THE PREVALENCE OF HIV AMONG THE MENTALLY ILL PATIENTS, A CASE STUDY OF KAMPALA INTERNATIONAL UNIVERSITY TEACHING HOSPITAL *WESTERN* CAMPUS

BY

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A RESEARCH REPORT SUBMITTED TO SCHOOL OF ALLIED HEALTH SCIENCES IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF DIPLOMA IN CLINCAL MEDICINE AND COMMUNITY HEALTH AT KAMPALAINTERNATIONAL UNIVERSITY WESTERN CAMPUS

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DECLARATION

I declare that the work presented here is my original work and has never been presented anywhere else for any award. Where reference was made has been duly acknowledged. This report is here by presented to the faculty of Allied Health Sciences of Kampala International University with approval of my supervisor.

Date:……Signature:.....

MERIDAH SANDRAH MWASAME

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APPROVAL

This research report has been conducted under my supervision and is approved for submission for examination as the candidate's original work.

Signature……....Date:.....

TASHOBYA DANIEL KAMUGISHA

(SUPERVISOR)

DEDICATION

I dedicate this work to my parents Mr. Mwasame Robert and Mrs. Annet Mwasame for their support and patience throughout my course. To all my lecturers that made me reach this point and course mates at Kampala International University. To my entire family members and friends, all glory goes to the almighty God.

ACKNOWLEDGEMENT

I acknowledge the under mentioned people and institution for the support extended to me during my years of study.

Kampala International University Western Campus for giving me this opportunity to do this course.

All the lecturers who taught me the various subjects that have enabled me to achieve my studies, May the almighty God bless them.

My supervisor Mr. Tashobya Daniel Kamugisha who assisted me from the beginning of my research to the end, without him this research would not be a success.

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LIST OF ABBREVIATIONS

AIDS	:	Acquired Immune Deficiency Syndrome
ARV	:	Anti retrovirus
HIV	:	Human Immune Virus
KIU	:	Kampala International University
KIU-TH	:	Kampala International University Teaching Hospital
WHO	:	World Health Organization.

ABSTRACT

This research carried out an investigation into the prevalence of HIV among the mentally ill patients, a case study of Kampala international University teaching hospital western campus. The purpose of study was to investigate on the prevalence of HIV/AIDS among the mentally ill patients; the specific objectives of the study were identifying the number of mentally ill patients who are HIV/AIDS positive; establishing the relationship between mental illness and HIV/AIDS infection and explore the measures taken to reduce on the mental health problems.

The significance of the study was that study would create awareness to the ministry of health and the community and the increasing number of the people with cases related to the mental illness. This help in designing possible means to address this problem and that the study would be important to the student himself because it is a partial fulfillment of the award of bachelor in medicine and surgery.

The methods which were used to collect the data from the field involved questionnaire and guided discussion.

The findings revealed that finding revealed that the number of people with mental illness and HIV/AIDS infection was (11%) which is an indication of the prevalent of HIV/AIDS among psychiatric patients with HIV/AIDS infection and was due to drug abuse, stress and poverty. Further findings found out that there is relationship between HIV/AIDS as evidenced by the fact that HIV/AIDS results into stress, isolation which are the major drivers to mental illness. The findings revealed further that some measures can be taken to reduce mental illness among the HIV/AIDS patients and these included health education, stopping drug abuse and stigma by the community.

It was therefore recommended that there should health education to community by health government personnel about the need of the community to always go for blood testing from recognized health places and that the community should be cautioned to stop relying on traditional doctors on health issue.

CHAPTER ONE

1.0 Introduction

This chapter provides the background of the study, problem statement, purpose of the study, objectives of the study, research questions, scope of the study, significances of the study and limitations of study.

1.1 Background of the Study

The need to train primary health care workers and other personnel to provide basic mental healthcare is increasingly recognized (Acorn, 1993;Brooker,Tarrier, Barrowclough, Butterworth& Goldberg, 1992), and may be particularly indicated in the selected countries (Eisenman, Weine, Green, De Jong,Rayburn,Ventevogel, Keller & Agani, 2006).

Mental illness is considered common in the sub-Saharan Africa, but only those with severe behavioral disturbances are identified. Many forms of mental disorders are likely to remain unrecognized, even though many people with mental health issues present themselves to the health care services, with surprisingly large numbers attending general outpatient services. A longitudinal study by the World Health Organization (WHO), conducted in 14 developing countries, found that almost one-third of all patients presenting at primary healthcare services showed discernible evidence of mental health problems (Sartorius, Ustun, Costa de Silva, Goldberg, Lecrubier, Ormel, Von Kor! & Wittchen, 1993).

Uganda has approximately 32 psychiatrists in total, with the majority practicing in the capital city of Kampala. In addition, there are about 40 psychiatric clinical officers, with half of them practicing in regional hospitals in rural areas. Decentralization of mental health services, with increasing emphasis on outreaches and community based programmes therefore, represents an obvious strategy for accessing mental health care service for the majority of the population. WHO advocates inclusion of mental health care as a part of primary health care worldwide (World Health Organization, 2015)

The HIV/AIDS epidemic has also contributed to extensive personal loss, family fragmentation, and the increased burden of caring for ill relatives and orphaned children. Substance abuse, depressive, psychotic, schizophrenic, bipolar disorders to mention but a few are also common. Many of these problems are inter-related, with for example, HIV/AID shaving adverse psychological effects on infected individuals as well as their partners and children, and their communities,(keller &Agani,2006)

In Uganda, the prevalence of HIV/AIDS is 5.3% in males, and 7.3% in females, with a national average of 6.5%, (The Uganda Ministry of Health (MOH), 2015). Mental health problems in Uganda, most people are unaware of where they can get medical help for mental health disorders. Because of widespread cultural beliefs that mental illness is caused by witchcraft, patients are often taken to traditional healers.

The current researcher therefore deemed it necessary to carry out an investigation into the prevalence of HIV among the mentally ill patients in KIU-TH, Bushenyi as the scope of the study.

1.2 Statement of the Problem

The increase in the number of people with mental problems in Uganda has raised concern to Ugandans. It is believed that in Uganda, the rates of mental illness are high due to poverty, high prevalence of HIV/AIDS and long term exposure to civil wars and armed rebellion. The cost of mental health services in urban hospitals remains prohibitive for the rural poor who resort to traditional healers, and many mental health workers prefer working in urban areas. The effects of mental problems are that; it increases the rate of accidents and crimes in the country and this implies that the families of people with mental problems and their relatives are all affected. It is against this background that the current researcher found it necessary to investigate on the prevalence of HIV among the mentally ill patients such that remedies can be found to curb reduce on it.

1.3 Purpose of the Study

The purpose of study was to investigate on the prevalence of HIV/AIDS among the mentally ill patients attending KIUTH Psychiatry ward.

1.4 Specific Objectives of Study

To establishing the prevalence of HIV/AIDS among mentally ill patients attending KIU-TH Psychiatry ward.

To identifying the relationship between mental illness and HIV/AIDS infection among patients attending KIUTH Psychiatry ward

To explore the measures taken to reduce HIV/AIDS infection among patients with mental health problems.

1.5 Research Questions

What is the prevalence of HIV/AIDS among mentally ill patients attending KIU-TH Psychiatry ward?

What is the relationship between mental illness and HIV/AIDS infection among patients attending KIUTH Psychiatry ward?

What are some of the measure undertaken to reduce HIV/AIDS infection among patients with mental health problems?

1.6 Scope of Study

Geographical scope

Kampala International University Teaching Hospital (KIU-TH) is located in Ishaka, a town in Igara County, in Bushenyi District which is located 64 km west of Mbarara and 7km West of Bushenyi-District headquarters. The Hospital's population catchment is more than 1million with overall work force of 629 members of staff. It trains Medical students, Dentist, Pharmacy, Nursing, Laboratory scientist, Clinical Officers, with a total population of over 2000 students. The hospital is private-puplic partnership teaching and provides subsidised user fee in conjunction with the Government of Uganda under the Public- Private Partnership Program and has the capacity to offer medical services to about 500 persons per day. The Hospital has a total bed capacity of 610 and offers outpatient, inpatient as well as Accident and Emergency services and provides these services to both Bushenyi District and the neighbouring districts. The outpatient services include: General Outpatient, as well as special clinics such as Dental, Ear Nose and Throat (ENT), Ophthalmology, Psychiatry, Internal Medicine, Surgery/Orthopaedics, Obstetrics and Gynaecology (Obs &Gyn) and Paediatric outpatient services. The inpatient services include: Obstetrics/ gynaecology, General surgery / orthopaedics, Internal medicine, Maternal Child Health and Family Planning/Paediatrics as well as Mental Health services. The hospital also offers diagnostic services such as laboratory and imaging services.

Content scope

The content scope of study was to describe the prevalence of HIV/AIDS among the mentally ill patients attending KIUTH Psychiatry ward.

Time

The study was conducted from February to July 2017

Significance of the study

The study is of importance to the different categories of people in the following ways:-

The study findings create awareness to the ministry of health and the community at large about the increasing number of the people with cases related to the mental illness and HIVAIDS positive. This help in designing possible means to address this problem.

This study is of importance to me as the student as it is a partial fulfillment of the award of Diploma in Clinical Medicine and Community Health.

It is also of importance to the further researchers who may carry out research in any related field as they may use it as reference.

CHAPTER TWO

2.0. LITERATURE REVIEW

2.1Introduction

This chapter reviews the related literature in reference to the set objectives of the study

2.2 MENTAL HEALTH PROBLEMS IN HIV/AIDS POSITIVE INDIVIDUALS

Psychosomatics (2009; 50:325–330), mania in HIV-positive individuals has been well documented; however, cases of bipolar mania in HIV infection occur, as well. Objective: This is the first controlled study of the demographic and clinical characteristics of bipolar mania and secondary mania in persons with HIV/AIDS in Uganda and Africa. Method: Patients were consecutively recruited from the adult psychiatric wards of Makerere University (Uganda) teaching hospitals. Diagnosis of acute manic episode was based on DSM–IV criteria. Results: The HIV-positive patients with bipolar mania had more immune suppression and more cognitive impairment, suggesting that these patients may already have been cognitively and functionally impaired by their mental illness by the time they acquired HIV infection. Discussion: These findings may be used to help clinicians and policymakers recognize and design appropriate interventions for this vulnerable group of patients. Further studies to delineate the phenomenology of mania in patients with HIV infection/AIDS are warranted.

Bipolar mania is the most common inpatient psychiatric disorder at Butabika Hospital, Uganda's only psychiatric-referral hospital, where the rate of HIV infection among patients with severe mental illness is estimated at 18.4%. Clinicians are faced with the task of determining whether an HIV-positive individual with a manic episode has secondary mania or bipolar mania. Also, in many rural areas, routine HIV testing is not available. In such situations, clinicians may have to rely on clinical symptoms and signs to determine the HIV status of an individual with bipolar mania so as to offer appropriate treatment. Previous researchers have hypothesized that mania occurring in the early stages of HIV infection may represent bipolar disorder, whereas manic individuals with AIDS show secondary mania linked to the path physiology of HIV brain infection.

Given that the two conditions have different etiologies, their clinical presentation and subsequent management may differ. In most developing countries, individuals with bipolar disorder are often under-treated or untreated because of a lack of access to mental health services or noncompliance with treatments given.9 Their untreated symptoms, such as increased libido, impulsivity, and impaired judgment put them at risk of acquiring HIV infection. In such circum Received January 3, 2007; revised July 30, 2007; accepted August 21, 2007. From the Department of Psychiatry, Makerere University; Clinical Epidemiology Unit, Department of Medicine, Makerere University; and the Department of Medicine, Faculty of Medicine, Makerere University,Eisenman,2006

Previous researchers have argued that HIV-positive patients with various bipolar subtypes may have associated impulsive, risk-taking traits that may play a role in HIV risk-behavior such as unprotected sex.16 this study also confirmed the hypothesis that the demographic profiles of HIV-positive patients with bipolar mania and those with secondary mania were different. (Ben-Tovim(1983)

Although, at assessment, both groups had comparable ages, those with bipolar mania were younger when they had their first episode of affective symptoms. Also, the bipolar-mania group had more education and was more likely to be employed than the secondary-mania group. However, both groups of HIV-positive patients had comparable female-to-male ratios, with women being more often affected than men. In a previous study in the United States, 17 HIV-positive patients with mania were grouped according to whether they had a family history of mood disorder. Both groups of patients had comparable age at assessment, which was similar to that of our patients, but men were more common than women in both groups. Also, previous case reports and studies on mania in HIV infection have mostly described male patients.14,18 The differences in gender found between our study and earlier reports may be as a result of differences in HIV transmission between developed and developing countries. In Africa, where heterosexual transmission predominates, men usually have multiple sexual partners. Therefore women are more at risk of acquiring HIV infection.19 Clinically, as expected, the HIV-positive patients, regardless of mania status, had more immune suppression, more cognitive impairment, and more severe manic symptoms, with more irritability and more psychotic symptoms than the HIV negative patients with bipolar mania, Inter-Agency standing committee(2007)

2.3 Stress is Suspect

Scientists studying the developmental roots of mental illness have zeroed in on a likely suspect: the body's stress response. When the body reacts to stressors, two systems kick into gear. The endocrine system produces stress hormones such as cortisol. And the sympathetic nervous system churns out other stress-related hormones such as epinephrine and norepinephrine—the factors responsible for the heart-pounding, sweaty-palms sensation known as the fight-or-flight response.

Yet stress physiology encompasses much more than just stress hormones, says Thaddeus Pace, PhD, an assistant professor of psychiatry and behavioral sciences at Emory University School of Medicine. Stress also impacts immune function. "A stressful event can have profound effects on the amount of activity that's going on in the inflammatory immune system," he says.

Inflammation is a key part of the stress response. It has also been linked to a variety of bodily ills, from diabetes and heart disease to depression and Alzheimer's disease. "I see inflammation as one of the chief evils in mammalian biology," Pace says. Of course, the immune system serves a critical function—and not just for fighting disease. "The immune system is really important for how the brain develops normally," says Staci Bilbo, PhD, an assistant professor of psychology and neuroscience at Duke University. Cells called microglia are the resident immune cells in the brain. They're the central nervous system's first-line defense against infections and other invaders. And, Bilbo says, "They do a lot of important things for building a brain."

For starters, microglia are involved in synaptic pruning and programmed cell death. They also express cytokines, the signaling molecules that serve as messengers between cells and are a key component of the body's inflammatory response. Cytokines are important for the development of basic brain structures from blood vessels to axons. They are also involved in regulating cognition and mood, Bilbo says.

She explored the brain's immune cells by infecting infant rats with the bacterium E. coli four days after birth, a developmental period comparable to the third trimester of pregnancy in humans. The young rats recovered fully from the infection, and as adults they performed as well as control rats on tests of memory and cognition. But their early infections had left their mark.

The rats' microglia had been "primed," Bilbo says; in essence, the cells had been put on high alert for future infections. When the rats experienced a second infection—what she calls a "second hit"—around the time they were learning a new task, they showed profound memory impairments for that task. The primed rats, she discovered, were dramatically over-expressing cytokines in response to the second hit (Journal of Neuroscience, 2011). "Their immune system is changed long-term as a result of the neonatal infection," she says. "And because the immune system impacts brain function, they are altered behaviorally."

That same pattern appears in many neurodegenerative diseases in humans, she says. "A peripheral infection will suddenly make mental functions decline sharply, and you can measure concentrations of cytokines in the cerebrospinal fluid that were previously undetectable."

2.4 Interaction between HIV/AIDS and Mental illness

The total number of new patients seen by the mental health outreach program Increased approximately four-fold during the three year period. Patients with epilepsy comprised by far the largest diagnostic group within the total patient sample (74.5%). The majority of the patients presented with epilepsy, brief psychotic disorder, and depression. Very few patients present with alcohol problems at the health units possibly because in the community, alcohol is socially accepted. Kasoro, S., Sebudde , 2002).

Drinking and getting drunk are considered normal behaviors. Some patients do, however, present with a dual diagnosis of alcohol problems with another diagnosis. Women have twice the number of depressive disorders than men, as seen in numerous epidemiological surveys in low and high income country settings (Rihmer & Augst, 2005). In Uganda, men do not easily express their depressive feelings, while women do and seek help.

2.5 Measures taken to reduce on the Mental Health Problems.

2.5.1. Initiation of the mental health outreach service

In 2002, a program was initiated to test the feasibility of providing mental health outreach services to populations in rural and remote areas in the Mbarara district. They chose 15 health units in the district and also in a rural community of Rubindi sub-county, where a community oriented

sensitization program was to be implemented in order to increase awareness of mental health issues. Four of the health units were located at a distance of approximately 40 kilometers from Mbarara Regional hospital, while 11 were located at a distance of between 40 and 70 kilometers. All of these health units were rural in character.

The sub-county of Rubindi was also chosen because there was no functional government health unit, as opposed to a nongovernmental unit, e.g. stated by a nongovernmental organization (NGO). During the planning phase, obtained baseline data regarding health workers' attitudes to mental illness, the level of care currently available, and the numbers of patients visiting the health unit, they developed a questionnaire to assess the training needs of health workers, e.g. their knowledge of mental health, common mental disorders, services available, etc.

5.5.2. The Mental health outreach service

The mental health outreach service has been in operation since 2002. A mental health team at Mbarara regional hospital, consisting of a psychiatrist, psychiatric clinical officer, a nurse, and occupational therapist, conducts the outreach and clinical supervision. The outreach team goes out once a week, according to a preset program. Medical students from Mbarara also participate in these activities. Health care units (HC levels III, IV) are informed of the dates for the visits well in advance.

2.5.3. Awareness raising activities

Sensitization meetings with community members In Rubindi sub-county, with a population of about 18 000 people, community sensitization meetings were carried out in seven parishes. Over the course of one year, each parish had five sensitization meetings, with 30 participants attending each session. Elders, religious leaders, teachers, local leaders, traditional healers, traditional birth attendants, and representatives of interest groups for women, youths and disabled persons attended meetings. Sensitization meetings focused on common mental illnesses, beliefs and attitudes towards mental illness, approach/handling/care of persons with mental health problems in the community, the community's role in promoting mental health, importance of early identification and early referral of patients for medical treatment, as well as the resettlement of patients.

2.5.4. Medication supply

Medication supply by the government health units/hospitals is inadequate and often unreliable. As mentioned, it is government policy to provide free medication to patients, although in most cases medications are lacking and patients do not get the prescribed treatment. Patients and care givers appreciate the importance of medication, and therefore the absence of medication in health units is a source of frustration and greatly contributes to poor compliance. In the light of this problem, In the light of this problem, patients and caregivers resolved to contribute to the purchase of medications.

2.5.5. Working with traditional healers

In the course of their work, they realized that nearly all mental health patients first sought help from traditional healers. Therefore, they approached one prominent traditional healer who agreed to organize other healers for meetings, with the aim of establishing collaboration. They had contact with 20 traditional healers who agreed to work with them, especially in the areas of referral of patients, exchange visits and sharing of information

CHAPTER THREE

3.0. METHODOLOGY

3.1. Introduction:

This chapter include:- Study Area, Study Population, Sample Size, Sampling Procedure3.9 Ethical Consideration, Data Analysis and Presentation, Quality Control, Data Collection Tools

3.2. Research Design

Across section of both quantitative and qualitative methodology of data collection and analysis was used. Quantitative methodology enabled the researcher analyze data for statistical purposes while qualitative methodology provided detailed data for analytical purposes.

3.3. Study Area

Kampala International University Teaching Hospital (KIU-TH) is located in Ishaka, a town in Igara County, in Bushenyi District which is located 64 km west of Mbarara and 7km West of Bushenyi-District headquarters. The Hospital's population catchment is more than 1million with overall work force of 629 members of staff. It trains Medical students, Dentist, Pharmacy, Nursing, Laboratory scientist, Clinical Officers, with a total population of over 2000 students. The hospital is private-puplic partnership teaching and provides subsidised user fee in conjunction with the Government of Uganda under the Public- Private Partnership Program and has the capacity to offer medical services to about 500 persons per day. The Hospital has a total bed capacity of 610 and offers outpatient, inpatient as well as Accident and Emergency services and provides these services to both Bushenyi District and the neighbouring districts. The outpatient services include: General Outpatient, as well as special clinics such as Dental, Ear Nose and Throat (ENT), Ophthalmology, Psychiatry, Internal Medicine, Surgery/Orthopaedics, Obstetrics and Gynaecology (Obs &Gyn) and Paediatric outpatient services. The inpatient services include: Obstetrics/ gynaecology, General surgery / orthopaedics, Internal medicine, Maternal Child Health and Family Planning/Paediatrics as well as Mental Health services. The hospital also offers diagnostic services such as laboratory and imaging services.

3.4. Study Population

This study used a number of one hundred respondents selected from OPD and ward of Psychiatry Department of KIUTH. The respondents involved the health officers for interpretation of the language.

3.5. Sample Size

The study used a sample size of 100 respondents for the convenience of time and resources, the number of respondents interviewed per day was7 each within 15 minutes for 15 days The time chosen is because most respondents are busy and may not enough time to spend in the discussion. The following formula was used in the determination of the number of respondents. Mbuto (2004)

$$X=\frac{dn}{t}=$$

Where:

- d= period to be taken for collecting data in days.
- n=number of respondents to be interviewed per day.
- t=time taken to interview each respondent in minutes.
- x=number of respondents needed.

3.6 SAMPLING PROCEDURE

Simple random sampling method was used to those respondents that would be available on any particular day.

3.7. INCLUSION AND EXCLUSION CRITERIA

3.7.1. INCLUSION CRITERIA

Any patient attending KIUTH Psychiatry department that would give attention was considered for an interview.

3.7.2. EXCLUSION CRITERIA

All patients that became uncooperative were left out of the study.

3.8. DATA COLLECTION TOOLS

Questionnaires with both closed and open ended questions were used to gather information from respondents.

3.9. QUALITY CONTROL

I collected data by myself so as to get clear explanations to respondents.

3.9.1. DATA ANALYSIS AND PRESENTATION

Data was analyzed using calculators and Microsoft excel in a computer and then presented in form of frequency tables and bar graphs and these were accompanied with some simple explanation.

3.9.2. ETHICAL CONSIDERATION.

An introductory letter was obtained by the researcher from the administration of Kampala international university faculty of clinical medicine and dentistry which was presented to the relevant authorities of the area of the study. I then explained to the respondents about the study before interviewing them, this was done in language they could understand best, informed verbal consent was sought, confidentiality was ensured and participation was voluntary. Finally the data collected was used for the purpose of this research.

3.10. Data Analysis and Presentation

After collecting the data by the research instruments, it was sorted out, arranged, coded and analyzed manually in order to have the required quality, accuracy, consistency and completeness. Table and graphs were used in analyzing the descriptive findings from the field.

CHAPTER FOUR

4.0. DATA PRESENTATION, INTERPRETATION AND ANALYSIS

4.1.Introduction

This chapter presents the data collected regarding the prevalence of HIV/AIDS among the mentally ill persons. The findings are presented using simple frequency, percentages, and tables. The study based on the research questions and objectives that were used to guide the researcher.

The chapter is also comprised of four parts: 4.1 show the demographic information of the respondents, 4.2 shows the number of people who get Mental health problems before HIV/AIDS infection; 4.3 show the Interaction between HIV/AIDS and Mental illness and 4.4 shows the Measures taken to reduce on the Mental Health Problems.

4.2. Background of the Respondents

4.2.1 Sex of the respondents

The sex of the respondents is given in table 1

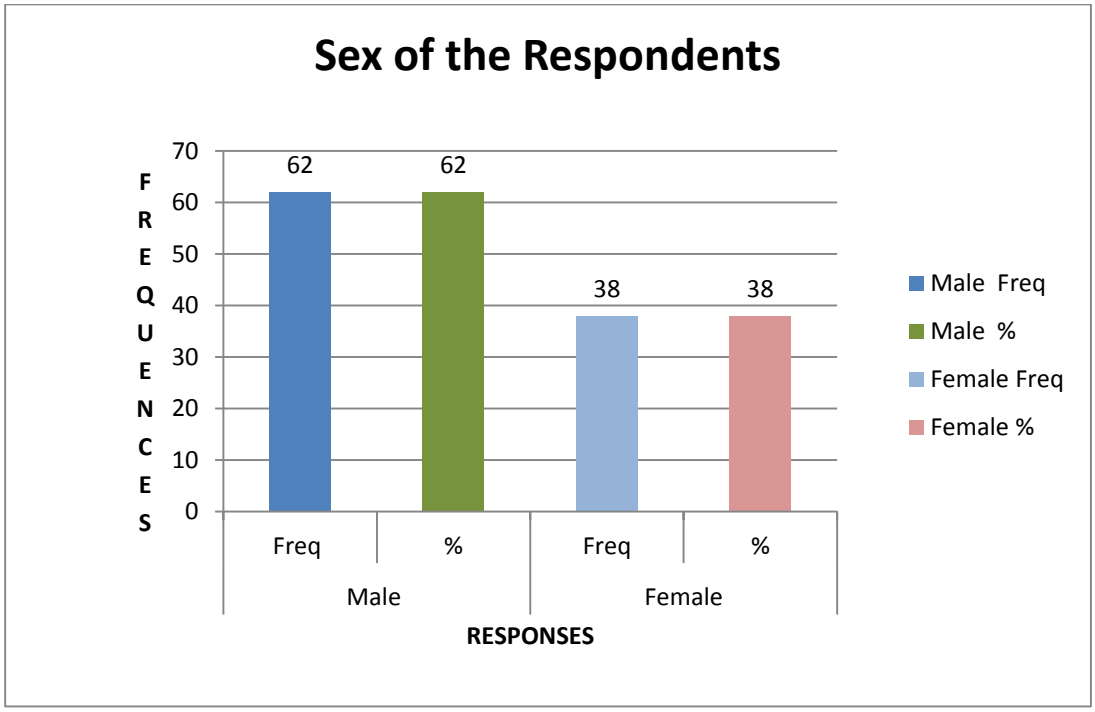
Table 1: showing sex of the respondents

Male		**Female**	
Freq	%	**Freq**	%
62	62	38	38

Source: Primary data

From the above table, the male respondents were 62 (62%) while the female were 38 (38%). The male respondents were the majority because these more accessible than the female ones. This also graphically illustrated below:

Figure 1: **showing sex of the Respondents**



4.2.2 Age of the respondents

Table 2: ***showing Age of the respondents***

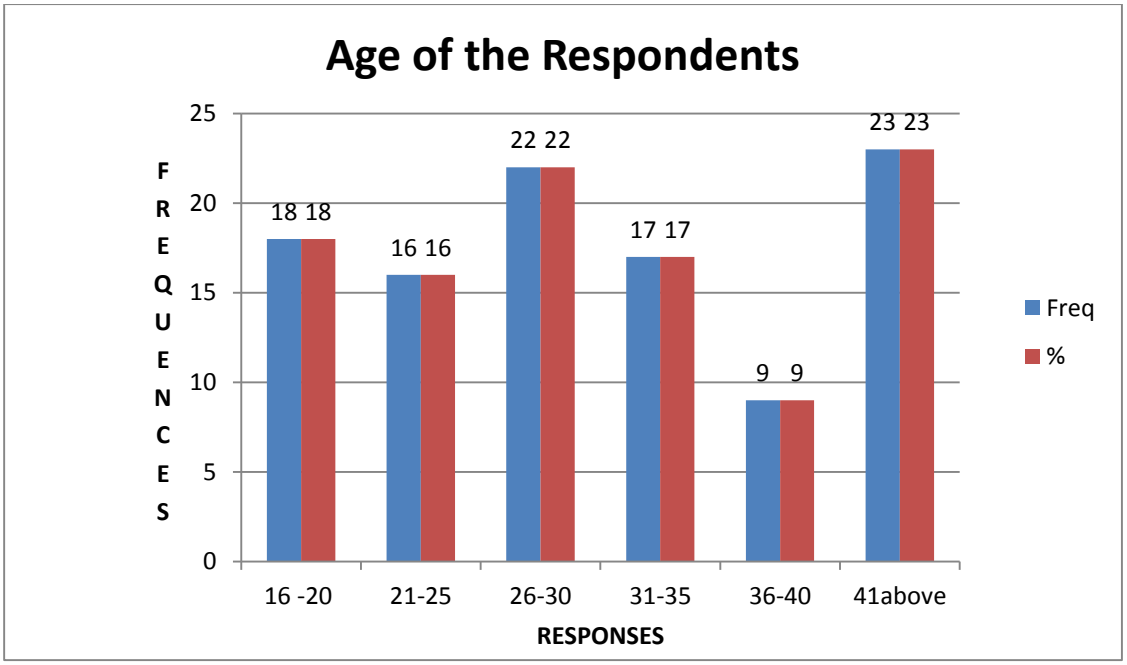
Age	Freq	%
16 -20	18	18
21-25	16	16
26-30	22	22
31-35	17	17
36-40	9	9
41above	23	23

Source: Primary data

From the table above the results indicate that the respondents between the age of 16-20 totaled to 18 (18%), between 21-25 yrs were 16 (16%), between the age of 26 -30 amounted to 22 (22%), between 31-35 yrs were 17 (17%), between 36-40 yrs were (9%) and beyond 41 above

were 23 (23%). From the table it can be stressed that the majority of the respondents were between the age of 26-30 years. This is also illustrated by the help of a graph below:

Figure 2: ***showing Age of the Respondents***



4.2.3 Education level of the respondents

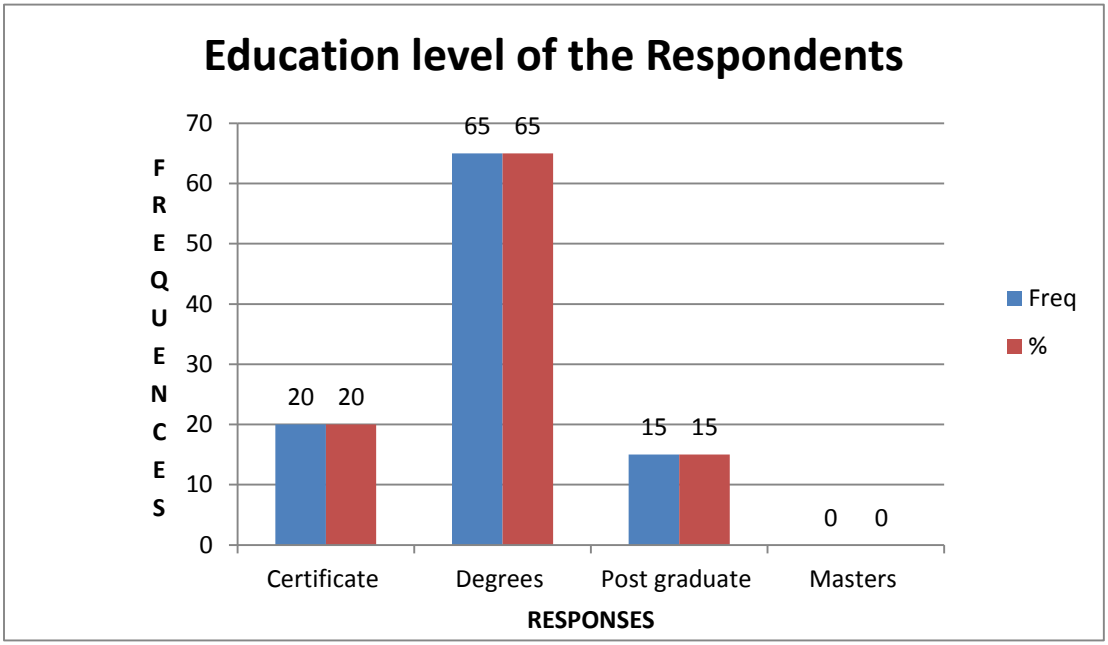
Table 3: ***showing level of Education of the Respondents***

Education	Freq	%
Certificate	20	20
Degrees	65	65
Diploma	15	15

Source: Primary data

The results in the above show that 20 (20%) respondents had certificates while 65 (65%) had degrees, 15 (15%) were of diploma and no one had master's degree. From the findings above, it can be articulated that the biggest number of the respondents were of degree level because these people who were accessible.

Figure 3: ***showing level of Education of the Respondents***



4.2.4 Number of people who get mental health problems with HIV infection.

Table 4: **showing the prevalence of HIV/AIDS among the mentally ill persons**

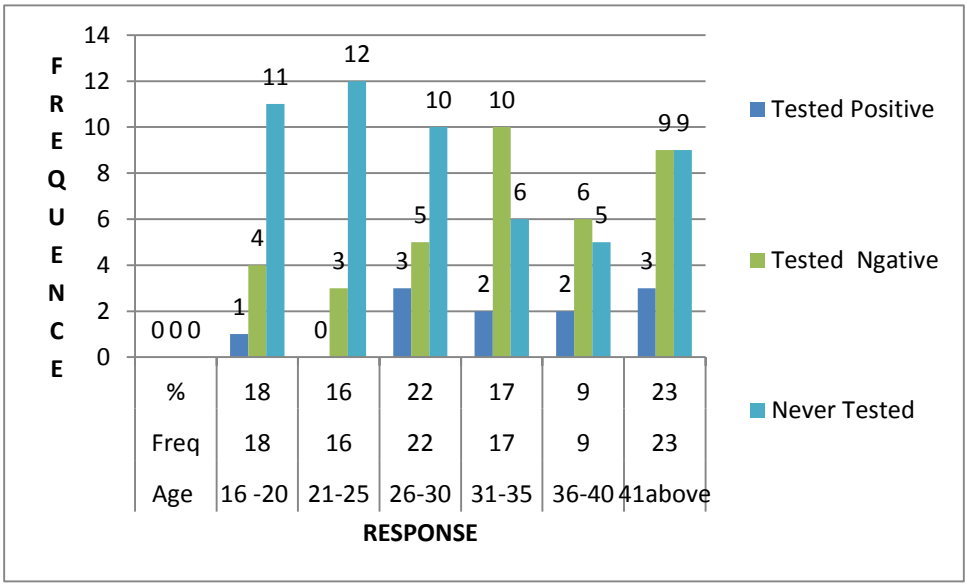
Prevalence of HIV/AIDS Among the Mentally Ill Persons								
Age range of the Respondents			**Tested Positive**		**Tested Negative**		**Never Tested**	
Age	**Freq**	**%**	**Freq**	**%**	**Freq**	**%**	**Freq**	**%**
16 -20	18	18	1	1	4	4	11	11
21-25	16	16	0	0	3	3	12	12
26-30	22	22	3	3	5	5	10	10
31-35	17	17	2	2	10	10	6	6
36-40	9	9	2	2	6	6	5	5
41above	23	23	3	3	9	9	9	9

Source: Secondary data

From the table above, results show that out of 18 (18%) male respondents between the age 16-20 years, 1 (1%) were tested positive, 4 (4%) tested negative and 11 (11%) never tested. The male respondents between the age of 21-25 years who totaled up to 16 (16%) had 0 (0%) of people tested positive, 3 (3%) tested Negative and 12 (12%) never tested.

22 (22%) of the male respondents between the age of 26-30 had 3 (3%) of the people tested positive; 5 (5%) tested negative and 10 (10%) never tested. Between 31-35 year – 17 (17%) had 2 (2%) tested positive; 10 (10%) tested negative and 6 (6%) never tested. Between the age of 36-40 – 9 (9%) had 2 tested positive, 6 (tested negative and 5 (5%) never tested. The respondents who were

Figure 4: **Prevalence of HIV/AIDS among the Mentally Ill Persons**



4.2.4 Number of Male HIV/AIDS positive among Mental illness persons

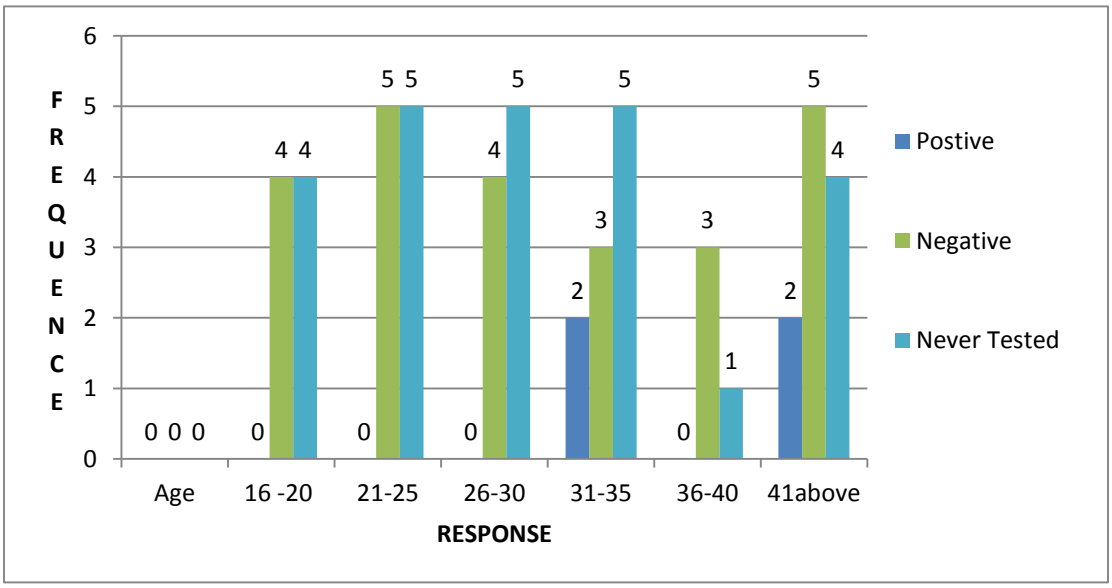
Table 5: **: showing Number of Male HIV/AIDS positive among Mental illness Persons**

	Positive		Negative		Never Tested	
Age	**Freq**	**%**	**Freq**	**%**	**Freq**	**%**
16 -20	0	0	1	1	6	6
21-25	0	0	4	4	2	2
26-30	1	1	1	1	9	9
31-35	2	2	5	5	6	6
36-40	0	0	2	2	2	2
41above	4	4	3	3	4	4

Sources: Secondary data

The findings in the table above show that 0 (0%) male respondents between the age of 16-20 tested positive; 1 (1%) tested negative; 6 (6%) never tested. The results further show that 0 (0%) tested positive; 1 (1%) tested negative; 9 (9%) never tested.2 (2%) of the respondents between the age of 31-35 test positive, 5 (5%) tested negative and 6 (6%) never tested. 0 (0%) respondents between the age of 36-40 tested positive; 2 (2%) tested negative and 2 (2%) never tested. From the findings, it can be argued that were HIV/AIDS positive comprised of the male respondents between the age of 41 and above, this have been due to the fact that these are mature people who have more than one wife or through their occupation or as a result of mental illness. The majority among those who were negative comprised of the age between 21-25 years. The biggest number among those had not tested were between the age of 16-20years. This is illustrated graphically below:-

Figure 5: showing Number of Male HIV/AIDS positive among mentally ill patients



Number of Female HIV/AIDS positive among mentally ill patients

Table 6: **showing Number of Female HIV/AIDS positive among Mental illness**

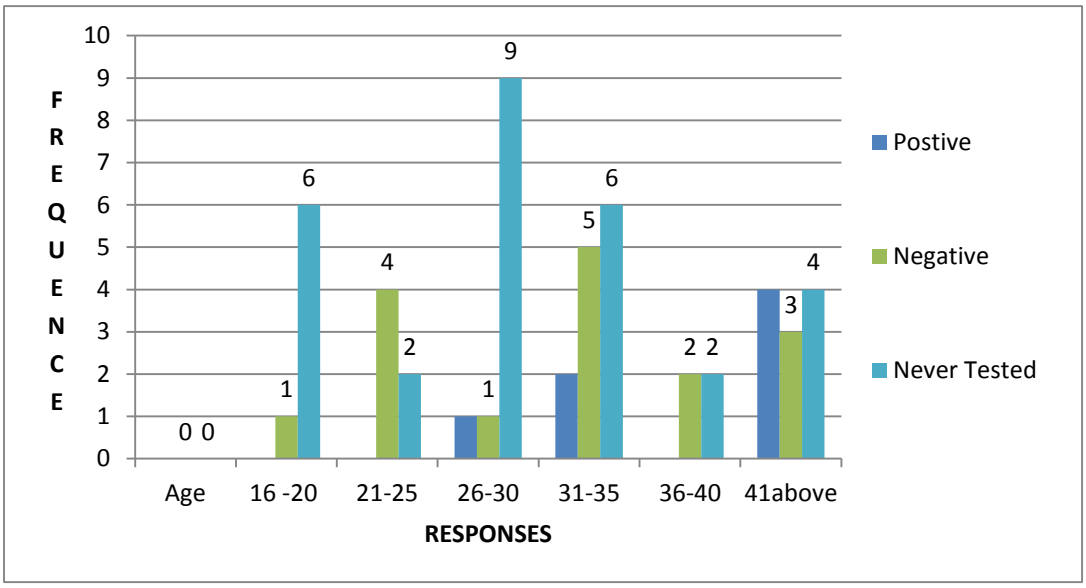
Patients

	Positive		**Negative**		**Never Tested**	
Age	**Freq**	**%**	**Freq**	**%**	**Freq**	**%**
16 -20	0	0	4	4	4	4
21-25	0	0	5	5	5	5
26-30	0	0	4	4	5	5
31-35	2	2	3	3	5	5
36-40	0	0	3	3	1	1
41above	2	2	5	5	4	4

Source: Secondary data

The findings in the table above indicate that 0 (0%) respondents between the age of 16-20 tested positive; 4 (4%) tested negative; 4 (4%) never tested. 0 (0%) of the respondents between 21-25 of age test positive; 5 (5%) tested negative; 5 (5%) tested negative and 5(5%) never tested. 0 (0%) between 26-30 of age tested positive; 3 (3%) tested negative; 5 (5%) never tested. 2 (2%) of the respondents between the age of 31-35 tested positive; 3 (3%) tested negative and 5 (5%) never tested. 0 (0%) respondents between 36-40 were positive, 3 (3%) were negative and 1 (1%) never tested. 2 (2%) respondent aged 41 and above were positive;5 (5%) were negative and 4 (4%) never tested. It can stress from the findings that who HIV/AIDS were between 41 and above. Among those were negative, the biggest number was between the age of 21-25. And among those who had not tested were between 16-20years. This is also graphically presented below:-

Figure 5: **showing Number of Female HIV/AIDS positive among mentally ill Patients.**



Total number of people HIV/AIDS positive, negative and never tested among Mental illness Persons

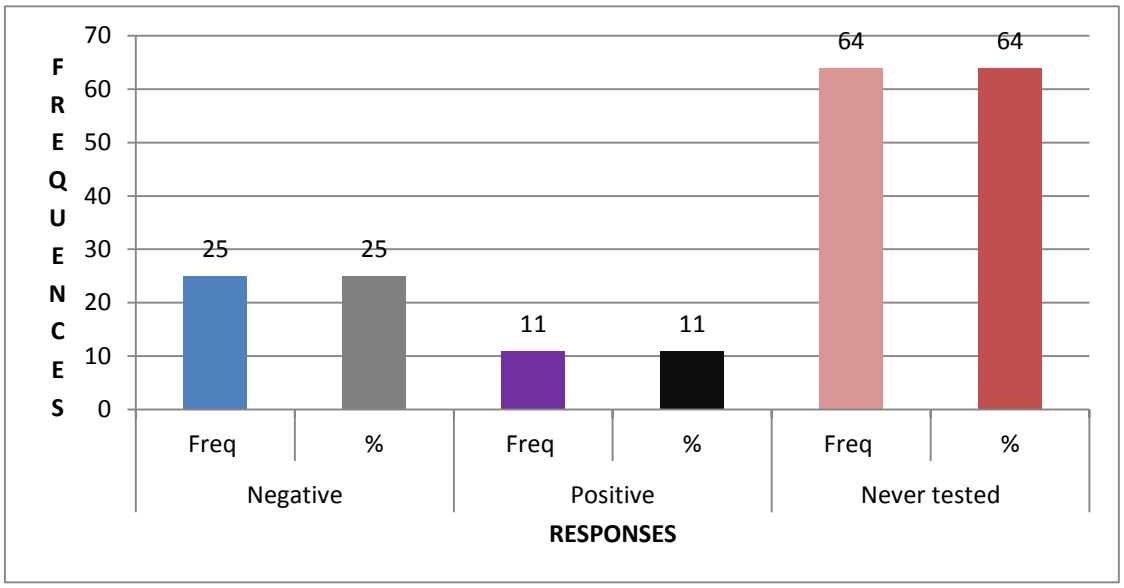
Table 7: ***showing the total number of people who get mental illness HIV/AIDS infection.***

Negative		**Positive**		**Never tested**	
Freq	**%**	**Freq**	**%**	**Freq**	**%**
25	25	11	11	64	64

Source: Primary data

The results in the table above show that the total numbers of people who are positive totaled 11 (11%), negative were 25 (25%) and those who never tested amounted to 64 (64%). From these findings it can be stressed the majority of the respondents never tested because the doctors or nurses never ordered for the test and some were not due to lack of test kits. This is also illustrated as below:-

Figure 6: ***: showing the total number of people who get mental illness HIV/AIDS infection.***



4.3.1 Relationship between HIV/AIDS and mental illness

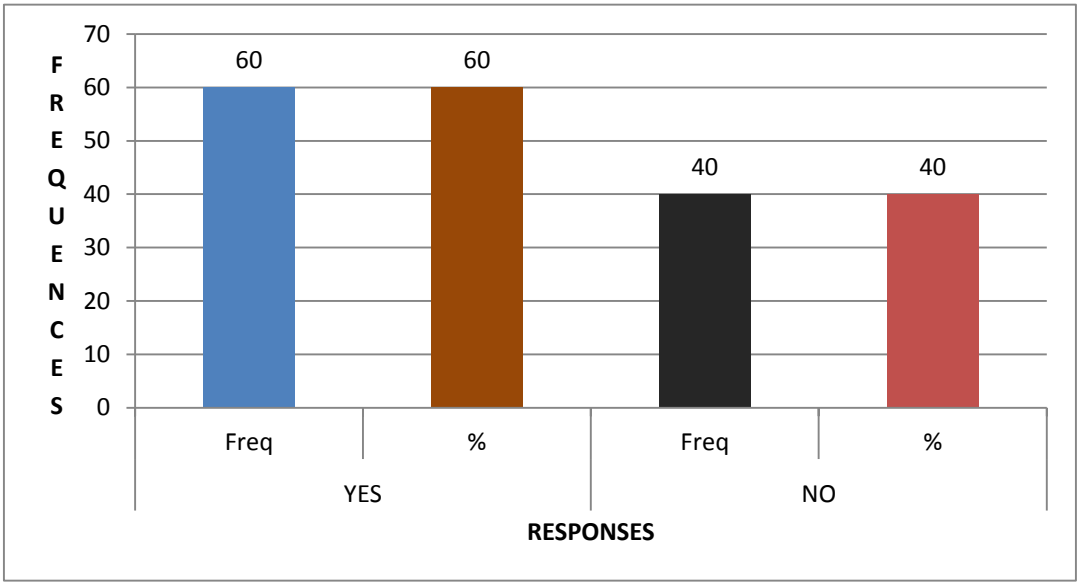
Table 8: **: showing respondents on whether HIV/AIDS can cause mental illnesses.**

YES		**NO**	
Freq	**%**	**Freq**	**%**
60	60	40	40

Source: Primary data

The findings show that 60 (60%) agreed that HIV/AIDS has potential to cause mental illnesses while 40(40%) gave negative which implied that they disagreed. The majority suggested that HIV/AIDS has potential to lead the mental illness and this due to the fact that many people with HIV/AIDS were admitted with mental health problems. This also illustrated by a graph below:-

Figure 7: ***showing respondents on whether HIV/AIDS can cause mental illnesses***



4.3.3 Some Factors that predispose HIV/AIDS to Mental illness

Table 9: ***showing some factors that predispose HIV/AIDS to Mental illnesses***

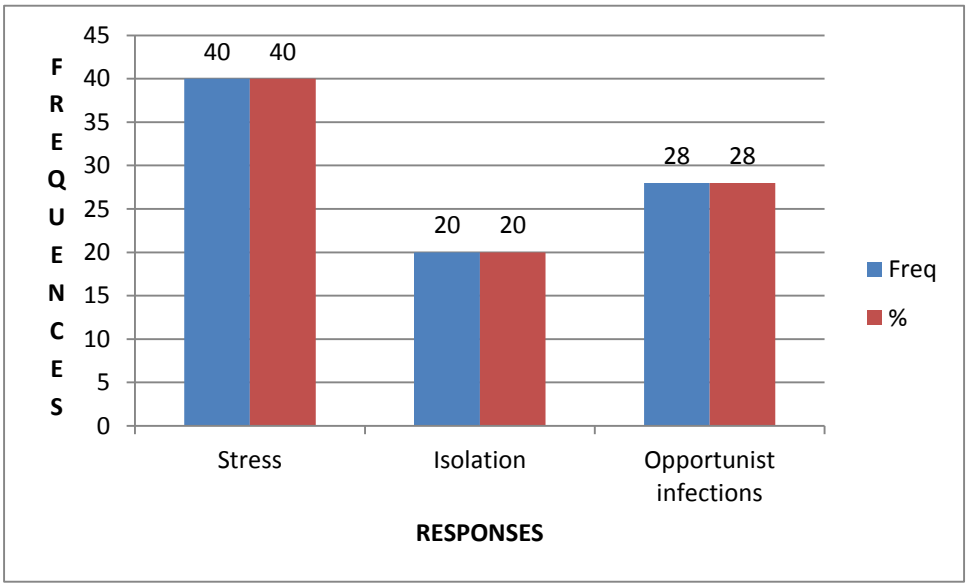
Responses	Freq	%
Stress	40	40
Isolation	20	20
Opportunist infections	40	40

Source: Primary data

The findings in the table above indicates that 40 (40%) of the respondents suggested stress as one of the factors that HIV/AIDS patients to mental illness; 20 (20%) mentioned isolation while 40 (40%) stressed opportunist infections.

From the findings it can stressed that the majority of the respondents articulated stressed stress as one of the biggest problems that lead people with HIV/AIDS to get mental health problems and this could be due to much fear of death and stigma associated with people who are HIV/AIDS infection and opportunistic infections as a result of reduced immunity. This also graphically illustrated below:-

Figure 8: ***showing factors that predispose HIV/AIDS to Mental illnesses***



4.3.4. Mental illness a cause for HIV/AIDS

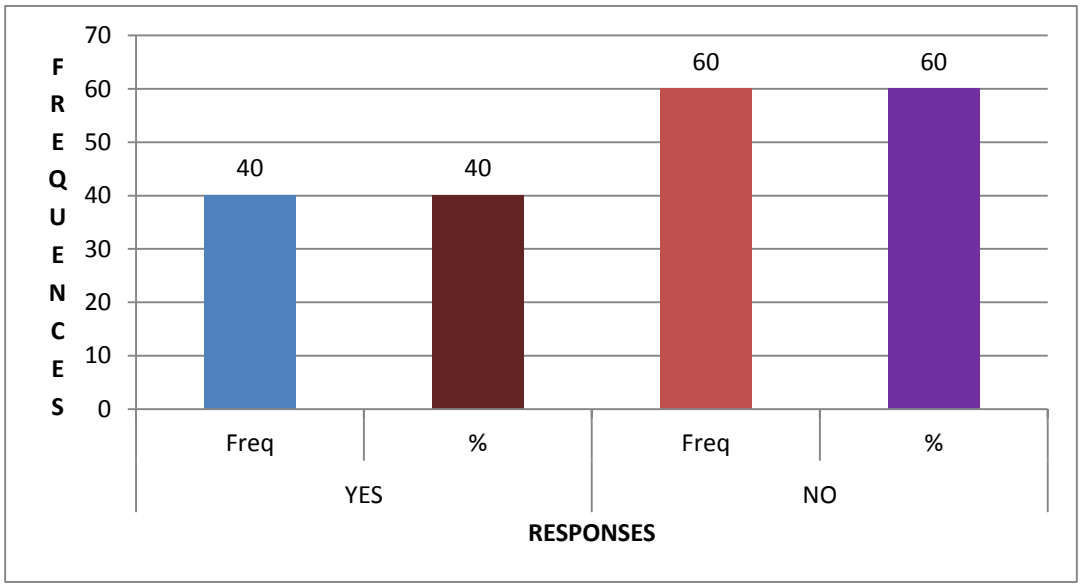
Table 10: ***showing mental illness as a cause for HIV/AIDS***

YES		**NO**	
Freq	**%**	**Freq**	**%**
40	40	60	60

Source: Primary data

The finding in the table show that 40 (40%) respondents gave a yes response and this indicated that they agreed that mental illness can cause HIV/AIDS while 60 (60%) did not agree. From the findings above the 40% argued that people with mental health problems are susceptible HIV/AIDS and this could be due to their inability to realize the need to protect themselves from such infections. This further graphically illustrated below:-

Figure 9: ***showing mental illness as a cause for HIV/AIDS***



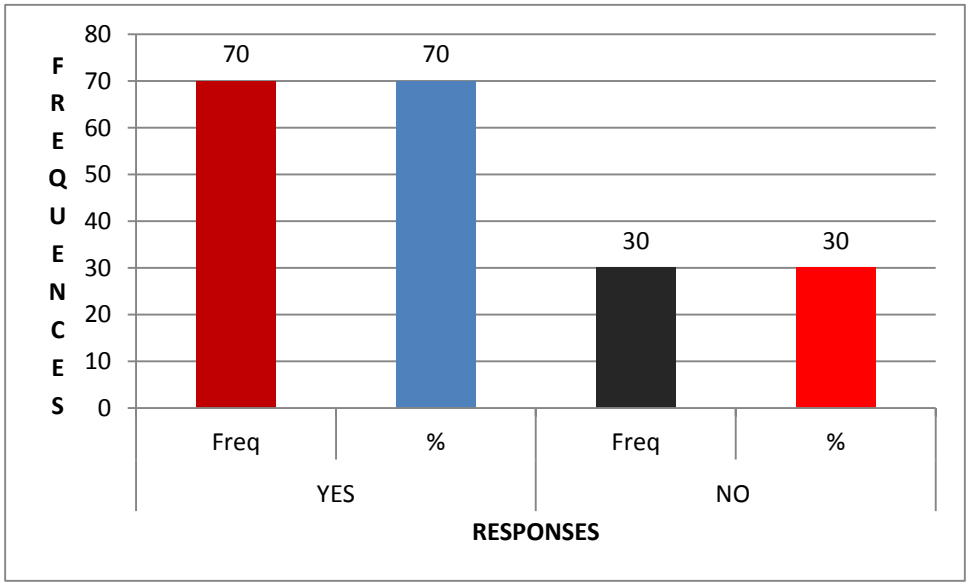
4.3.5. Knowledge of factors that predispose mentally ill patient to HIV/AIDS infections

Table 11: ***showing the responses on the knowledge of the respondents about factors that predispose mentally ill patients to HIV/AIDS infections***

YES		NO	
Freq	**%**	**Freq**	**%**
70	70	30	30

From the table above, the results indicate that 70 (7%) of the respondent had knowledge on the factors that predispose mentally ill persons to HIV/AIDS while 30 did not know. The respondents of majority had knowledge about the factors that predispose mental ill patients to HIV/AIDS infection; this was because most respondents were doctors and nurses who always interact with these patients. This is further presented below:-

Figure 10: ***showing the responses on the knowledge of the respondents about factors that predispose mentally ill patients to HIV/AIDS infections***



4.3.6 Factors that predispose mentally ill people to HIV/AIDS

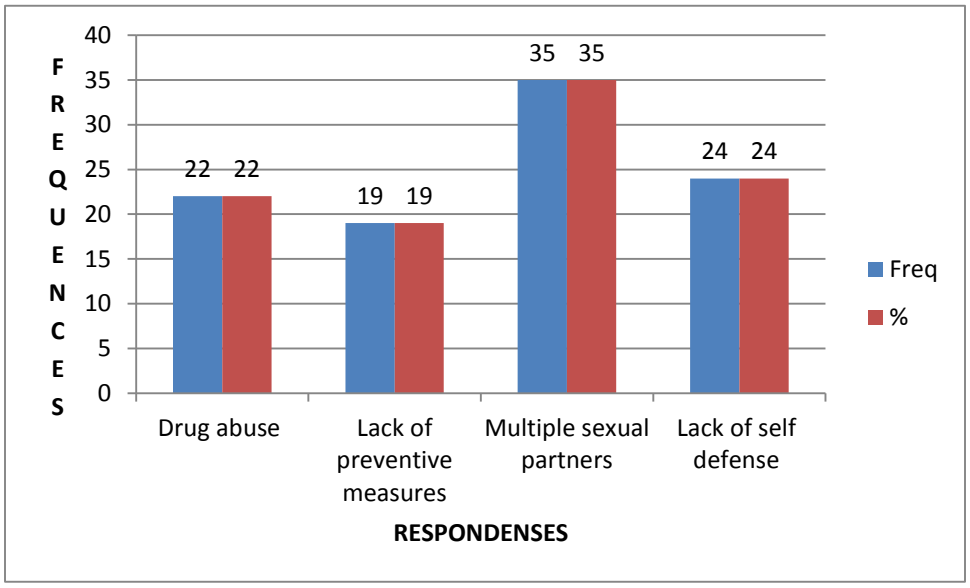
Table 12: showing responses on factors that predispose mentally ill people to HIV/AIDS

Response	Freq	%
Drug abuse	22	22
Lack of preventive measures	19	19
Multiple sexual partners	35	35
Lack of self defense	24	24

Source: Primary data

The findings in the table indicate that 22 (22%) stressed drug abuse as one of the factors that predispose mental illness to HIV/AIDS while 19(19%) articulated lack of preventive measures, 35 (35%) mentioned multiple sexual partners and 24 (24%) stressed lack of self-defense. The majority of the respondents stressed multiple sexual partners and drug abuse as the most important factors that predispose mental ill to HIV/AIDS infections. This was attributed to some conditions like bipolar disorder. This is further illustrating graphically below:-

Figure 11: **showing responses on factors that predispose mental ill people to** HIV/AIDS



4.4 Measures taken to reduce Mental Illness among HIV/AIDS Patients

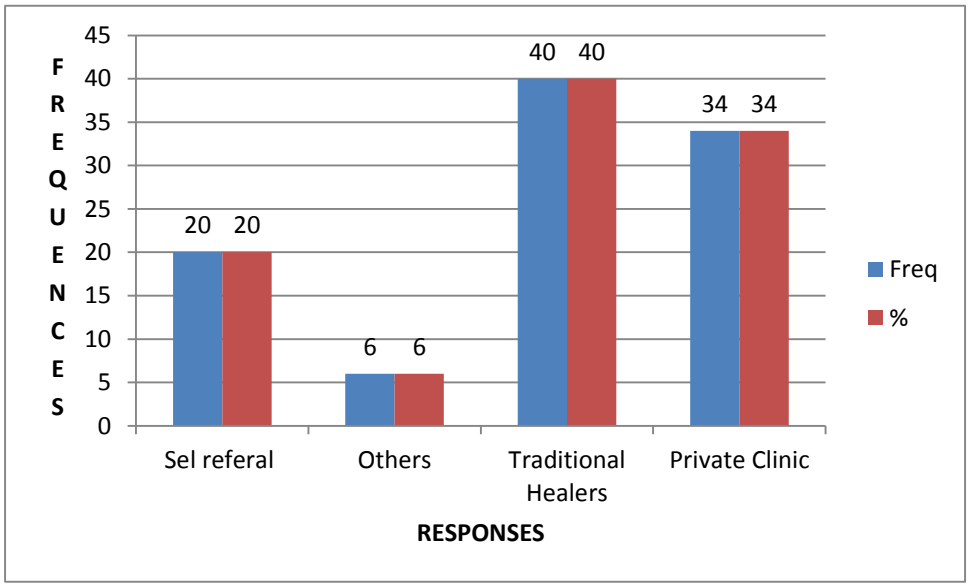
4.4.1 Places where patients receive treatment

Table 13**: showing responses on the places where patients receive treatment**

Reponses	**Freq**	**%**
Self referral	20	20
Others	6	6
Traditional Healers	40	40
Private Clinic	34	34

From the table above, the results indicate that 20 (20%) respondents postulated Self referrals to hospital as one of the places where patients receive treatment; 6 (6%) go to other places; 40 (40%) visit traditional healers and 34 (34%) go to private clinics. According to the majority of the respondents, most patients receive treatment from traditional healers. This further illustrated graphically below:-

*Figure 12**: showing responses on the places where patients receive treatment***



4.4.2 Do you offer HIV/AIDS services?

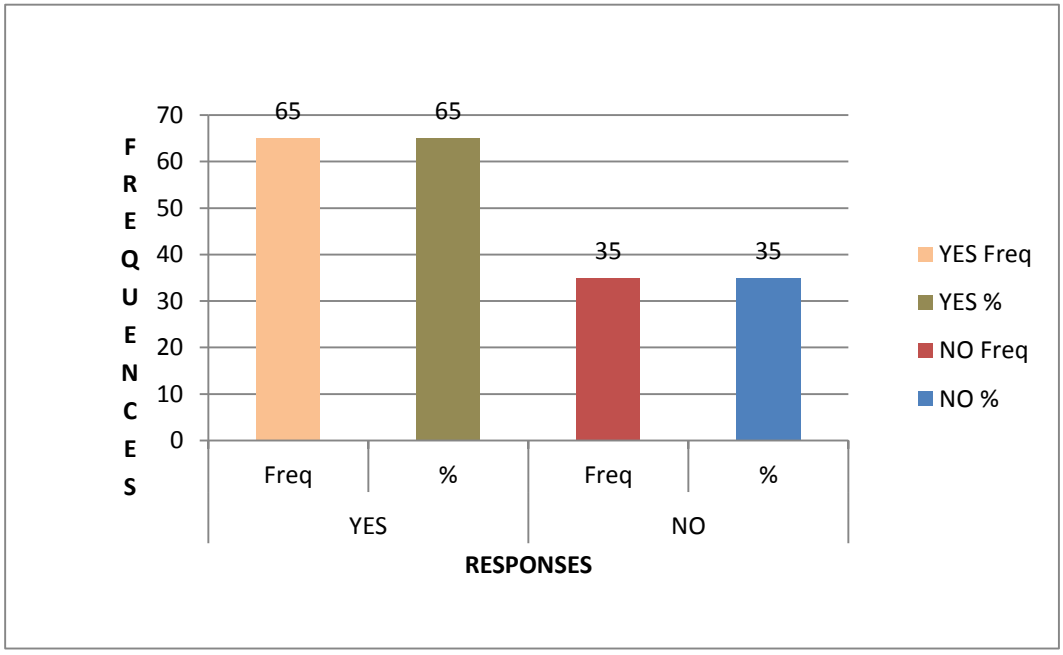
Table 14: ***showing response on whether HIV/AIDS services are offered***

Yes		**No**	
Freq	**%**	**Freq**	**%**
65	65	35	35

Source: Primary data

From the table above, the findings show that 65 (65%) of the respondents said that they offer HIV/AIDS services while 35 (35%) said they did not offer these services. 35% of the respondents said that they not offer HIV/AIDS services and this could attributed to lack of facilities or test kits. This is further illustrated graphically as follows:-

Figure 13: ***showing response on whether HIV/AIDS services are offered***



4.4.3 Reasons why HIV/AIDS service are not offered

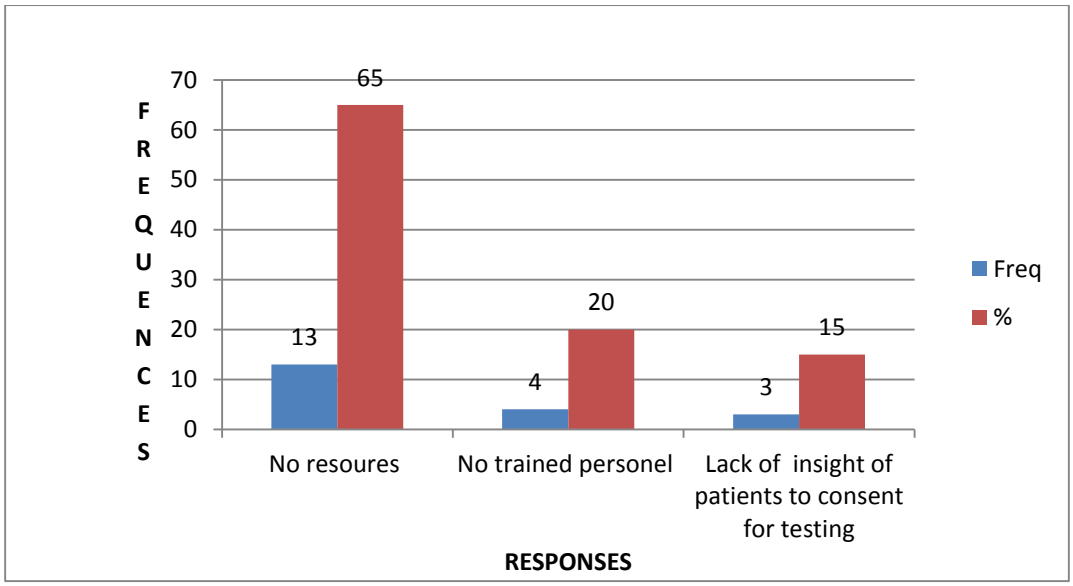
Table 15: ***showing responses on the reasons why they did not offer HIV/AIDS Services***

Responses	Freq	%
No resources	13	65
No trained personnel	4	20
Lack of insight of patients to consent for testing	3	15

Source: Primary data

The findings in the above table show that 13 (65%) respondents said they do not have resources; 4 (20%) have trained personnel and 3 (15%) stressed that they lack insight of patients to consent for testing. The majority postulated lack of resources as a major hindrance to the provision of HIV/AIDS services. This is reflected graphically below:-

Figure 14: ***showing responses on the reasons why they did not offer HIV/AIDS Services.***



4.4.4 Management of HIV/AIDS Positive with Mental illness

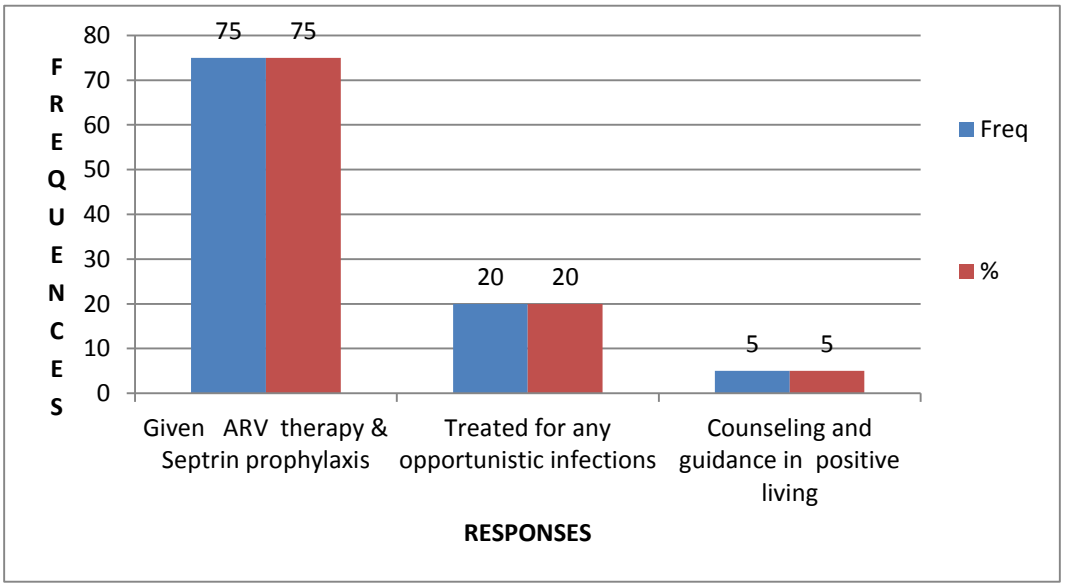
Table 16**: showing responses on the management of HIV/AIDS Positive with Mental illness.**

Responses	Freq	%
Given ARV therapy & Septrin prophylaxis	75	75
Treated for any opportunistic infections	20	20
Counseling and guidance in positive living	5	5

Source: Primary data

The results in the table above indicate that 75 (75%) of the respondents said they manage HIV/AIDS positive with mental illness by giving them ARV therapy and Septrin prophylaxis; 20 (20%) said they are treated for any opportunistic infections. 5 (5%) counsel and guide them. According to the majority of the respondents, HIV/AIDS positive with mental health problems are managed by continuing supply of ARVs and septrin prophylaxis .This is further illustrated below:-

Figure 15**: showing responses on the management of HIV/AIDS Positive with Mental illness**



4.4.5 Some common mental Illnesses among HIV/AIDS

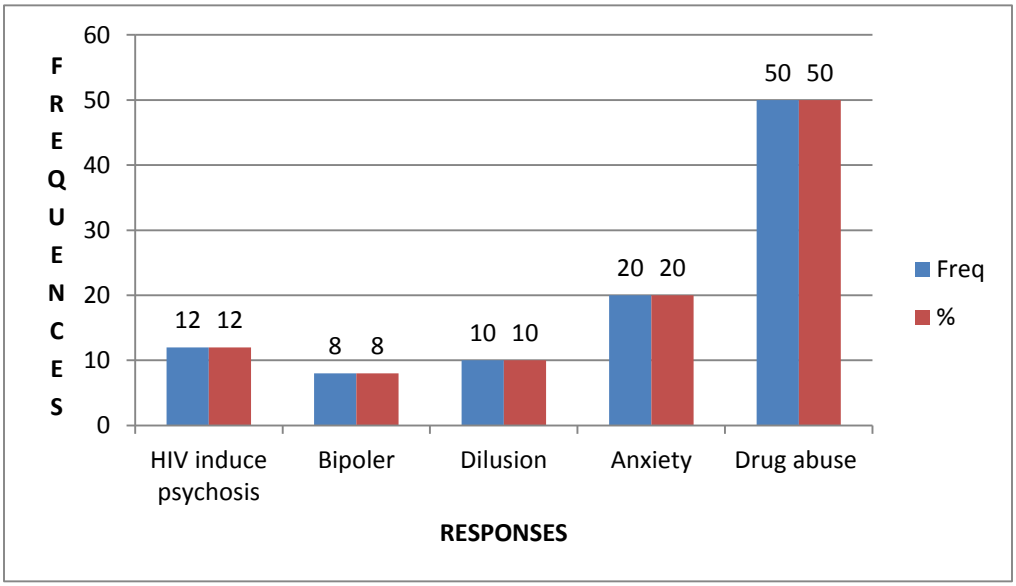
Table 17: showing some common mental Illnesses among HIV/AIDS.

Responses	Freq	%
HIV induce psychosis	50	50
Bipolar affective disorder	8	8
Delusion	10	10
Anxiety	20	20
Drug abuse	12	12

Source: Primary data

From the table above the findings shows that 50 (50%) respondents stressed HIV induce psychosis as one of the common mental illness among HIV/AIDS; 8 (8%) mentioned bipolar affective disorder; 10 (10%) stressed delusion; anxiety and 12 (12%) suggested drug abuse. The biggest number of the respondents stressed HIV induce psychosis as the major problem common among the mental ill persons. This could be attributed to the increasing number of people involved in taking marijuana. This is further illustrated below:-

Figure 16: ***showing some common mental Illnesses among HIV/AIDS.***



4.4.6 Individual measures to reduce mental illnesses among HIV/AIDS

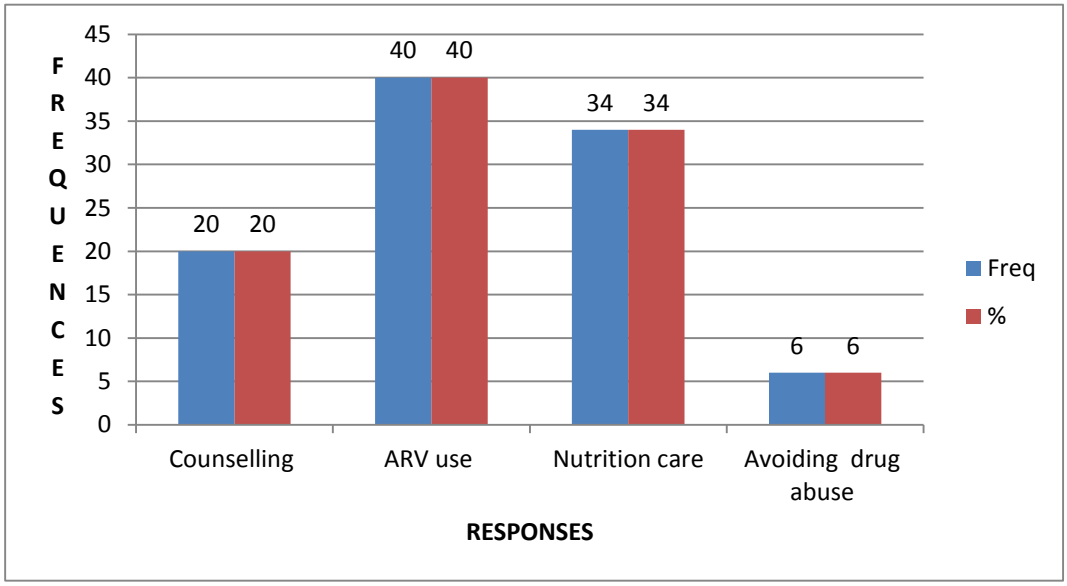
Table 18**: showing responses on the individual measures to reduce on mental illness among HIV/AID**

Responses	**Freq**	**%**
Counseling	20	20
ARV use	40	40
Nutrition care	34	34
Avoiding drug abuse	6	6

Source: Primary data.

The findings in the table indicate that 20 (20%) suggested counseling; 40 (40%) mentioned ARVs; 34 (34%) said nutrition care and 6 (6%) suggested avoiding drug abuse. The biggest number of the responses articulated ARVs as the major measure used to reduce on the mental illness among the HIV/AIDS patients. This is because this one improves on the immune system of the patients. This illustrated graphically below:-

Figure 17: ***showing responses on the individual measures to reduce on mental illness among HIV/AIDS.***



4.4.7 Community measures

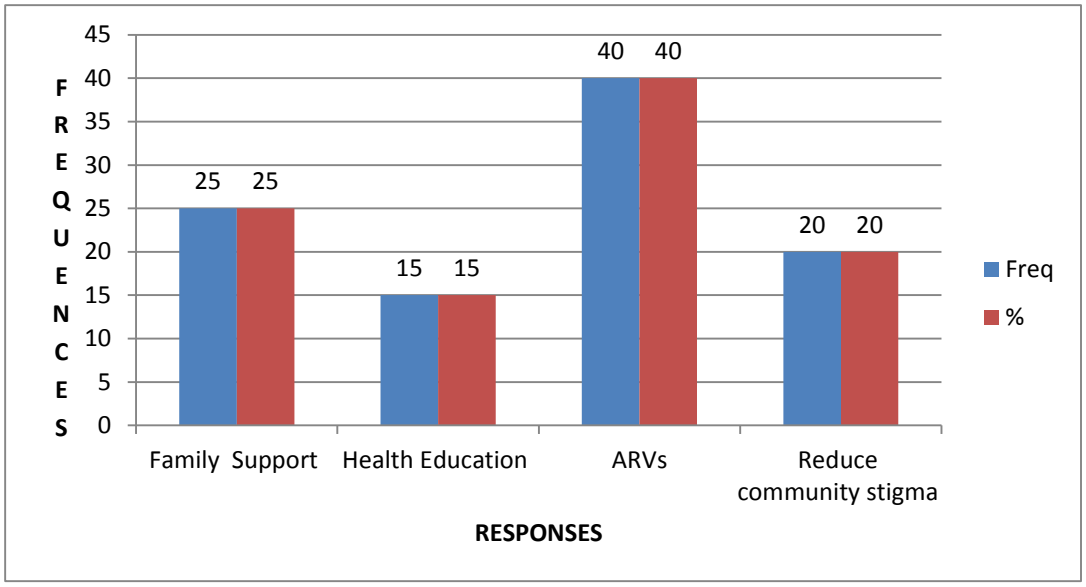
Table 19: ***showing responses on the Community Measures***

Responses	Freq	%
Family Support	25	25
Health Education	15	15
ARVs	40	40
Reduce community stigma	20	20

Source: Primary data

From the above table, results indicate that 25 (25%) of the respondents suggested family support; 15 (15%) mentioned health education; 40 (40%) stressed ARVs while 20 (20%) articulated reduction on the community stigma. The majority mentioned ARVs as a major measure to the mental illness among HIV/AIDS positive persons. These findings are illustrated as below:

Figure 18: ***showing responses on the Community Measures***



4.4.8 How Effectiveness of the Measures used to manage mental illness among HIV/AIDS patients.

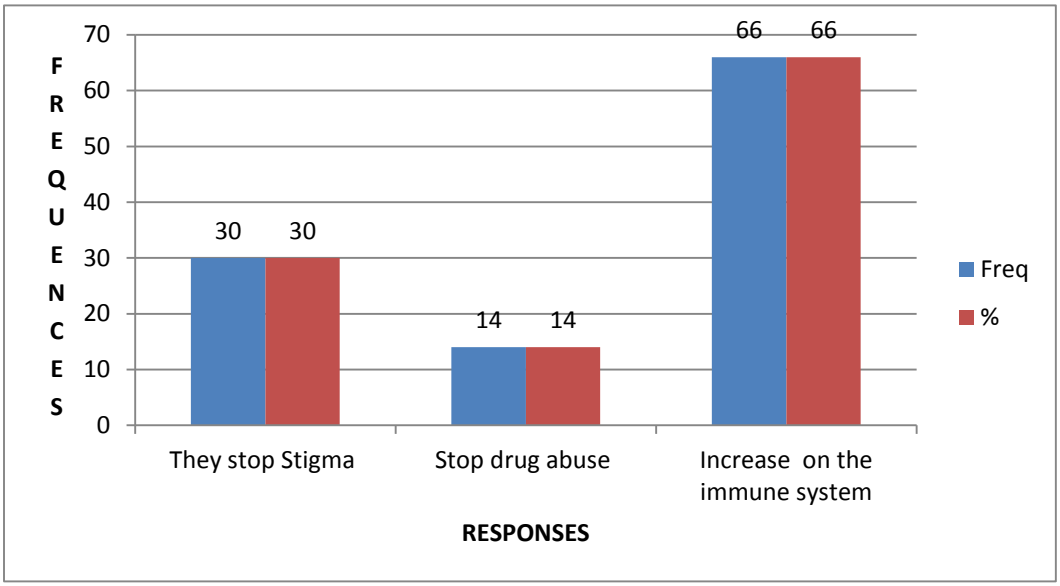
Table 20: ***showing responses on the effectiveness of the measure used to manage mental illnesses among HIV/AIDS patients.***

Responses	Freq	%
They stop Stigma	30	30
Stop drug abuse	14	14
Increase on the immune system	66	66

Source: Primary data

The findings in the table indicate that 30 (30%) of the respondents said they stop stigma while 14 (14%) postulated that the stop drug abuse and 66 (66%) argued that they increase immune system. According to majority of the respondent. The biggest number of the respondents stressed stopping stigma as one factors that portray the effectiveness of the measures. This is further illustrated graphically as below:-

Figure 19**: showing responses on the effectiveness of the measure used to manage mental illnesses among HIV/AIDS patients.**



4.4.9 Why Mental Illness and HIV/AIDS still Prevalent

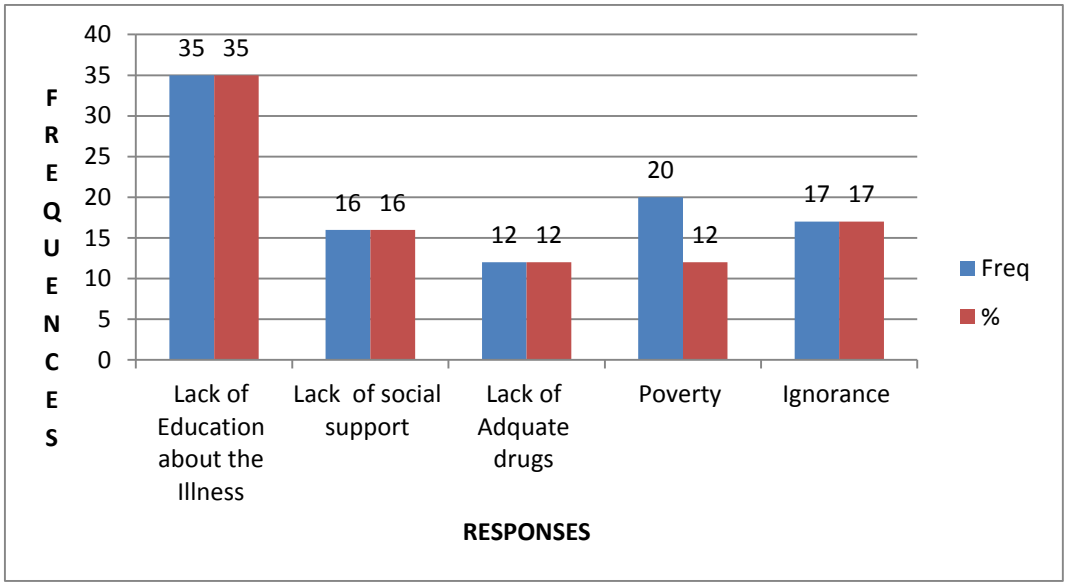
*Table 21**: showing responses on why mental illness and HIV/AIDS are still prevent despite the measures under taken.***

Responses	Freq	%
Lack of Education about the illness	35	35
Lack of social support	16	16
Lack of Adequate drugs	12	12
Poverty	20	12
Ignorance	17	17

Source: Primary data

From the above finding in the table 35 (35%) respondents said lack of education about the illness 16 (16%) suggested lack of social support; 12 (12%) articulated lack of Adequate drugs; 20 (20%) asserted poverty and (17%) stressed ignorance. The majority of the respondents mentioned lack of Education about the illnesses a major factor leading to prevalence of HIV/AIDS and mental illness. This is further shown graphically below:

Figure 20: ***showing responses on why mental illness and HIV/AIDS are still prevent despite the measures under taken.***



CHAPTER FIVE

5.0. DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

In this chapter, the researcher presented the discussions, conclusion and recommendations respectively.

5.2. Discussion

The original aim of this research is to establish the prevalence of HIV /AIDS among the mentally ill patients the extent, to which the researcher's aim has been achieved, has been indicated in the course of the discussion.

5.2.1. Number of people who are mentally ill with HIV/AIDS infection.

The findings related to this objective revealed that the number of people with mental illness and HIV/AIDS infection was (11%) which is an indication of the prevalent of HIV/AIDS among psychiatric patients. And there is a possibility that if all the people were tested, the number would have been higher than this. The findings attributed this to drug abuse, stress, opportunistic infections, HIV induced psychosis and poverty as the cause of mental illness As well as HIV/AIDS.

In line with these findings, scientists say that the developmental roots of mental illness have zeroed in on a likely suspect: the body's stress response. When the body reacts to stressors, two systems kick into gear. The endocrine system produces stress hormones such as cortisol. And the sympathetic nervous system churns out other stress-related hormones such as epinephrine and norepinephrine—the factors responsible for the heart-pounding, sweaty-palms sensation known as the fight-or-flight response. They would like concur with this author because there were many factors that were mentioned as the cause of mental illness and HIV/AIDS. This objective was satisfactorily achieved.

5.2.2. Relationship between HIV/AIDS and mental illness

Under this objective, the study findings revealed that HIV/AIDS has potential to cause mental health problems. The findings further revealed that the major factors that predispose HIV/AIDS mental illness involve illness stress, Isolation and opportunist infections.

Related to the above findings, Sebudde (2002) says the total number of new patients (HIV/AIDS) seen by the mental health outreach programme increased approximately four-fold during the three year period. Patients with epilepsy comprised by far the largest diagnostic group within the total patient sample (74.5%). The majority of the patients presented with epilepsy, brief psychotic disorder, and depression. Very few patients present with alcohol problems at the health units possibly because in the community, alcohol is socially accepted. From this perspective, it can be stressed that HIV/AIDS has potential to cause mental health problems. This was supported by most of the respondents from the field.

5.2.3 Management of HIV/AIDS Positive with Mental illness

From the table above, the results revealed in the management of mental illness among the HIV/AIDS patients, people use ARVs, avoiding drug abuse, health education, reduction in the community stigma because these could help to improve on the immunity of the patients.

Orley, J. (1994), suggested the initiation of the mental health outreach service. This programme was initiated to test the feasibility of providing mental health outreach services to populations in rural and remote areas in the Mbarara district. We chose 15 health units in the district and also in a rural community of Rubindi sub-county, where a community oriented sensitization program was to be implemented in order to increase awareness of mental health issues. Four of the health units were located at a distance of approximately 40 kilometers from Mbarara Regional hospital, while 11 were located at a distance of between 40 and 70 kilometers. All of these health units were rural in character. This program is related to the health education which was suggested from the field.

5.3. Conclusion

In view of the findings already presented and discussed, all the research questions were well answered and the objectives of the study satisfactorily achieves, the finding revealed that the number of people with mental illness and HIV/AIDS infection was (11%) which is an indication of the prevalent of HIV/AIDS among psychiatric patients, this would high if all patients in psychiatric unit are screened regularly for HIV/AIDS infection and was due drug abuse, stress, and poverty. Further findings found out that there is relationship between HIV/AIDS as evidenced by the fact that HIV/AIDS results into stress, isolation which are the major drivers to mental illness. The findings revealed further that some measures can be taken to reduce mental illness among the HIV/AIDS patients and these included health education, stopping drug abuse and stigma by the community.

5.4. Recommendations

In respect to the findings the following are the recommendations:-

There should health education to community by health government personnel about the need of the community to always go for blood testing from recognized health places.

The community should be cautioned to stop relying on traditional doctors on health issues.

The community should sensitize to stop abusing drugs because this is the source of mental health problems.

The government should supply enough medicine especially ARVs to referral hospitals were the HIV/AIDS patients get treatment.

The hospital from which the research should integrate the HIV/AIDS services along with the treatment of psychiatric treatment.

The government should encourage routine testing of the psychiatric patients, since it co-exist with HIV/AIDS.

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Appendix I: QUESTIONNAIRE SCHEDULE FOR PATIENTS CARE PROVIDER, KAMPALA INTERNATIONAL UNIVERSITY TEACHING HOSPITAL

Introduction

Good morning / afternoon Sir / Madam

Am Meridah Sandrah Mwasame, a student of Kampala University International carrying out a research on the prevalence of HIV among the mentally ill patients, request you as my respondent to honestly and faith fully fill in the information that is factual as demanded by the questions. I promise that this information will be confidential and be used for the academic purposes only.

SECTION I

PERSONAL IDENTIFICATION DATA

a) Name:……..

b) Age?.....

c) Sex?.....

d) Tribe?.....

e) Religion?.....

Occupation?.....

h) Level of education?.....

1. Where do some of the patients received in this hospital first receive their treatment from?

Self referral

Other hospital

Traditional healers

From private clinics

2 a) Do you offer HIV services in this hospital? Yes ☐ No ☐

b) If yes, outline some of them

……
……
……
……
……

c) If no, why

……
……
……
……
……

3 Do you carry out routine HIV counseling and testing on every patient?

Yes ☐ No ☐

4. Those who are HIV positive with mental illness how are they managed?

……
……
……
……
……

5. What are some of the mental illness common among HIV patients in this hospital?

……
……
……
……
……

7 a) Are there measures put in place among HIV positive patients to prevent or reduce to HIV-related mental illness?

Yes ☐ No ☐

b) If yes please outline them basing on;

i) Individual measures

……
……

……
……
……

ii) Community based measures

……
……
……
……
……

8) How effective are those measures (8 (b)?

……
……
……
……
……
……

9. Why is mental illness and HIV still prevalent?

……
……
……
……
……
……

10 a) Have you ever heard of other measures used to prevent or reduce

Tested/diagnosed HIV negative mentally ill patients from acquire HIV /AIDS

Yes ☐ No ☐

b) If yes specify them

……
……
……
……

11 How effective are those measure?

……
……
……
……
……
……

12 a) What are the measures put in place to prevent or reduce mental illness? Please categories then under:

Individual measures

……
……
……
……

Community measures

……
……
……
……

13 How effective are the measures mentioned above?

……
……
……
……

Relationship between mental illness and HIV/AIDS

14. Does HIV/AIDS contribute the cause of mental illness?

Yes ☐ No ☐

(b) Does HIV/AIDS contribute the cause of mental illness?

Yes ☐ No ☐

15 (a) Do you know some factors that predispose HIV/AIDS positive patients to mental illness?

Yes ☐ No ☐

(b) If yes, outline some of them……..

……..

16 (a) Do you know some factors that predispose mentally ill patients to HIV/AIDS infections?

Yes ☐ No ☐

(b) If yes, outline some of them…….

……..

THANKS

GOD BLESSES YOU!!!

Appendix II: WORK PLAN

This research took a period of seven months as presented in the following table:-

ACTIVITY	**PERIOD**
Collection and compilation of literature review	February
Revised research questionnaires	March
Data collection	April
Data processing and editing of fieldwork	May
Typing of data and editing	June
Consultation with research supervisor	June –July
Final data analysis	July

Appendix V: BUDGET

This research consumed as shown in the table below:

Item	**Amount**
Typing, printing and photocopying	100,000
Flash disk	30,000
Binding both spiral and final report	80,000
Total	**210,000**