

residence as results showed that respondents who resided in rural areas faced many challenges in accessing ART services as compared to those in urban areas.

Furthermore, data from figure 8 above revealed majority of participants 48.3% spend 1000-5000 Shillings on transport while 29.2% spend less than 1000 Shillings and least 22.5% spend 5000 shillings and above. This is in similar findings presented by Bikaako-Kajura *et al.* (2013), whose study about the changes in sexual behavior and risk of HIV transmission after antiretroviral therapy and prevention interventions in rural Uganda revealed that some of the economic challenges faced by HIV positive adolescents attending ART clinic among the adolescents included poverty.

5.2.3 Health facility challenges faced by HIV positive adolescents

From table 8 above results indicated 51 (57%) of participants do not get adequate supervision by health workers and 38 (43%) get adequate supervision which is not good despite the results from table 9 which showed that health worker goes to check them where 62(70%) of the participants said always, followed by 26 (29%) sometimes and least participants 1 (1%) reported never.

In figure 10 above, out of 89 participants 98.9% said that they received patient education regarding the goal of adherence to ARVs while 1.1% said did not receive health education on the goal of adherence this does not correspond to Mugavero *et al.* (2010), study results who reported that the barriers to antiretroviral adherence as well as the importance of depression, abuse, and other traumatic events that some of the health facility related challenges faced by HIV positive adolescents in ART clinic included

lack of clear health education and sensitization about the importance of adherence as well as the dangers of poor adherence. Table 10 above, out of 89 respondents majority 65.2% spend 2-3 hours to receives followed 30.3% spend more than 3 hours and only 4.5% spend less than 1 hour. Figure 11 shows, most respondent 58% Never followed by 18% who said twice, 18% once and only 6% three times.

5.3 Conclusion

The health of a person relies on one's decision and life belongs to God majority of participants 61% (54) said had never abandoned taking ARVs drug and least 39% (35) said they had ever abandoned taking ARVs drug.

Data indicated 51 (57%) of participants do not get adequate supervision by health workers and 38 (43%) get adequate supervision, 80% of the participants reported good rapport with health workers at the ART clinic and only 20% said had no good rapport.

The findings of the study indicated some of the following are the challenges faced by HIV positive adolescents on ART attending ART clinic at Kabira Healthy Centre iii in Kabira Sub-county Rakai District

- Lack of adequate supervision of adolescents on ART by healthy worker
- Long distances travelled by HIV positive adolescents to pick ARVs
- Long waiting hours at the ART clinic when they have gone for drug refill
- Disclosure problems to their partners or spouses leading to poor adherence
- Poor rapport with health workers by some HIV positive adolescents leading to poor adherence

- ARVs drugs running out of stock some times and patients stay without taking any ARVs.

All the above challenges should be addressed if the goals and objectives of ART are to be achieved.

5.4 Recommendations

The Uganda Ministry of Health should find out what policymakers do understand on the various challenges faced by HIV positive adolescents on ART so as to come up with measures to alleviate the challenges and improve the utilization of ART services.

The ministry of health should;

- Employee more healthy workers
- Improve on infrastructures
- Purchase and stock ARVs drugs on time
- etc

Health workers should;

- Provide enough information to the HIV positive adolescents on ART regarding the reasons for positive living.
- Should do home visiting for supervision of adolescents on ART
- Give daily healthy education on advantages of good ARVs adherence
- Create good rapport with HIV positive adolescents on ART.

5.5 Recommendation for further research

Assess the knowledge of the health workers providing HIV/AIDS services from HIV clinic.

Factors affecting the HIV/AIDS services delivery by health workers at the HIV clinics

5.6 Implications to nursing practice

Nurses should collaborate with other health care providers in linking the HIV positive adolescent to care

More need for health education on most clients who is enrolled on ART.

Intensive adherences counseling should be done to those who abandoned to take ARVs regularly.

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APPENDICES

Appendix I: Consent Form

INTRODUCTION

My name is **Busobozi Denes**, a student of Kampala International University. I am carrying out a study to determine the challenges faced by HIV positive adolescents on ART attending ART clinic at Kabira Health Center III, Kabira Sub County, Rakai District. You have voluntarily consented to participate in the study and all the information you give will be kept confidential.

I have explained the study the purpose and objectives of the study to the participant, and they have understood and voluntarily consented to participate in the study.

Signature.....Date.....

(RESEARCHER)

The topic and its objectives have been fully explained to me, and I have understood and voluntarily agreed and consented to participate in the study.

Participants

Signature.....Date.....

(Participant)

Appendix II: Questionnaire

My name is **Busobozi Denes**, a student of Kampala International University. I am carrying out a study to determine the challenges faced by HIV positive adolescents on ART attending ART clinic at Kabira Health Center III, Kabira Sub County, Rakai District. You have voluntarily consented to participate in the study and all the information you give will be kept confidential.

Instructions

Please answer all questions asked

Please tick or write in the boxes or spaces provided against each question

Section A: Demographic Characteristics

1) Age

a) 12– 15years ☐

b) 16 – 19years ☐

2) Gender

a) Male ☐

b) Female ☐

3) Marital status

a) Single ☐

b) Married ☐

c) Divorced ☐

4) Level of education

- a) No formal education ☐
- b) Primary ☐
- c) Secondary ☐
- d) Tertiary ☐

5) Occupation

- a) House wife ☐
- b) Peasant farmer ☐
- c) Professional ☐
- d) Self employed ☐

Section B: Socio economic challenges faced by HIV positive adolescents in ART clinic

6) How long have you been taking ARVs?

- a) Less than 1 year ☐
- b) 1-3 years ☐
- c) 4 years and above ☐

7) Do you have any problem taking the drugs?

- a) Yes ☐
- b) No ☐

8) If yes, which problems?

- a) Forgetfulness ☐
- b) Lack of support ☐
- c) High cost of medication ☐
- d) Others (specify).....

9) Have you been sensitized about the side effects of the medication?

- a) Yes ☐

b) No ☐

10) Are there any community/peer support groups which work to encourage and motivate you to adhere to ARV?

a) Yes ☐

b) No ☐

11) Have you ever abandoned your medication because of any reason?

a) Yes ☐

b) No ☐

12) If yes, which reason

a) Forgetfulness ☐

b) Fear partner of to know status ☐

c) Lack of transport ☐

13) How far is the nearest health facility/unit where you get ARV from your home?

a) Less than 1km ☐

b) 1-3 km ☐

c) 4km and above ☐

14) What means of transport do you use to get to the health facility?

a) Footing ☐

b) Bicycle ☐

c) Motorcycle ☐

d) Others (specify).....

15) How much money do you spend on transport to the health facility to attend ART clinic? ☐

a) Less than 1000Shs

b) 1000 – 5000Shs ☐

c) 5000Shs and above ☐

16) What do you do if ARVs are not at the health facility?

.....
.....

Section C: Health-facility challenges faced by HIV positive adolescents in ART clinic

17) Do you always get adequate supervision by health workers in your community to help you take your medicines?

a) Yes ☐

b) No ☐

18) If yes, how regularly.....

19) Do you have a good rapport with the health workers at the ART clinic?

a) Yes ☐

b) No ☐

20) Do you always find ARVs when you come to the facility?

a) Sometimes ☐

b) Always ☐

c) Never ☐

21) Did you receive any patient education regarding the goals of adherence to ARVs?

a) Yes I received ☐

b) No i did not receive any ☐

22) How long do you wait to receive services at the facility?

a) Less than 1 hour ☐

b) 2 – 3 hours ☐

c) More than 3 hours ☐

23) How many times have health workers come to visit you at home in last year?

a) Once ☐


b) Twice ☐

c) Three times ☐

d) Never ☐

Thanks for your cooperation

Appendix III: Letter of Approval

 **KAMPALA INTERNATIONAL UNIVERSITY**
WESTERN CAMPUS
EXPLORING THE HEIGHTS

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

Office of the Dean - School of Nursing Sciences

TO WHOM IT MAY CONCERN

Dear Sir/Madam

RE: BUSOBOZI DENES - DNS/E/3704/153/DU


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


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

His topic is **CHALLENGES FACED BY HIV POSITIVE ADOLESCENTS ON ART ATTENDING ART CLINIC AT KABIRA HEALTH CENTER III, KABIRA SUB COUNTY, RAKAI DISTRICT**

Any assistance rendered to him will be highly appreciated.

Thank you in advance for the positive response.

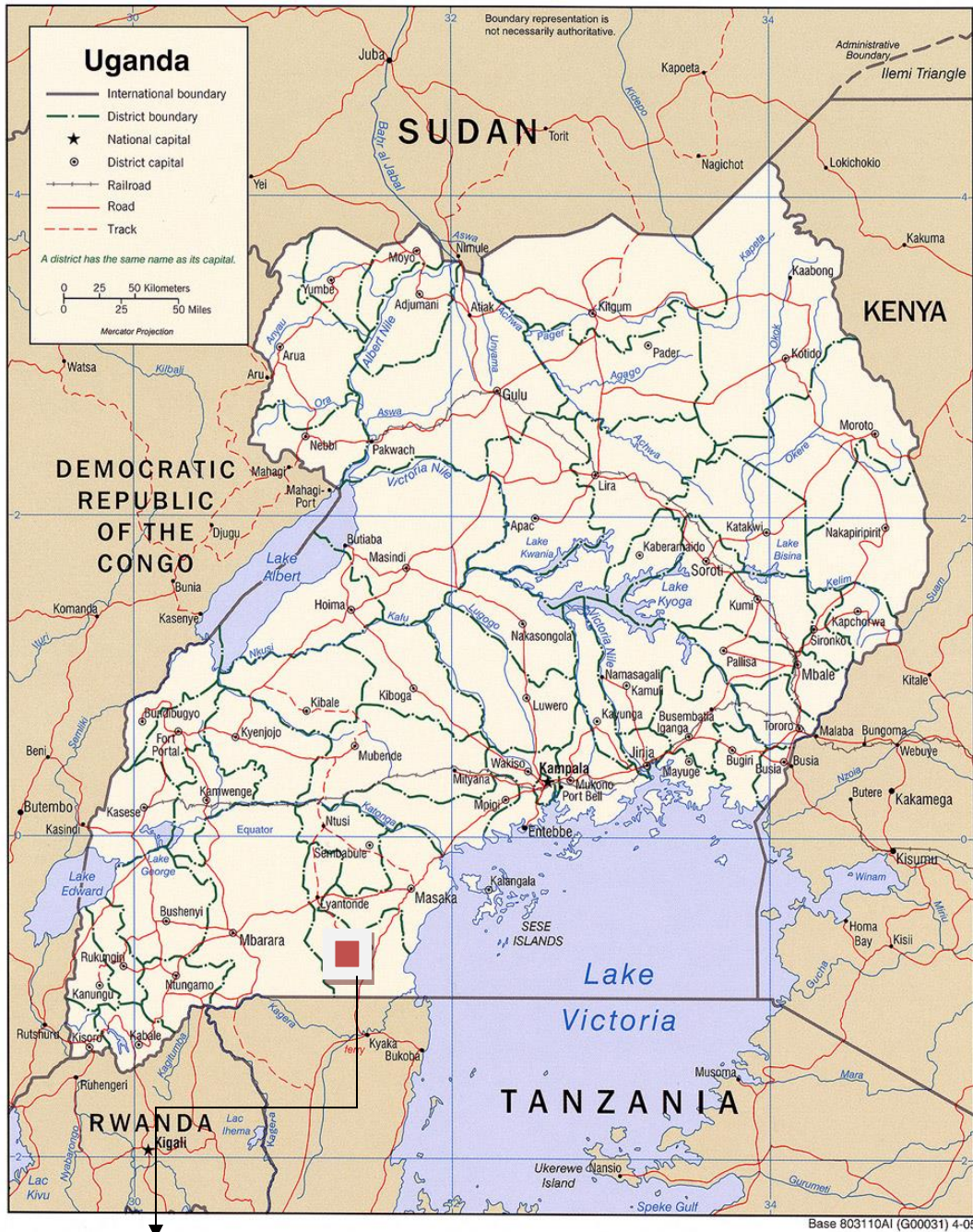
 3 MAR 2017
Naba Nisa Sarah
RESEARCH COORDINATOR

 KABIRA HEALTH CENTER
D. T. E. B. T. A.
VOTERA

Please allow this student to carry out his research and data collection at the ART clinic at Kabira Health Center III, Rakai District. Sincerely, [Signature]

"Exploring the Heights"

Appendix IV: Map of Uganda showing Rakai district



Rakai district

Appendix V: Map of Rakai district showing Kabira Sub County

