FACTORS AFFECTING MENTAL HEALTH CLINIC ATTENDANCE IN SHEEMA DISTRICT, SOUTH WESTERN UGANDA

TUTAMWEBWA KABAGAMBE THOMAS
DGN, DMH, BSc PH
MPH/0001/133/DU

A RESEARCH DISSERTATION SUBMITTED TO THE DIRECTORATE OF POSTGRADUATE STUDIES AND RESEARCH IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE MASTER OF PUBLIC HEALTH DEGREE OF KAMPALA INTERNATIONAL UNIVERSITY

NOVEMBER, 2017

DECLARATION

I, Tutamwebwa K Thomas hereby declare that the work presented in this dissertation is my own and has never been presented to any institution of learning for any academic award or submitted for publishing. I hereby submit this dissertation for examination.

Sign: _____ Date: 6/11/2017

TUTAMWEBWA K THOMAS

MPH/0001/133/DU

CERTIFICATION

This dissertation entitled **factors affecting mental health clinic attendance in Sheema District, South Western Uganda** was done under our supervision and is ready to be submitted to the directorate of postgraduate studies and research.

Sign---------- Date----7/11/2017

Dr. Scholastic Ashaba

(Supervisor)

Sign---------- Date----06-11-2017

Dr. Moazzam Mohiuddin Lodhi

(Supervisor)

DEDICATION

This work is dedicated to my late father Mzee Kabagambe Elias, My mother Specioza, to my darling wife- Kyomugisha Beatrice and our dear children; Ayesigwa Cynthia, Atujunire Adolf, Atuhairwe Anitia and Atusingwize Anabel.

ACKNOWLEDGEMENT

I would not have finished this work in time had it not been the hard work of my supervisors, Dr Scholastic Ashaba and Dr. Moazzam Mohiuddin Lodhi Lecturers, Kampala International University Western Campus.

Special thanks also go to the District health officer Sheema District who gave me permission to visit the health facilities in Sheema district.

I further wish to thank my course mate Mr. Ahmed Hashi Mohamoud who advised and assisted me while developing this dissertation.

I further thank my respondents who gave their time to answer the questionnaire.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF ABBREVIATIONS

AIDS:	Acquired Immunodeficiency Syndrome
APA	American Psychiatric Association
BCE:	Before Christian era
BCP:	Bio -Psychosocial model
HBM	Health Belief Model
HIMS	Health Information Management System
HIV	Human Immunodeficiency Virus
IB	Incompetence Benefit
OCD	Obsessive Compulsive Disorder
PTSD	Post Traumatic Stress Disorder
PHC	Primary Health Care
SES	Social Economic Status
SSDI	Social Security Disability Insurance
SSI	Supplemental Social Income
SPSS	Statistical package for Social Scientists
UBOS	Uganda Bureau of Statistics
WHO	World Health Organization

OPERATIONAL DEFINITIONS OF TERMS

Clinic attendance

A number of people who go to a clinic.

Delirium

A clinical syndrome of confusion, variable degree of clouding of consciousness, illusions, visual hallucinations, liability of affect and disorientation, (David, S. *et al (2005).*

Delusion

A belief that is held with utter conviction despite evidence to the contrary, and cannot be explained by the educational, social or cultural background of the person who holds the belief (David, S. *et al (2005).*

. **Depression**

This is a mood disorder characterized by five of the following according to DSM -IV:
Depressed mood for most of the day nearly every day, weight loss of at least 5%, diminished interest in pleasure, fatigue or loss of energy, feeling of worthlessness, inability to concentrate or think recurrent thoughts of suicide, insomnia almost every night,(David, S. *et al (2005).*

Hallucination

This is perception in the absence of an external stimulus,(David, S. *et al (2005).*

Mental disorder

A mental disorder is a clinically significant behavior or psychological pattern that occurs in an individual and is associated with a significant increased risk of suffering, death pain and disability (David, S. *et al (2005).*

Mental health

WHO (2001) defines mental health as a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, is able to make a contribution to his or her community, and harmonious functioning of the whole personality (physically, socially and morally).

Mental illness

It is clinically significant behavioral problems associated with distress and causes disability, WHO (2001).

Neurosis

It is a mental disorder whereby the patient recognizes his/her states as abnormal but does not suffer hallucinations and delusions. (David, S. *et al (2005).*

Psychosis

It is a mental disorder characterized by delusions hallucinations and disorganized behavior. (David, S. *et al (2005).*

Regular attendance

According to this context, regular attendance meant fulfilling the follow up dates and taking medications as prescribed, also adhering to the information given on the return date.

Schizophrenia

Schizophrenia (literally, split mind,) is a disintegrative psychosis, characterized by splitting of normal links between perception, mood, thinking, behavior and contact with reality, (David, S. *et al (2005).*

ABSTRACT

Introduction: The study assessed factors affecting mental health clinic attendance in Sheema district, south-western Uganda. Regularity of mental health clinics, socio-economic and health facility factors were determined and assessed.

Methodology: A health facility based descriptive cross sectional study design was used for this research. A total of 208 mental patients in remission phase were enrolled from four purposively selected health facilities in Sheema district. Additionally eight key informants were interviewed. These included health workers working in mental health clinics in the district. The health facilities selected were Mushanga HC III, Kabwohe HC IV, Shuuku HC IV and Kitagata hospital.

Data was generated using a questionnaire about social demographic factors, socioeconomic and health facility factors that influenced mental health clinic attendance, and key informant interviews provided in depth information on factors influencing regular clinic attendance.

Results: Results indicated that majority 41.8% of the respondents were aged between 25-34 years, and more than half (53.4%) were females. Factors affecting regular clinic attendance included, having a care taker, (P-value 0.05) having someone in charge of treatment costs(p-value 0.002) and having a relative with mental disorder(p-value 0.01) and incurring no cost on transport,(p-value 0.03) Health facility factors affecting clinic attendance included distance to facility, drug availability, health facility accessibility and awareness of service, (p-value 0.005).

Conclusion: The study recommends need to develop and promote interventions to economically empower families and people affected by mental illness so that they can sustain themselves and visit mental health clinic regularly to ensure continued stability. Additionally medications should be regularly stocked at the health centers to enable patients be able to access them whenever they visit the clinics for review.

CHAPTER ONE

INTRODUCTION

1.1 Background to the study

1. 1.1. Historical Background

Various studies demonstrated that one's decision to engage with a particular medical channel is influenced by a variety of social-economic variables, sex, age, social status of women, type of illness, access to services and perceived quality of the service. Depending on the area a person lives in, some treatment might be available but not other forms of treatments. Therefore, a patient is limited to what is accessible and available to them when seeking treatment for a disease.

In 2011, the World Health Organization argued that "the distribution of money, power and resources at global, national and local levels" creates these conditions. Socio-economic status (SES), gender, race, and education are factors of health-seeking behaviour that are influenced by the social determinants of health. This study intended to study socio-economic, demographic and health facility factors that influence mental health clinic attendance in Sheema District, south western Uganda. A mental disorder is a clinically significant behavior or psychological pattern that occurs in an individual and is associated with a significant increased risk of suffering, pain, disability or death *(David,S. et al 2005)*.

Mental health or mental ill health is still little understood as we try to battle the causes and the devastating consequences of mental disorders in the 21st century. Between the 17th and the 18thcentury, mental disorders were more identified with the devil and evil spirits and mental disorders were seen as a social problem hence patients were put in prisons with the poor and those practicing homosexuality (Alaki, 2005). It was perceived that patients with mental illness were not fit to belong to human society and exposed to violence and left to roam in the community and were commonly chained and treatment was by shock therapy with no doctors involved (Alaki, 2005). Additionally, in the 21st century over 50% of the resource limited countries did not have policies specifically dedicated to mental health (WHO, 2011). This

contributed to various human rights violations and abuses towards people suffering from mental ill-health. (Dhanda & Narayan, 2007). Despite limited research about the prevalence of mental illness in resource limited settings a few studies indicate that the prevalence of mental illness continues to increase (WHO, 2011). A previous study done in Uganda in 2004 revealed that at least 35% of Ugandans had mental health problems and of these 15% required treatment from mental health unit (Byaruhanga et al 2004).

Mental health services were started in Uganda in 1920 in Hoima district initiated by the then District commissioner (Alaki, 2005). As the number of patients continued to increase a national mental hospital was constructed in 1954 to meets the needs of the patients. This was later followed by construction of 13 regional referral hospitals with mental health units to bring services near the people. Unfortunately the amount dedicated to mental health services in the country has remained inadequate (Kigozi et al, 2010).

Mental health clinic attendance is irregular and it is estimated that over 65% of the mentally ill persons do not receive treatment and are being mismanaged in the community by traditional healers and are brought to mental health clinics when other treatment modalities have failed out, (Okello, 2007).

.

1.1.2 Theoretical back ground

Health belief model (HBM) was adopted for this study. In this model, 'Health seeking' is a conditioned behavior, so any attempt to encourage people to seek care requires an understanding of their motivation for such behavior. The model is based on the idea that people are more likely to change their behavior and adhere to treatments they perceive that they are at risk of relapsing if they don't attend to the clinic regularly or they perceive the disease might have an unfavorable outcome or if they perceive the proposed health behavior to be both effective and practical. The model also indicates that the respondents can adhere to health seeking behavior if they perceive the barriers to adopting the behavior to be minimal and if they have the ability of applying and practicing the specific behavior proposed. The model further explains about perceptions where the patients have the cues for motivating their actions such as internal cues (, past experiences or relapses following treatment default) or external cues (advice from friends, relatives and mass media campaigns). The specificity of the HBM components are considered in this study to be

useful in assessing risk perceptions with respect to mental disorders and mental health clinic attendance as well as in explaining the individual decision-making processes as regards the health-seeking behavior for these condition.

When the benefits of attending the mental health clinic are perceived to outweigh the perceived barriers also influences the decision to attend the clinic. Moreover people are normally hesitant to attempt new behaviour unless they believe they can do it. As such a person may opt to undertake health-seeking behaviour for mental disorders and continue with care or not.

1.1.3 Conceptual background

Mental health is state of wellbeing in which the individual realizes his/ her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and can make contribution to his/her community.

A mental disorder is a clinically significant behavior or psychological pattern that occurs in an individual and is associated with a significant increased risk of suffering, death pain and disability (*David,S. et al 2005).*The factors affecting mental health clinic attendance can be explained by multiple factors interacting with one another. The factors in this study included type of mental disorder, social economic factors, factors related to the health facilities factors and regularity of clinic-attendance.

Regularity of attendance meant that a respondent had come within appointment date or within two to three months from the previous visit.

Social economic factors are those related to the differences between groups of people caused mainly by their financial situation .This study looked at social support system at home , amount of income one earns, ones marital status, ones education and the cost of care along with the distance to the facility.

Healthy facility factors were those at facility, where patients received care and these included, drug availability, facility accessibility, facility personnel.

Mental health clinics are special clincs with specialized personnel to assess,diagnose, and offer treatment to those with mental disorders.

1.1.4 Contextual back ground

Mental health disorders are steadily approaching the second highest cause of disability in the world. Of the global burden of disease, 14% is attributed to neuropsychiatric disorders, indicating a 2% growth since the year 2000. It is believed that the figure will have increased by 2020 (Fournier, O.A. 2011). Mental disorders account for nearly 12% of the global burden of disease and by 2020, mental disorders will account for nearly 15% of disability-adjusted life-years lost to illness,(Marcia, 2011). The burden of mental disorders is higher in young adults, who make up the most productive section of the population (Marcia, 2011).

The Government of Uganda estimates that common mental disorders account for 20% to 30% of all outpatient clinic attendance (Okello, 2007). The findings from this research indicated that people suffering from mental health problems very often delay seeking professional help, or avoid it altogether, which in turn significantly compromises appropriate care and treatment. (Okello, 2007). Factors like fear of being diagnosed as suffering from mental illness, distrust towards the system, and lack of confidence in health professionals have been documented to make people hesitant to seek professional help (Howerton, 2007).

Seeking help also appears to be related to the individual's perception of the severity of the illness, with individuals who perceive the illness to be severe feeling more compelled to seek help (Okello, 2007). Furthermore, the choice of where to seek help is said to depend on what is believed to be the causal factor of the illness (Okello, 2007). Because mental illness is believed to be due to super natural causes, a significant number of people with mental health problems tend to initially seek and to continue seeking traditional healers' services after western medical help (Abbo, 2009). In Uganda mental health services have been decentralized from referral hospitals to 13 regional referral, general hospitals, health centres and village health teams (Mental health policy, 2005).

Sheema district has four facilities that offer mental health services and for the years(2011-2013) there has been a 21% increase in number of patients seeking for mental health services. However, the attendance of these patients is always irregular with patients coming in following a relapse.(Kitagata hospital annual report, 2014).

1.2 Problem statement

There is growing recognition of mental health as an important public health and development issue in Uganda. Statistics show that close to 20% (6.8 million) out of the 34 million people in Uganda have some degree of mental illness, ranging from anxiety and depression to severe mental illness and mental disorders have been recognized to be not only a clinical problem but also a serious public health problem in the country,(Kavuma,2010)

Human resource development has been undertaken through training of psychologists, psychiatrists, social workers, psychiatric clinical officers and psychiatric nurses along with renovations and infrastructure development of regional referral hospitals.

Community sensitizations through media; radio talk shows, print media and health education talks, religious and political heads along with traditional healers has also been done. The government of Uganda has decentralized mental health services from one national mental referral hospital 1 to 13 regional referral hospitals and mental health services have been decentralized further to HCIVs. (Ssebunnya,et al 2009).

Despite the above developments mental health clinic attendance is irregular and it is estimated that over 65% of the mentally ill persons do not receive treatment and are being mismanaged in the community by traditional healers and are brought to mental health clinics when other treatment modalities have failed out, (Okello, 2007).

And, this has lead to; high relapse rates and prolonged stay on wards before patients can get better again, reduction in economic growth and this has posed a serious social and economic threat to the country. This has further lead to low productivity and high dependence rates among the mentally ill. Other mentally ill persons end up murdering people and destroying valuable property.

The poor, social disadvantaged and those with low social support are commonly affected.

Therefore the reason for this study was to assess the regularity of metal health clinic attendance, assessed social economic factors and health facility factors associated with regular mental health clinic attendance in Sheema District in order to contribute to the reduction in treatment failure and relapses thus improving the lives of the mental patients. Hence the findings of this study are hoped to improve on community sensitization and to improve on regularity of clinic attendance.

1.3 Purpose of the study.

To assess factors affecting mental health clinic attendance in Sheema district, south western Uganda.

1.4 Specific objectives

i) To assess the regularity of mental health clinic attendance in Sheema District, south western Uganda.

ii) To identify social and economic factors associated with regular mental health clinic attendance in Sheema District, south western Uganda.

iii) To determine health facility factors associated with regular mental health clinic attendance in Sheema district south western Uganda.

1.5 Research Questions

i) What is the regularity of mental health clinic attendance in Sheema district south western Uganda?

ii) Which social- economic factors are associated with regular mental health clinic attendance in Sheema district, south western Uganda?

iii) Which Health facility factors are associated with regular mental health clinic re-attendance in Sheema district South Western Uganda?

1.6 Justification

Although there mental health services in almost all district hospitals and health centre in Uganda most patients with mental illness do not attend mental health clinics regularly for review and medication refills. The factors associated with clinical attendance and regular reviews are not well documented. The study findings are hoped to contribute to literature concerning factors associated with mental health clinic attendance in Sheema district. The study findings may further help to improve patient care and management in these health facilities and ensure compliance to medications among these patients to ensure stability. The findings of this study are hoped to enable community members to understand the factors affecting mental health service delivery.

1.7.0 Scope of the study

Scope of study included; geographical scope, theoretical scope, content scope and time scope.

1.7.1 Content scope

This study was health facility based. The study documented factors associated with mental health clinic attendance in selected health facilities in Sheema. The study also assessed how different factors including social, economic, and environmental and health facility factors interacted with one another to affect mental health clinic attendance. These variables were sought to contribute to either regular or irregular mental health clinic attendance or affect compliance to medications among patients with mental illness.

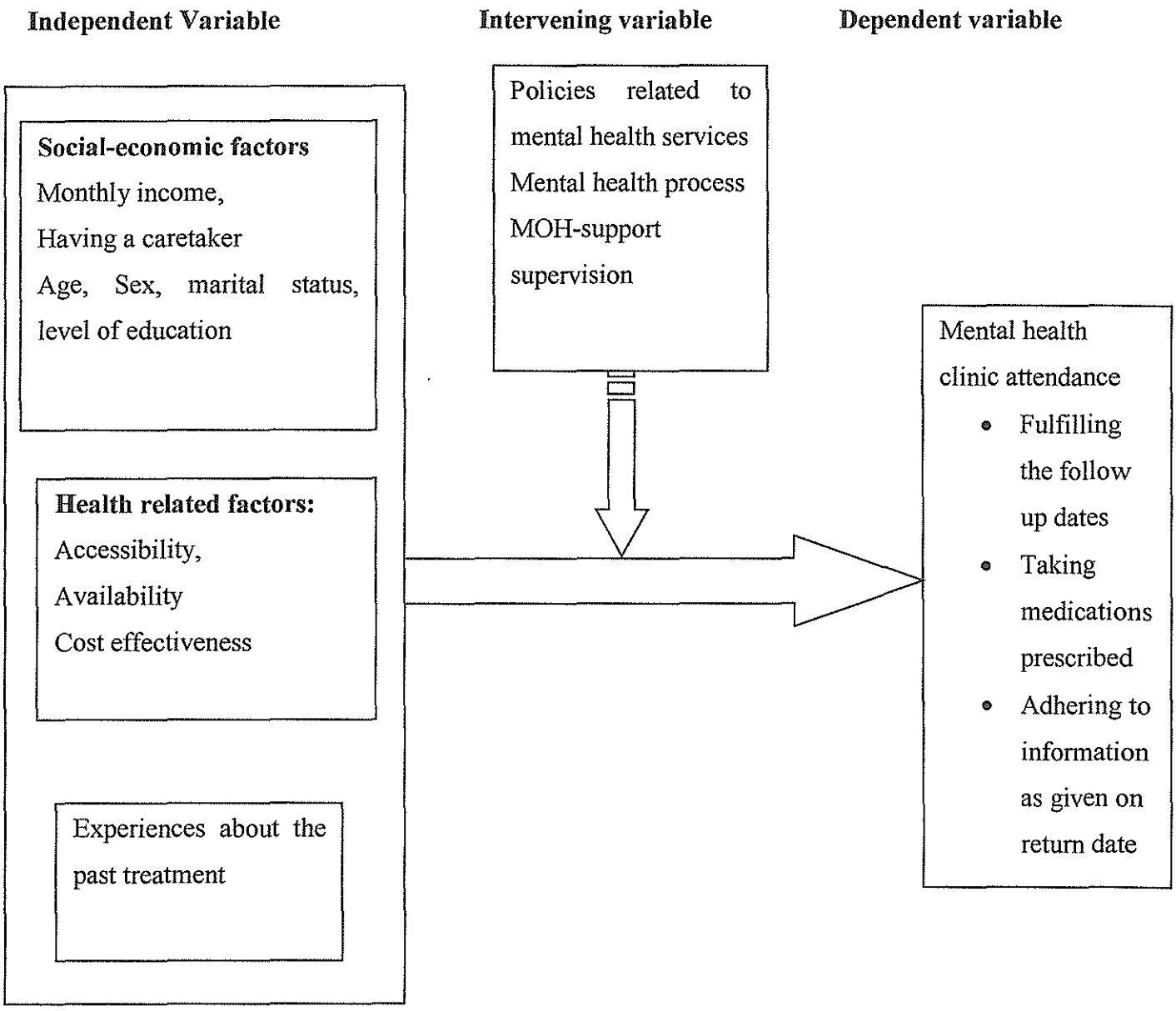
1.7.2 Geographical scope

This study was conducted in Sheema district located in Southwestern Uganda about 337km by road from Kampala the capital city of Uganda. We sampled health facilities in Sheema district and these facilities offer mental health services to patients from districts of Ntungamo, Rukungiri, Buhweju, Mitooma and Rubirizi. Sheema was curved from Bushenyi District in 2010. It boarders with Ibanda from the North, Bushenyi from the West, Ntungamo from the South and Mbarara from the East. The study was conducted from selected health facilities in Sheema district, namely: Kitagata hospital which is a district hospital in the rural areas of Sheema District that offers general patient care, in-patient care, obstetrics and gynecology services as well as mental health services. Other health facilities included Shuuku HC IV which is the second largest health facility located in the rural areas of Sheema District. It is situated in Kisyabya Town Council 5 kms along Kabwohe-Nyeihanga route. It offers other services apart from major operations. Kabwohe HC IV was another selected health facility and is one of the semi-urban health facilities that is located 1km along Kabwohe-Masheruka road. The health facility is situated within Itendero- kabwohe Town council. The services offered include minor operations and the facility has a fully functional operational theatre. Mushanga HC III is a private non for-profit health facility under the archdiocese of Mbarara. This facility is located 35 Kms along Mbarara-Ishaka highway.

1.7.3 Time Scope

This study considered data from 2011 to 2016 as it's from this time that health facilities had been provided with mental health workers.

1.8 Conceptual Framework



1.9 Explanation of the conceptual frame work

The factors responsible for mental health clinic attendance cannot be explained by a single factor but rather multiple factors interacting with one another. This study aimed to establish how social -economic, health facility factors, past experiences interact with one another to affect mental health clinic attendance by patients with mental illness.

A number of factors at the health facility are likely to influence patients' attendance. If drugs are available at the facility, the health workers are welcoming, the facility is within reach and there adequate professional health staff, the patients are more likely to attend to the clinic regularly and vice versa. Such factors include availability of drugs when patients visit the clinic, how the health workers communicate to the patients, arrangement at the health facility to enable privacy time management by the health workers, qualified health workers at the health facility. Other factors include economic status of the family or the patients, if the family / patient have some income, offer social support and have employment, have some level of education and knowledge about the benefits of attending the mental health clinic then they will attend more regularly.

Perceptions of the patient also increase the likelihood of mental health clinic attendance. These included perceived benefits, community sensitization/public awareness. The clues of health action include actual attendance at the health facilities which is motivated by the availability of skilled personnel, availability of enough and quality medicines, accessibility which includes distance to health facility.

Policies related mental health services provision such as staffing, medicine supplies and supervision all impact positively on regularity of attendance.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter presents a review of literature pertaining to the study objective, and of the existing literature on factors affecting regularity of mental health clinic attendance among patients with mental illness. Help-seeking behavior among patients with mental illness was noted to depend on a number of factors including beliefs and perceptions about the causes of mental illness, the nature of service delivery, social and economic factors, and severity of the condition, stigma, testimonies from those who have benefited from the services and awareness of the availability of services.

2.1 Regularity and Patterns of mental Clinic attendance

Demographic variables (demographics) such as age, gender, ethnicity, annual income, marital status, and education level are frequently reported as factors affecting clinic attendance in studies that address adherence to treatment among chronic illnesses including mental health problems (Guerrero, E. G et al., 2013). Busby and Sajatovic (2010) found that men had lower psychotherapy appointment attendance compared to women while Alonzo et al. (2011) found that individuals with severe depression were more likely to miss appointments than those with less severe depression.

Other studies (Basco & Smith, 2009; Fenton, Blyler, & Heinssen, 2007) revealed that people who were diagnosed with bipolar disorder and psychotic disorders were less likely to show up for treatment if they had no insight into their symptoms. Murphy et al. (2010) reported that individuals who attempted suicide were more likely to miss appointments and less likely to follow through with treatment than those who did not engage in self-harm. According to the study done by Abbo, (2009) results revealed that in Africa, traditional healers are usually the first source of care people seek when faced with mental health problems, and frequently the only source of care sought.

2.2 Social and economic factors associated with regular Mental health clinic attendance

In 2001, the World Health Organization estimated that up to 80% of mental health patients who reported to the health centre had visited the traditional healers first in common developing countries. The traditional belief system and cultural explanatory models of mental illness were noted to be very influential in the choice of where to seek help. Fassino et al, (2009) highlighted that mental illness is mostly perceived to be due to witchcraft, curses and evil or ancestral spirits. In addition accessibility of health facilities and financial costs associated with seeking care also influence help-seeking behavior among patients with mental illness. Transport costs and other financial implications including procuring medication when they are not available at the health facility were reported to frustrate patients and their caretakers, making them resort to the readily available and affordable traditional healers within their communities, (Abbo, 2009).

The house hold resources, educational level, economic status of patient /care takers, marital status, occupation of patient and caretakers, the age and sex of patient, all have an impact on number of patients seeking health care (Mazzotti, E., & Barbaranelli, C. (2012). The educated, those with source of income, employed and the married have better health seeking behavior compared to their counterparts. The cost of care also affects the number of patients seeking health services. Due to limited sources of income among most families in rural areas most of the patients are not able to access care ,(Alonso-Escolano, D. (2010). Other factors affecting patient's regularity of attendance and medication compliance were: social isolation, social neglect , discrimination and unemployment,(Kwintner, M. (2011). Further, Health seeking behavior studies demonstrate that the decision to engage with a particular medical channel is influenced by a variety of socio-economic variables, sex, age, the social status of women, the type of illness, access to services, perceived quality of the service and awareness of service availability (Mark et al., 2011). Environmental factors including living conditions, work stresses , employment status along with family and community support networks also affect an individual's ability to seek health services, (Muntaner et al, 2010). Other social factors include a dysfunctional home environment, poor relationships, living in poverty and social isolation unemployment or a stressful work environment highly stressed in your work can all put pressure on an individual's mental health seeking behavior (Muntaner et al, 2010).

In Uganda no such study has come out with social economic factor influencing mental health clinic attendance.

2.3 Health Facility factors affecting regular Mental Health Clinic Attendance.

Health seeking behavior studies demonstrate that the decision to engage with a particular medical channel is influenced by a variety of health facility factors including the type of illness, access to services, perceived quality of the service and awareness of service availability (Mark et al., 2011). Other health facility factors associated with engagement in care among patients with chronic conditions including mental illness include policies, perceived quality of health serve at particular health facility, standard of equipment available, competence of staff, attitudes of staff and interpersonal communication (Branson et al., 2013) and (Henzen et al., 2016). According to O'Brien, Fahmy, and Singh (2009), commonly cited reasons for treatment dropout include dissatisfaction with services, unsympathetic providers and poor communication. Additionally it has been stated from previous research that providing knowledge about causes of ill health and choices available to patients will go a long way towards promoting a change in individual behavior and promoting beneficial health seeking behavior (Mackian, 2002). Distance to the health facility has also been documented to affect health seeking behavior of the patients. When the facility is within reach and easily accessible it will encourage patients to seek services from that particular health facility (Brems, Johnson, Warner, & Roberts, 2006; Cully et al., 2010). This why with the decentralization of health services to regional hospitals and health centers the number of patients seeking services at these centers has increased since patients can easily access the health facilities (Kigozi & Ssebunya, 2009).

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This chapter includes study design, study area, study population, sampling procedure, sample size determination ,data collection technique, ethical considerations, data processing and analysis, inclusion and exclusion criteria and study limitations .

3.1 Study design

A health facility based cross-sectional study design was used to study patients with mental illness who were in remission phase and a qualitative study of key informants(health workers)providing mental health services at selected health facilities in Sheema district was used. I used both quantitative and qualitative methods to explore factors that affect the ability of patients with mental health regularly attend the mental health clinics for review and medication refills to ensure compliance to medications.

3.2 Study area

The study was conducted in selected health facilities in Sheema district including the following: Kitagata hospital which is general hospital with 100 bed capacity. Other health facilities included Shuuku, Kabwohe and Mushanga health centers. The study sites were purposively selected since they were the only health centers offering mental health services in Sheema district. In a similar way i selected health workers from these health centers selecting two participants per health facility. These health facilities offer mental health services to the people of Sheema district and neibouring districts of Ntungamo, Bushenyi, Mitooma, Rubirizi, Buhweju and Rukungiri.Services include both inpatient and outpatient services to mentally ill patients, psycho education, psycho therapy and chemo therapy .

Sheema district has a total population of 211,720 people (Uganda Bureau of Statistics 2014).The districts has total land area of 699.1 square kilometers with a population density of 315/km^2. Sheema district is bordered by Buhweju district to the north, Mbarara district to the east, Ntungamo district to the south, Mitooma district to the southwest and Bushenyi District to the

west. The district headquarters are located Kibingo which is approximately33 kilometers by road from Mbarara the largest town in Ankole sub-region.

Shuuku HC IV is located in Sheema south constituency and has a total bed capacity of 78 beds with 35 beds in general ward and 43 in maternity ward. Services offered include outpatient services, obstetric and minor surgeries, HIV clinics, immunization services , general in patient, dental services, ophthalmology, family support services , laboratory services and mental health services, that consist of both in patient and out patient services.Mental services include psycho therapy,chemo therapy and psycho education.

Kabwohe HC IV is located in Sheema North constituency has 70 bed capacity has 40 health workers and services offered include general out-patient services, obstetric and minor surgeries, HIV/ART clinics, immunization; out-patient ,general in patient, dental services, ophthalmology, family support services and laboratory services. Mental health services include psycho therapy, chemo therapy and psycho education.

Mushanga HCIII is a non-governmental health facility managed by the Catholic archdiocese of Mbarara. Services offered include general out-patient, general in patient services, obstetric and antenatal care services child health services, laboratory services and monthly mental health clinic services provided by Mbarara regional referral hospital mental health department who visit the health facility once a month. Here only outpatient services are offered and include, psycho education, psycho therapy and chemo therapy

3.3 Study population

Data was collected from patients with mental illness who were in remission phase and on continued care and were able to understand and respond to questions appropriately. We also interviewed 8 health workers offering mental health services working in the mental health clinics within the selected health facilities in Sheema district. The number of patients attending mental health clinics is four hundred eighty (480) patients according to HMIS (2015) annual report for Sheema district health office and are distributed thus: Kitagata hospital: 190, Mushanga H/CIII: 192, Shuuku H/C III: 42 and Kabwohe H/CIV: 56. Respondents aged between 18-65years were only interviewed and an interval of ten was used.

3.4 Sampling Method

The health facilities were purposively selected as they were the only facilities offering mental health services according to HIMS 2015 for Sheema district.

Simple random sampling method was used to select study participants. The study participants were selected from each health facility by use of rotary method were by pieces of paper equivalent to the number of patients were written on yes and others no, put in a box and after shaking the box they picked one after the other whoever picked yes was to participate in the study. Proportionate random sampling method was used to distribute the study participants that had been attending the mental health clinics. These were: Mushanga HC III 90. Kitagata Hospital 87, Shuuku HC IV 15 and Kabwohe HC IV 22. The total of all respondents was 214 to be considered in the study. This was obtained by getting a uniform proportion of 50% from all health facilities. Health workers were purposively selected, 2 per health facility.

3.5 Sample size determination

Morgan tables were used to determine Sample size . where byN is the study population=480and S is the sample size =214

3.6 .0 Study Variables

3.6. 1 Dependent Variables.

Regular mental health clinic attendance.

3.6.2 Independent Variables.

Social and economic factors including monthly income, marital status, occupation of the patient, having a care taker, having another family member with mental disorder. Other factors included health facility factors which included accessibility of the health facility and availability of the health services, distance to the health facility, the quality and distribution of the technical staff in the mental clinic and Policies related mental health services Mental health process.

3.7 Data collection technique

Data was collected by using a standardized questionnaire, key informant interview guide and record review. The questionnaire was locally generated and pretested prior to use to make sure it was appropriate for the population of interest. The questionnaire was interviewer administered it was translated into the local language (Runyankore) and back translated to ensure consistency

and avoid altering the meaning of the questions asked. A questionnaire was used and this was preferred because of its ability to enable a researcher collect a lot of data over a short period of time. Eight (8) key informant interviews were also conducted to collect more information that could not be directly observed but we also wanted to get the views of health workers on the factors affecting the mental health clinic attendance in the district of Sheema. The key informants were mental health workers, who were Psychiatric nursing officers and psychiatric clinical officers.

3.8 Inclusion and exclusion criteria

3.8.1. Inclusion criteria

Only people who had suffered from mental illness that that were in remission phase and consented were accessing mental health care in the selected health facilities were enrolled in the study. We enrolled adults aged between 18-65 years.

3.8.2 Exclusion criteria

The study excluded patients with mental illness who had active symptoms and were not in position to consent were excluded from the study. Additionally we excluded patients who were receiving mental health services from other health centers that were not the focus of the study. Participants below 18 years were also excluded.

3.9 Data quality control

In this study, data quality issues were addressed through pre-testing the questionnaire a process that helped the researcher to make changes and improve clarity of the questions. Proper filling of the questionnaires was also ensured by checking for completeness and accuracy of completed data collection forms at the end of each day of data collection to ensure that all required data was filled in the questionnaires.

3.10 Data analysis and presentation

Data cleaning was done manually to ensure completeness, consistency and accuracy of the data collected. Data was analyzed and processed by use of computer Statistical Programme for Social Scientists (SPSS) Version 16 and Microsoft excel. At univariate level, the socio-demographic variables of the respondents such as age, sex, level of education, occupation etc. was analyzed

independently. At bivariate level, binary logistic regression was used to determine the significance association between dependent and independent variables.

Multivariate level, logistic regression was used to study the significance of different independent variables. Different variables were compared in analysis. The results were presented in form of tables. Qualitative data was audio recorded and transcribed and then coded to identify relevant themes.

3.11 Study limitations/ delimitations

Some of the respondents may have under reported or given incorrect information.

This was prevented by ensuring that the respondents were properly talked to prior to questionnaire administration. The researcher ensured that the questionnaire was brief so that the respondents didn't feel delayed

3.12 Ethical considerations

I received clearance from the ethical committee of the school of post graduate studies and research of Kampala international University and then received Ethical approval for the study from the Research and Ethics Committee of Kampala International University. Permission was also obtained from the office of the district health office of Sheema before proceeding to the respective health centers for data collection.

3.12.1. Informed Consent

All participants provided written informed consent before data collection procedure.The researcher introduced himself to the participants and all the procedures involved in the study were explained to participants. The purpose of the study, the information about the criteria for selecting study participants, procedures to be followed and any risks and benefits of the study were explained to the respondents. The participants were also informed that their participation was voluntary, and they were free to terminate their participation at their own will at any point during the study and they were guided on whom to contact in case of any inquiry, the respondents who understood and consented were made to sign the consent form.

3.12.2 Benefit and risk

The balance of risks and benefits of the research had been assessed and no harm was knowingly caused. The safety of the participant throughout the research period was of paramount concern. The benefits and risk ratio was also considered. The respondents were informed of how the study had no invasive procedures. However they were informed of possible psychological issues when patients remember what they have gone through. There was no special benefit to the participants. However, the management of the facilities will get the final report and be able to identify which areas they needed to improve on according to the participants' views.

3.12.3 Confidentiality

The privacy issues were ensured by respecting the respondents and their information was not shared with the public. While the confidentiality issues were addressed by keeping the data collected from the respondents confidential, the data was anonymous and their information given was used for only research. Information about respondent that was collected during the study was put away and no-one but the researcher was able to access. Data were never shared with anyone who was not a member of the research team.

3.12.4 Autonomy

The respondent's decisions were respected and each individual was give chance to choose to participate in the study or not. The researcher avoided making choices for the respondents. The respondents had the right to make the decisions and their decision was respected as they are entitled to them.

3.12.5 Respect for human rights:

Research participants had a right to participate or not and that they also had a right to withdraw from the study at any time without any penalty.

3.13 Justice

Every respondent was treated equally without giving a particular group priority. Simple random sampling was used to select the research participants, all the respondents had equal chance of being selected for the study.

3.14 Dissemination of the findings

At the end of the research the researcher disseminated the findings to the respective health facilities that were included in the study and one copy of the research will be kept in KIU Library for reference purposes.

.

CHAPTER FOUR

PRESENTATION AND INTEPRETATION OF RESULTS

4.0 Introduction

This chapter covers the major findings from the study. The study described the factors associated with mental health clinic attendance in Sheema district. The findings were illustrated in form of tables. The study had initially considered 218 mental patients. But due to the fact that some of them never consented, a total of 208 participants were included in the study. They generated mainly quantitative data using 208 questionnaires and that were administered by the researcher. To obtain qualitative data, eight key informants were interviewed by the researcher using an interview guide. These Key informants were health workers working in mental health clinics in the district.

4.1 Demographic characteristics of the respondents

Table 1: Social demographic characteristics of individual attending mental health clinic in Sheema district (N=208)

Characteristic	Frequency	Percentage (%)
Sex		
Male	97	46.6
Female	111	53.4
Age group (years)		
15-24	28	13.5
25-34	87	41.8
35-44	59	28.4
45-54	27	13.0
55-64	7	3.4
Marital status		
Never married	40	19.2
Married	77	37.0
Separated	86	41.3
Widow/ widower	5	2.4
Occupation		
Un employed	112	53.8
Civil servant	17	8.2
Business	30	14.4
Peasant farmer	31	14.9
Others	18	8.1
Religion		
Catholic	66	31.7
Protestant	91	43.8
Moslem	26	12.5
Others	25	13
Education level		
No formal education	25	12
Primary	115	55.3
Secondary	43	20.7
Tertiary	25	12

Over half 111 (53%) of the participants were female, majority 87 (42%) were aged between 25-34 and almost half 91 (44%) were unemployed while more than half 115 (55%) had attained primary level of education.

4.2 Regularity of attendance

The regularity was measured by the number of times the patient missed appointments. We considered that clinic attendance was not regular when the patient missed 3 or more appointments, by checking on the treatment notes and clinic attendance registers. Majority 133 (74%) did not attend the clinic regularly compared to 75 (36%) who attended the clinic regularly. On regularity of attendance, majority 6/8 (75%) of the key informants reported that patients do not attend the clinic regularly as indicated by the fluctuations of the numbers attending the clinic every month. They attributed this to seasonal changes and farming activities by some of the patients who miss clinics to plant their seeds during the rainy season. One of the participants had this to say; "*We usually get low clinic attendance during times of planting seeds as patients are busy with farming activities*" (KI from Shuuku HCIV)

Another participant added *"our patients attend more regularly during times of coffee harvest as they have some money and attend irregularly during times of hunger and starvation in the community"(*KI from Kitagata hospital)

Table 2: Distribution of respondents' demographic characteristics by regularity of attendance

	Regularity of attendance		
Characteristic	**Irregular attendance**	**Regular attendance**	**P-Value**
Type of mental disorders			
Schizophrenia	40(30.1%)	27(36%)	0.000
Manic depressive	49(36.8%)	15(20%)	0.415
Depression	30(22.6%)	8(10.7%)	0.005
HIV induced psychosis	6(4.5%)	22(29.3%)	0.78
Substance induced psychosis	8(6%)	3(4%)	0.66
Sex of the respondents			
Female	77(57.9%)	34(45.3%)	
Male	56(42.1%)	41(54.7%)	0.08
Occupation			
Unemployed	95(71.4%)	17(22.7%)	0.12
Civil servant	6(4.5%)	11(14.7%)	0.83
Business	7(5.3%)	23(30.7%)	0.80
Peasant farmer	17(12.8)	14(18.7%)	0.74
Casual labour	6(4.5%)	9(12%)	0.70
Others	2(1.5)	1(1.3%)	0.41
Level of education			
No formal education	10(7.5%)	13(17.3%)	0.01
Primary	56(42%)	41(54.7%)	0.02
Secondary	47(35.3%)	15(20%)	0.08
Tertiary	20(15%)	6(8%)	0.91

Respondents with schizophrenia had highest regular attendance(36%),Males were majority(54.7%), those involved in business(30.7%) and those who had attained primary level of education(54.7%) .

Table 3: Health facility factors affecting respondents' regularity of mental health clinic attendance.

	Regularity of attendance		
Variable	Regular attendance	Irregular re-attendance	P-value
Distance to Facility			
1-5KM	70	54	<0.0001
6-10KM	5	46	0.99
11& above km	0	33	0.99
Accessibility to facility			
Easily accessed	67	8	<0.0001
Difficult to access	28	105	
Factors promoting attendance			
Drug availability	62	13	<0.0001
Good communication	12	70	<0.0001
Got better on treatment	1	50	0.042

Majority of respondents who attendant more regularly were from a distance within 5kms, 70 (93%), easily accessed the facility (89.3%), and reported drug availability as the biggest motivating factor (82%).

4.3 Social economic factors affecting regular mental health clinic attendance

Different factors were related to the regularity of mental health clinic attendance as summarized in the table 5 below. We found that availability of care taker OR 25.173, 95% CI (8.868-72.99) and P-value< 0.0001, Level of income OR 3.389, 95% CI (2.402-4.781) and P-value <0.0001. and access to service OR 24.96,95% CI (4.19-148.65) P-value< 0.0001 were significantly associated with regular mental health clinic attendance.

Table 4: Bivariate analysis showing factors affecting regular clinic attendance

Variable	OR(95% CI)	P-Value
Education level		
No formal education	1.00	
Primary	4.33(1.26-14.82)	0.02
Secondary	2.44(0.90-6.61)	0.08
Tertiary	1.06(0.36-3.14)	0.91
Mental disorder		
Schizophrenia	1.00	
HIV induced Psychosis	1.80 (0.44-7.40)	0.415
Manic depressive	9.77 (1.965-48.66)	0.005
Depression	0.82 (0.19-3.47)	0.78
Substance induced psychosis	0.711(0.15-3.31)	0.66
Transport cost		
Involved transport cost	1.00	
No transport cost involved	163.84(51.44-521.84)	<0.0001
Having a Care taker		
Yes	1.00	
No	25.173(8.68-72.99)	<0.0001
How much one earns a month		
Earn<50.000sh.	1.00	
Earn 50.000sh	0.05(0.017-0.188)	<0.0001
Earn 60,000-10,0000sh	0.84(0.20-0.35)	0.001
>100.000sh	1.21(0.309-4.842)	0.77
Awareness of service		
Yes	1.00	
No	127(45.2-360)	<0.0001
Having someone In charge of treatment		
yes	1.00	
no	0.01(0.003-0.028)	<0.0001.
Health facility accessibility		
Yes	1.00	

no	31.40(13.51-72.99)	<0.0001.
Having a relative with a mental disorder.		
Yes	1.00	
No	0.48(0.26-0.87)	0.01

According to key informants, majority 7/8 (88 %) of the KI reported that poverty impacted on the ability of the patients to attend the clinic on a regular basis. They reported that due to poverty patients cannot afford transport fair to the clinic every month for review and to get their medication refills.

"Majority of our clients are un employed hence unable to afford funds for transport and drug purchases since they need to come on a monthly basis year after year"(KI from Mushanga HCIII)

Another factor that prevented the patients from attending the clinics regularly was lack of family support. The participants reported that patients who do not have responsible caregivers commonly miss the clinic compared to those who are well supported. They reported that those who are cared for by the parents attended the clinic regularly. "*When a patient has responsible care takers especially those who are cared for by parents, they rarely miss appointments*"(KI from Kitagata hospital).

Majority of key informants also reported that traditional beliefs about the cause of the mental illness also affected regularity of clinic attendance.

One of the Respondents said *"patients that attribute their mental disorder to witchcraft often attend irregularly than those who don't attribute it to other causes ".(KI from Kabwohe HCIV)*

Majority (6/8) of respondents reported that those who are informed about their mental disorder and have insight were more likely to attend regularly compared to those with no insight.

Poverty coupled with un employment was also reported to be affecting regular clinic attendance Majority of respondents 5/8 reported that marital conflicts , separation or divorce impaired the patient's ability to attend the clinic.

Following divorce/ separation especially the woman who has been getting support from the husband it has often been difficult for such a person to keep appointments as their second homes may be far away from the facility or in even another district. (KI Kabwohe HC IV).

Another factor that was reported by informants to affect regularity of mental health clinic attendance by patients with mental illness was alcohol and drug abuse."*Often when these patients*

that have a problem of alcohol and they are tired of telling lies about their drinking habits they often decide not to come back (to the clinic), not until they are readmitted in acute states following withdrawal/ intoxication syndrome"(KI KitagataHospital). Patients with insight rarely missed their clinic appointments compared to those who lacked insight or who believed that the cause of their mental illness was ingrained in family traditions that they were not sick.

4 Health Facility factors affecting mental clinic attendance

In this study, the distance to the health facility, accessibility and motivating factors such as drug availability and having no cost on transport to the facility were factors influencing regular clinic attendance.

Accessibility to clinic), P-value 0.007, having no cost on transport to facility, OR 0.002 ,95% CI (0.000-0.187), P-value 0.008 . These are summarized in table 5 above.

According to the key informants the following health facility factors were reported to be affecting regular clinic attendance: All key informants mentioned inadequate staffing at the health facility as a major factor affecting regular mental health clinic attendance.

"The long waiting hours at our clinics often put patients off. They hence end up going to buy medicines from drug shops" (KI Kabwohe HCIV).

Majority 6/8 of key informants mentioned that drug shortage at the health facility has always had an effect on regularity of attendance *"Whenever a patient comes on more than two occasions finding no medicines their regularity pattern will be affected"*

Majority 6/8 of key informants reported that patients are not given enough time at the clinic and are often not explained to the cause for their mental disorder which does not encourage them to come back for review. *" Patients often expect to get better on a single month medication hence when they don't recover they resort to other sources of treatment*"

"Another key informant reported *"that the side effects of medications have often lead to irregular attendance as drug side effects are seen to worsen the diseases picture than improve it". "Majority of our patients expect to see change within a short period of time, so when this doesn't happen they believe that the mental problem is due to other causes. Hence find no need of coming back but instead come back when conditions have worsened.* (KI from Kabwohe HCIV)

Another key informant reported" *due to abnormal behavior exhibited by the mentally ill, majority of the patients are thought to have been cursed/ bewitched hence they go for prayers/ traditional healers and move from church to church and from tradition healer to the other before they can come back to a health facility" (KI From Mushanga HC III)*

Table5: Multivariate analysis of factors associated with mental health clinic attendance

Variable	OR(95%CI)	P-Value
Having Care taker		
Yes	1.0	
No	0.002 (0.00-0.99)	0.05
Incurring transport cost		
Incurs transport costs	1.0	
Doesn't incur transport costs	0.65 (0.005-0.77)	0.03
Awareness of Service		
Yes	1.0	
No	0.10 (0.0 - 0.25)	0.005
Someone in charge of treatment		
Yes	1.0	
No	0.002 (0.00-0.11)	0.002

At multivariate level, transport cost, P-value, 0.03, awareness of service P-value, 0.005, having someone in charge of treatment P-value 0.002 and having a care taker P-value 0.05 were the most significant factors that influence regular clinic attendance.

CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

This study focused on assessment of factors influencing mental health clinic attendance in selected health facilities of Sheema district, South Western Uganda. The discussion reflects 208 participants that had been stable on treatment at the time of enrollment in the study. It also reflects the views of 8 mental health care workers who were key informants and provided their views on the factors affecting mental health clinic attendance. The study findings show that majority of the patients did not attend the clinic regularly a situation they attributed to social, economic and health facility factors. Distance from the health centre, availability of medications at the health centre, type of the metal disorder, having a stable caretaker and employment status were significantly associated with regular clinic attendance. Other factors significantly associated with regular clinical attendance included availability of transport to the clinic and having another relative with mental illness.

5.1 Patterns of mental health Clinic attendance

Few (36%) of the respondents attended the clinic regularly. No such study has been done in Uganda previously to compare with. Patients with manic depressive illness attended more regularly compared to other mental disorder type. These findings are in disagreement with findings of Basco & Smith, (2009); Fenton, Blyler, & Heinssen, (2007) that showed that people who were diagnosed with bipolar disorder were less likely to show up for treatment if they had no insight into their symptoms and hence did not adhere to their medication regimen.

5.1.2. Socio- Economic Factors influencing mental health attendance

According to the study findings, having a care taker was a significant factor that determined regular clinic attendance. Patients who had care takers that would meet the cost of care and other social needs attended more regularly. The study findings are in agreement with the study of Kavuma 2010 where by accessibility of health facilities and financial costs associated with care influence health-seeking behavior.

This study revealed that transport cost was an important factor determining regular attendance. Those who incurred no cost on transport and came from within a distance of 5 km from the facility attended more regularly compared to those that incurred transport and came from a distance above 5km. The study findings are similar to the study by Alonso, Escolan (2010) whereby high transport costs, cost of treatment, time of travel along with the economic status of the patient or care taker all had an impact on patient attendance to a particular health needs.

The study also revealed that lower education level was associated with regular clinic attendance compared to those with higher education levels. These study findings differed from one done byMazzotti, E., & Barbaranelli, C. (2012) where those with high education had a better health seeking behavior.

The study findings that those with lower education attended more regular could be attributed to the majority of Ugandans having attained primary level of education, according to the national census report of 2014.

This study also revealed that having a person responsible for medical treatment, was also another significant factor that influenced regular clinic attendance. This study also revealed that those who had relatives responsible for their medical care attended more regularly compared to those without relatives in charge of their care. One who stayed with parents had more chances to attend regularly compared, to any other relative. The study findings were also in agreement with the study of (Kwinter,M ,2011) whereby neglect, social isolation, loneliness or discrimination , social disadvantage, poverty and, unemployment has an effect on clinic attendance.

5.1.3 Health facility factors affecting mental health clinic attendance

Drug availability at the facility was another significant factor along with communication between health worker and patient/ patient care taker as well as previous response to the medication that was prescribed. Even from the key informant interview it was revealed that when drugs are available there is more clinic attendance and drug stock out was responsible for irregular attendance, as patients would resort to buying from drug shops or even abscond from treatment. Inadequate health staffs for the mentally ill patients with delays at health facility along with insufficient information on when and why they need to come back were also echoed as barriers to regular attendance of mental health clinic attendance. The results agree with findings by Hasvold and Wooton (2011) who found that missed appointments resulted in clinicians and support staff being less efficient in their work due to increased paperwork, which gave them less time for other job requirements.

Another significant factor according to this study that affected regular clinic attendance was awareness of service. Patients were more likely to attend regularly when they are aware of the availability of services most especially when informed by those who had recovered from the same facility or someone they have known before with a mental disorder gets improved.

5.2. CONCLUSION

5.2.1 Regularity of attendance

Patients attended mental health clinic irregularly. Less than half of the total number of patients was able to attend following their appointment dates. Irregular clinic attendance was more likely to be associated with poor adherence to medications. This would lead to high relapse rates, multiple admissions and reduced productivity hence leading to reduced economic growth in the country.

5.2.2 Social economic factor affecting clinic attendance

Significant factors that influenced regular attendance according to this study were; having a care taker, incurring no cost on transport and having someone in charge of treatment cost. Those who had care takers and most especially parents and siblings attended more regularly compared to those that did not have. Those who incurred no transport cost coming from within 5km from home also attended more regularly. Patients that had someone in charge for medical care costs also attended more regularly compared to those that didn't have someone in charge.

5.2.3 Health facility factors affecting clinic attendance

Significant factors that affected attendance of regular attendance at the facility were awareness of service and drug availability. Those who were aware of the availability of health services and clinic days attended more regularly compared to those that didn't. Drug availability i.e. having drugs available at the facility and being able to purchase drugs, was linked to attending more regularly.

5.3 RECOMMENDATIONS

5.3.1 Regularity of attendance

There is a need to sensitize the patients/ caretakers on the importance of complying with medications and keeping appointment dates, so as to improve on regularity of mental health clinic attendance.

5.3.2 Social economic factors affecting attendance of mental health clinic

Patients during recovery should be encouraged to participate in occupational therapy that includes handcrafts making skills so as to boost their ability to generate income that will enable them to attend mental health clinics more regularly.

Also Patients' care takers should be asked to start some projects /small scale businesses that will enable the patients to have income for transport/ drug purchases so as to provide the much needed support to their patients both social and economic.

5.3.3 Health facility factors affecting mental health clinic attendance

There is need for government to increase on number of health workers specialized to handle patients with mental disorders and have adequate supplies and medicines for mentally ill patients. There is need to establish outreach clinics so as to reduce on distance travelled by patients to health facilities. Health workers in mental health clinics should improve on communication and should allocate more time to answer patient's issues affecting their attendance. Health facility in charges should be asked to promptly order more drugs for mental patients and health workers should give more information concerning drug doses, side effect, and duration of treatment and how to notice relapse symptoms. Patients/ caretakers should be asked to form support groups which can help them solicit funds from both governmental and nongovernmental organizations.

5.4 Areas for further research

There is need to do further research on determinants of choice of where patients with mental illness would prefer to be taken for treatment.

REFERENCES

Abbo ,C .(2009). Profiles and outcome of traditional healing practices for severe

Abbo, C. (2003). Management of Mental Health Problems by Traditional Healers .

Acosta, F. J., Bosch, E., Sarmiento, G., Juanes, N., Caballero-Hidalgeo, A., & Mayans, T.(2009). Evaluation of noncompliance in schizophrenia patients using electronic monitoring (MEMS®) and its relationship to sociodemographic, clinical and psychopathological variables. *Schizophrenia Research, 107,* 213–217. http://dx.doi.org/10.1016/j.schres.2008.09.007

Alaki, D(2005) .Mental health and you, 2005 4 23 ,5-9

Alonso-Escolano, D. (2010). Adherence to treatment and therapeutic strategies in schizophrenic patients: The ADHERE Study. *CNS Spectrums, 15*(5), 327-337.

Alonzo, D. M., Harkavy-Friedman, J. M., Stanley, B., Burke, A., Mann, J. J., & Oquendo, M. A. (2011). Predictors of treatment utilization in major depression. *Archives of Suicide Research, 15,* 160–171. http://dx.doi.org/10.1080/ 13811118.2011.566052

Assessment rates and compliance with assertive follow-up after self-harm: Cohort

attendance at psychotherapy: A meta-analysis of randomized controlled trials. *Journal of Consulting and Clinical Psychology, 80,* 928–939. http://dx.doi.org/ 10.1037/a0029630

Balikci, A., Erdem, M., Bolu, A., Bozkurt, S. Z., & Ozun, Ö. (2013). Adherence with outpatient appointments and medication: A two-year prospective study of patients 86 with schizophrenia. *Bulletin of Clinical Psychopharmacology, 23,* 57–64. http://dx.doi.org/10.5455/bcp.20121130085931

Beck, E., Cavelti, M., Kvrgic, S., Kleim, B., & Vauth, R. (2011). Are we addressing the 'right stuff' to enhance adherence in schizophrenia? Understanding the role of insight and attitudes towards medication. *Schizophrenia Research, 132*(1), 42-49. doi:10.1016/j.schres.2011.07.019

Bergdahl, E., Allard, P., Lundman, B., & Gustafson, Y. (2007). Depression in the oldest old in urban and rural municipalities. Aging & Mental Health, 11570–578.

Branson, C. E., Clemmey, P., & Mukherjee, P. (2013). Text message reminders to improve outpatient therapy attendance among adolescents: A pilot study. *Psychological Services, 10,* 298–303. http://dx.doi.org/10.1037/a0026693

Brems, C., Johnson, M. E., Warner, T. D., & Roberts, L.W. (2006). Barriers to healthcare as reported by rural and urban interprofessional providers.Journal of Interprofessional Care, 20105-118. http://dx.doi.org/10.1080/13561820600622208

Brossart, D. F., Wendel, M. L., Elliott, T. R., Cook, H. E., Castillo, L.G., & Burdine, J. N. (2013). Assessing depression in rural communities.Journal Of Clinical Psychology

Buckner, J. D., Cromer, K. R., Merrill, K. A., Mallott, M. A., Schmidt, N. B., Lopez, C., Joiner, T. E., Jr. (2009). Pretreatment intervention increases treatment outcomes for patients with anxiety disorders. *Cognitive Therapy Results, 33,* Art. No. 126. http://dx.doi.org/10.1007/s10608-007-9154-x

Burnett-Zeigler, I. E., Pfeiffer, P., Zivin, K., Glass, J. E., Ilgen, M. A., Flynn, H. A., Chermack, S. T. (2012). Psychotherapy utilization for acute depression within the Veterans Affairs health care system.

Busby, K. K., & Sajatovic, M. (2010). Patient, treatment, and systems-level factors in bipolar disorder nonadherence: A summary of the literature. *CNS Neuroscience &Therapeutics, 16,* 308–315. http://dx.doi.org/10.1111/j.1755-5949.2010.00191.x

Byaruhanga,E, Elizabeth, Cantor, Maling S.& Kabakyenga J(2004).Pioneering work in mental health outreach in rural south western western Uganda.

Chartier-Otis, M., Perreault, M., & Bélanger, C. (2010). Determinants of barriers to treatment for anxiety disorders. *Psychiatric Quarterly, 81,* 127–138. http://dx.doi.org/10.1007/s11126-010-9123-5

Chun, R. (2016, January). *MinnesotaCare* [Information brief]. Retrieved from http://www.house.leg.state.mn.us/hrd/pubs/mncare.pdf

Corrigan, P. W., Rüsch, N., Ben-Zeev, D., & Sher, T. (2014). The rational patient and beyond: Implications for treatment adherence in people with psychiatric disabilities. *Rehabilitation Psychology, 59,* 85–98. http://dx.doi.org/10.1037/a0034935

Cui, R., Tate, S. R., Cummins, K., Skidmore, J. R., & Brown, S. A. (2015). Chronic physical health problems moderate changes in depression and substance use among dual diagnosed individuals during and after treatment. *Substance Use & Misuse, 50*(2), 174-183. doi:10.3109/10826084.2014.962052

Cuijpers, P., Berking, M., Andersson, G., Quigley, L., Kleiboer, A., & Dobson, K. S. (2013). A meta-analysis of cognitive-behavioural therapy for adult depression, alone and in

comparison with other treatments. *Canadian Journal of Psychiatry, 58,* 376–385. http://dx.doi.org/10.1177/070674371305800702

Cully, J. A., Jameson, J. P., Phillips, L. L., Kunik, M. E., & Fortney, J. C. (2010). Use of psychotherapy by rural and urban veterans. *The Journal of Rural Health, 26,* 225– 233. http://dx.doi.org/10.1111/j.1748-0361.2010.00294.x

David,S.Roger,S. Jonathan, B.Ragan.D,Andrew.M(2005).Oxford hand book of psychiatry(80)Oxford university press first edition Oxford England.

Defife, J. A., Conklin, C. Z., Smith, J. A., & Poole, J. (2010). Psychotherapy appointment no-shows: Rates and reasons. *Psychotherapy Theory, Research, Practice, Training, 47,* 413–417. http://dx.doi.org/10.1037/a0021168

Dhanda A., Narayan T. (2007). Mental health and human rights. The Lancet, 370, 1197-1198

Di Bona, L., Saxon, D., Barkham, M., Dent-Brown, K., & Parry, G. (2014, December). Predictors of patient non-attendance at improving access of psychological therapy services demonstration sites. *Journal of Affective Disorders, 169,* 157–164.

effectiveness and cost of patient-focused booking and SMS reminders at a

Evans, E., Jaffe, A., Urada, D., & Anglin, M. D. (2012). Differential outcomes of our supervised

Fassino, S., Pierò, A., Tomba, E., & Abbate-Daga, G. (2009). Factors associated with dropout from treatment for eating disorders: A comprehensive literature review. *BMC Psychiatry, 9,* Art. No. 67. http://dx.doi.org/10.1186/1471-244X-9-67

Faul, F., Erdfelder, E., Buchner, A., & Lang, A.-G. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *BehaviorResearch Methods, 41,* 1149–1160. http://dx.doi.org/10.3758/BRM.41.4.1149

Fenger, M., Mortensen, E. L., Poulsen, S., & Lau, M. (2011). No-shows, drop-outs and completers in psychotherapeutic treatment: Demographic and clinical predictors in a large sample of non-psychotic patients. *Nordic Journal of Psychiatry, 65,* 183–191. http://dx.doi.org/10.3109/08039488.2010.515687

Fournier, O.A., 2011. The status of mental health care in Ghana, West Africa and signs of progress in the greater Accra region. *Berkeley Undergraduate Journal*, 24(3), pp. 1-27.

Guerrero, E. G., Marsh, J. C., Duan, L., Oh, C., Perron, B., & Lee, B. (2013). Disparities in completion of substance abuse treatment between and within racial and ethnic groups. *Health Services Research, 48*(4), 1450-1467. doi:10.1111/1475- 6773.12031

Hall, A. J., Logan, J. E., Toblin, R. L., Kaplan, J. A., Kraner, J. C., Bixler, D., .Paulozzi, L. J. (2008). Patterns of abuse among unintentional pharmaceutical overdose fatalities. *JAMA, 300,* 2613–2620. http://dx.doi.org/10.1001/ jama.2008.802

Hasvold PE, Wootton (2011) Use of telephone and SMS reminders to improve attendance at hospital appointments: a systematic review. J Telemed Telecare 17: 358–364.

Henzen, A., Moeglin, C., Giannakopoulos, P., & O. (2016). Determinants of dropout in a community-based mental health crisis centre. *BMC Psychiatry*, 16. doi:10.1186/s12888-016-0819-4

Horvath, M., Levy, J., L'Engle, P., Carlson, B., Ahmad, A., & Ferranti, J. (2011). Impact

Hospital, Kampala, Uganda. Qualitative Health Research , 17(1):14-25

Howerton A, Byng R, Campbell J, Hess D, Owens C, Aitken P(2007)

http://dx.doi.org/10.1016/j.jad.2014.08.005

http://dx.doi.org/10.1111/j.1470-6431.2010.00903.x

http://dx.doi.org/10.2196/jmir.1702

Insel, T. R. (2011, December 14). Director's blog: Treatment development: The past 50

Jordan, J., McIntosh, V. V. W., Carter, F. A., Joyce, P. R., Frampton, C. M. A., Luty, S. E., Bulik, C. M. (2014). Clinical characteristics associated with premature termination from outpatient psychotherapy for anorexia nervosa. *European Eating Disorders Review, 22,* 278–284.

Kao, Y.-C., & Liu, Y.-P. (2010). Compliance and schizophrenia: The predictive potential

Karolinska Institutet and Makerere University;

Kim, J. E., & Zane, N. (2016). Help-seeking intentions among Asian American .

Kavuma,M. Richard;The guardian news paper of Wednesday 19th May 2010, on changing perceptions of mental health in Uganda.

Kwintner, M. (2011). When absence speaks louder than words: An object relational perspective on no-show appointments. *Clinical Social Work Journal, 39,* 253–94 261. http://dx.doi.org/10.1007/s10615-011-0313-x

Laerd Statistics. (2015). Binomial logistic regression using SPSS statistics. *Statistical tutorials and software guides.* Retrieved from https://statistics.laerd.com/spsstutorials/binomial-logistic-regression-using-spss-statistics.php

Lawn, S., Delany, T., Pulvirenti, M., Smith, A., & McMillan, J. (2016). Examining the use of metaphors to understand the experience of community treatment orders for patients and mental health workers. *BMC Psychiatry, 16,* Dec 2016.

Lee, S., & Held, M. L. (2015). Variation in mental health service use among U.S. Latinos by place of origin and service provider type. *Psychiatric Services, 66*(1), 56-64. doi:10.1176/appi.ps.201300533

López-Lara, E., Garrido-Cumbrera, M., & Díaz-Cuevas, M. P. (2012). Improving territorial accessibility of mental health services: The case of Spain. *The European Journal Of Psychiatry, 26*(4), 227-235. doi:10.4321/S0213- 95 61632012000400002

Lu Ann Aday, Llewellyn J. Cornelius .(2006). Designing and Conducting Health Surveys: A Comprehensive Guide, 3rd Edition ISBN: 978-0-7879-7560-9

MacKian S. 2002. Complex cultures: rereading the story between health and social capital. Critical Social Policy22: 203–25

Marcia Angell June 23, 2011 Issue The Epidemic of Mental Illness

Mark, T. L., Levit, K. R., Vandivort-Warren, R., Buck, J. A., & Coffey, R. M. (2011). Changes in US spending on mental health and substance abuse treatment, 1986– 2005, and implications for policy. *Health Affairs, 30,* 284–292. http://dx.doi.org/10.1377/hlthaff.2010.0765

Mazzotti, E., & Barbaranelli, C. (2012). Dropping out of psychiatric treatment: A methodological contribution. *Acta Psychiatrica Scandinavica, 126,* 426–433. http://dx.doi.org/10.1111/j.1600-0447.2012.01872.x

Menard, S. (2010). Logistic regression: From introductory to advanced concepts and applications. Thousand Oaks, CA: Sage.

mental illnesses in two districts in Eastern Uganda Stockholm and Kampala:

Milne, R. G. (2010). Reducing non-attendance at specialist clinics: an evaluation of the

Moczygemba, L. R., Osborn, R. D., & Lapane, K. L. (2014). Adherence to behavioral

Murphy, E., Steeg, S., Cooper, J., Chang, R., Turpin, C., Guthrie, E., & Kapur, N. (2010).

O'Brien A, Fahmy R, Singh SP (2009) Disengagement from mental health services. A literature review. Soc Psychiatry PsychiatrEpidemiol 44: 558-568.

O'Connor, P. J., Martin, B., Weeks, C. S., & Ong, L. (2014). Factors that influence young

of health portal enrollment with email reminders on adherence to clinic appointments: A pilot study. *Journal of Medical Internet Research, 13,* 112–125.

of insight into illness, symptoms, and side effects. *Comprehensive Psychiatry, 51,* 557–565. http://dx.doi.org/10.1016/j.comppsych.2010.03.007

Okello ES,(2007): Explanatory Models and Help-Seeking Behavior: Pathways to

Oldham, M., Kellett, S., Miles, E., & Sheeran, P. (2012). Interventions to increase

Paige, L., & Mansell, W. (2013). To attend or not attend? A critical review of the factors impacting on initial appointment attendance from an approach-avoidance perspective. *Journal of Mental Health, 22,* 72–82. http://dx.doi.org/10.3109/ 09638237.2012.705924

Pastore, P., Griswold, K. S., Homish, G. G., & Watkins, R. (2013). Family practice enhancements for patients with severe mental illness. *Community Mental Health Journal, 49,* 172–177. http://dx.doi.org/10.1007/s10597-012-9521-2

Patra, J., Taylor, B., Irving, H., Roereche, M., Baliunas, D., Mohapatra, S., & Rehm, J. (2010). Alcohol consumption and the risk of morbidity and mortality from different stroke types: A systematic review and meta-analysis. *BMC Public Health, 10,* Art. No. 258. http://dx.doi.org/10.1186/1471-2458-10-258

people's mental health help-seeking behaviour: A study based on the Health Belief Model. *Journal Of Advanced Nursing, 70*(11), 2577-2587. doi:10.1111/jan.12423

Pfeiffer, P. N., Glass, J., Austin, K., Valenstein, M., McCarthy, J. F., & Zivin, K. (2011). Impact of distance and facility of initial diagnosis on depression treatment. *HSR: Health Services Research, 46,* 768–786. http://dx.doi.org/10.1111/j.1475- 6773.2010.01228.x

Philips, B., & Wennberg, P. (2014). The importance of therapy motivation for patients with substance use disorders. *Psychotherapy, 51,* 555–562. http://dx.doi.org/ 10.1037/a0033360

Prunetti, E., Bosio, V., Bateni, M., & Liotti, G. (2013). Three-week inpatient cognitive evolutionary therapy (CET) for patients with personality disorders: Evidence of effectiveness in symptoms reduction and improved treatment adherence. *Psychology and Psychotherapy: Theory, Research And Practice, 86,* 262–279. http://dx.doi.org/10.1111/j.2044-8341.2011.02060.x

Psychiatric Care Among Patients Admitted for Depression in Mulago

qualitative interview study. British Medical Journal 2007, 334(7588):303.

Roberge, P., Fournier, L., Menear, M., & Duhoux, A. (2014). Access to psychotherapy for primary care patients with anxiety disorders. *Canadian Psychology, 55,* 60– 67. http://dx.doi.org/10.1037/a0036317

Rosenstock(1988) IM: Historical origins of the health belief model, Health EducationMonographs 2:328-335, 1974

R.V. Krejcie & D. W. Morgan (1970). Determining sample for research activities. Educational and psychological measurement

Sara. M.,(2003). Health system development programme, areview of health seeking behavior, problems and prospects.University of Manchester university Scottish health board. International Journal of Consumer Studies, 34, 570–580.

Sebastian, F., Mushtaq, S., Easow, J. M., & Luty, J. (2012). Number needed to treat further engaged of opioid-dependent clients following missed appointments. *Journal of Substance Use, 17,* 235–239. http://dx.doi.org/10.3109/ 14659891.2011.565108

Sims, H., Sanghara, H., Hayes, D., Wandiembe, S. Finch, M., Jakobsen, H., Kravariti, E. (2012). Text message reminders of appointments: A pilot intervention at four community mental health clinics in London. *Psychiatry Online, 63,* 161–168. http://dx.doi.org/10.1177/appi.ps.201100211

Social Care in The Community, 22(5), 469-478. doi:10.1111/hsc.12102

Ssebunnya, J., Kigozi, F. (2009). Integration of mental health into primary health care in Uganda: opportunities and challenges. Mental Health in Family Medicine. 6:37-42.

study. *Archives of Suicide Research, 14,* 120–134. http://dx.doi.org/10.1080/

substance abuse treatment among California parolees and probationers. *International Journal of Offender Therapy And Comparative Criminology, 56*(4), 539-556. doi:10.1177/0306624X11404827

the-past-50-years.shtml therapy and psychiatry visits in a safety-net setting in Virginia, USA. *Health &*

Turner et al,(2010) A framework for vulnerability analysis in sustainability science. Proc. Nat. Acad. Sci. 100 (14): 8074-8079. Understanding help seeking behaviour among male offenders University; White American students in psychological distress: Application of the health belief model. *Cultural Diversity and Ethnic Minority Psychology, 22*(3), 311-321. doi:10.1037/cdp0000056

Williams, S. E., Hartstone, M. D., & Denson, L. A. (2010). Dialectical behavioural therapy and borderline personality disorder: Effects on service utilisation and selfreported symptoms. *Behaviour Change, 27,* 251–264. http://dx.doi.org/ 10.1375/bech.27.4.251

Worley, M. J., Trim, R. S., Tate, S. R., Hall, J. E., & Brown, S. A. (2010). Service utilization during and after outpatient treatment for comorbid substance use disorder and depression. *Journal Of Substance Abuse Treatment*, *39*(2), 124-131. doi:10.1016/j.jsat.2010.05.009

years. Retrieved frohttp://www.nimh.nih.gov/about/director/2011/treatmentdevelopment-

APPENDIX I: CONSENT FORM

KAMPALA INTErnational University WESTERN CAMPUS

SCHOOL OF POST School of Postgraduate Studies

Research AND ETHICS Committee

STUDY TITLE:" Factors associated with Mental Health clinic attendance in Sheema district , Uganda''

Researcher:

Tutamwebwa K Thomas (MPH Student)

Your consent is being sought to participate in this study. Please read the following information carefully before you decide whether or not to consent to participate.

This consent form is composed of the following two parts:

Part I: Information sheet

This part contains the information which will assist you to make the decision to either participate or not to participate.

Part II: consent form

This part contains a certificate which you can sign if you accept to give your consent to participate and get interviewed. If you do not agree to participate you are not supposed to sign.

Part I: Information Sheet

Purpose of the research:

This study is intended to assess factors associated with increased prevalence of mental disorders among patients attending mental health clinics in Sheema district, so as to come with current situation which will help in improving mental health services in Sheema district.

Participant selection:

We are selecting a total of 208 participants among patients receiving mental health services in Sheema district

Procedure to be followed:

Taking part in this study is voluntary. If you agree to participate, you will answer some questions about yourself on the questionnaire.

Risks and Benefits

The risks and benefits will be explained to the respondents. There will be no invasive procedures employed and the only the risks involved could be psychological when they remember any past event.

The benefits of this study will be that the information gained from the study will be used to improve on patient care and also be used to set preventive measures where possible.

Confidentiality

The privacy issues will be assured by respecting your information and it will not be shared with the public. Confidentiality issues will be addressed by keeping the data collected confidential. The data will be anonymous and their information given will be used for only research purpose and will only be available to the Research and Ethics Committee of Kampala International University. You may contact the following address: Tutamwebwa Kabagambe Thomas. (The Researcher) Tel: **0772903122/ 0772903122.**

Part II: consent FORM

I have read the foregoing information, or it has been read to me. I have had the opportunity to ask question (s) about it and any question (s) that I have asked have been answered to my satisfaction.

I consent voluntarily to participate as a participant in this research and understand that I have the right to withdraw from the research at any time knowing it will not affect my job in any way.

Name of the Participant: _____

Signature of the Participant: _____

Date _____/_____/_____

Day/Month/Year

Name of the Witness: _____

Signature of the Witness: _____

Date _____/_____/_____

Day/Month/Year

Name of the Researcher: _____

Signature of the Researcher: _____

Date _____/____Month____/Year_____

APPENDIX II: QUESTIONNAIRE

I am Mr. Tutamwebwa K Thomas a master of public health student of KIU doing a research on Assessment of factors affecting mental health clinic attendance in Sheema district south western Uganda.

You are requested to answer all the questions honestly and the information got will be strictly confidential.

Please tick or write in the space provided as the question demands.

Serial number……

PART I. DEMOGRAPHIC DATA

Demographic information

2. What is your age? a)15-24 ☐ b)25-34 ☐ c) 35-44 ☐ d)45-54 ☐ e) 55-64 ☐

3. Gender:

a) Male ☐ b) female ☐

4. Education level

a) Nil ☐ b) Primary ☐ c) Secondary ☐ d) Tertiary/ University ☐

5. Marital status

a) Never married ☐ b) Married ☐ c) Separated ☐ d) Window /Widower ☐

6. What is your religion?

a) Catholic ☐ b) Protestant ☐ c) Moslem ☐ c) others ☐

7.What is your occupation?

a) Un employed ☐ b) Civil Servant ☐ c) Business ☐

d) Peasant farmer ☐ e) Casual laborer ☐ f)Others ` ☐

8. What mental disorder are you being managed for?

a)Manic depressive illnes ☐ b)Schizophrenia ☐ c) Substance induced psychosis ☐

d) HIV induced psychosis ☐ e) Depression ☐

9. When were you supposed to have come back for review?

a) Today b) a months ago c) Two months ago d) Three and above months ago.

B) Social economic factors affecting mental clinic re-attendance

10. How much do you earn in a months? ----------Shs.

a) >50.000shs. ☐ b) 50.000 shs. ☐

c) 60.000-100.000 shs ☐ d) 110.000shs & above ☐

11 Do you have someone in charge for your treatment at home?

i) Yes ☐ ii) No ☐

12. If yes who?

i) Spouse ☐ ii) Parent ☐ iii) Sibling ☐

iv) Others ☐

13.Whom do you stay with at home?

i) Spouse ☐ ii) Parent ☐ iii) Sibling ☐

iv) Others ☐

14.Do you have arelative with amental disorder?

I)Yes ☐ ii) No ☐

15. Do you have acare taker at home?

i)Yes ☐ ii)No ☐

16. Did you fail to get employment?

i)Yes ☐ ii)No ☐

C) Organizational/ health facility factors affecting mental health clinic attendance

16. How far is your home from the health facility?

a) 0-5km ☐ b) 6 -10km ☐ c) 11& above km ☐

17. Do you incur transport costs to access the clinic?

1).Yes ☐ ii) No ☐

18. How did you come to know of the availability of the mental service here?

i) Radio ☐ ii) In place of worship ☐

iii) A Friend ☐ iv) A patient that had recovered ☐

19. Where do you access mental health services? 1. Health facility: 2) Mushanga ☐

HCIII ☐ 3 Shuuku HCIV ☐ (4) Kabwohe HCIV ☐

20. How accessible is this mental health clinic to you?

i)Easly to access ☐ ii) Difficult to access ☐

21). For how long have you been attending this clinic?

i) < 1 year ☐ ii) 1-3years ☐ iii) 4-6 ☐ iv) 7& above years ☐

22. Do you use/ abuse alcohol and other substances?

i) Yes ☐ ii) No ☐

23 .What factors would you attribute to your mental breakdown?

Witchcraft ☐ ii) Genetical ☐

iii) Substance abuse ☐ iv) HIV ☐ v) Stress ☐

24. What motivates you to keep coming to this health facility?

a) Drug availability ☐ b) Good communication ☐

c) Got better from here. ☐

APPENDIX III: KEY INFORMATION INTERVIEW

I am **Tutamwebwa K Thomas** a Masters' degree student in Public Health at Kampala International University conducting a study " *entitled factors affecting mental health clinic attendance in Sheema district , south western* " *Uganda* .You are humbly requested to participate and give your views on the study. Your participation is voluntary. Information provided will be treated with utmost confidentiality. If you need further information, I shall be happy to provide it.

There has been increased number of mental disorders in Uganda and the world at large but despite this trend majority of patients with mental illness according to records and literature. Attend irregularly, have you noticed the same according to you health facility records?

1. What is the regularity of attendance in your health facility?
2. What social economic factors would you attribute to mental health clinic attendance in Sheema district?
3. What health facility factors would you attribute to mental health clinic attendance?

Thank you for your participation.

APPENDIX IV RECORD REVIEW CHECK LIST

1 Name of facility----------

2.Patients diagnosis----------

3. Age----------

4.Sex----------

5. For how long have you attended this clinic? ----------

6.When where you supposed to have come back?

a) Today b) a months ago c) two-three months ago

d)three and above months ago.

APPENDIX V MORGAN TABLES

Table 4: Sample size(s) required for the given population size(s)

N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	256	3000	341
20	19	120	92	300	169	900	269	3500	346
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	354
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	191	1200	291	6000	361
45	40	170	118	400	196	1300	297	7000	364
50	44	180	123	420	201	1400	302	8000	367
55	48	190	127	440	205	1500	306	9000	368
60	52	200	132	460	210	1600	310	10000	370
65	56	210	136	480	214	1700	313	15000	375
70	59	220	140	500	217	1800	317	20000	377
75	63	230	144	550	226	1900	320	30000	379
80	66	240	148	600	234	2000	322	40000	380
85	70	250	152	650	242	2200	327	50000	381
90	73	260	155	700	248	2400	331	75000	382
95	76	270	159	750	254	2600	335	100000	384

Source: R.V. Krejcie & D. W. Morgan (1970). Determining sample for research activities. Educational and psychological measurement

APPENDIX V: APPROVAL LETTER

KAMPALA
INTERNATIONAL
UNIVERSITY
EXPLORING THE HEIGHTS

Western Campus
P.O. Box 71, Bushenyi,
Tel: +256 200923543
Website : www.kiu.ac.ug

Sheema District Local Gov't
Date.....

INSTITUTIONAL REVIEW AND ETHICS COMMITTEE (IREC)

Received & Verified
Sheema District Local Gov't
Date 24/6/2016

Date: 23rd June 2016

Tutamwebwa Kabagambe Thomas
MPH/0001/133/DU

LETTER OF APPROVAL

This is to certify that the research proposal titled ***"Factors Associated with Increased Prevalence of Metal Disorders among Patients Attending Mental Health Clinics in Sheema District Uganda"*** was reviewed by the Research Subcommittee of the Board of Postgraduate Studies and Research Directorate of Kampala International University-Western Campus (KIU-WC) in its meeting on 08th September 2015 for its Scientific Validity and Ethical appropriateness and was approved subject to minor corrections.

This proposal was finally approved on 23rd June, 2016 after the expedited review following the minor corrections. You may now start conducting your research.

The Research Subcommittee retains the powers to continue monitoring how you are conducting the research. To this effect you are required to present monthly progress reports inform of power point presentations to your department in the presence of your supervisors and a representative from the Postgraduate Directorate. Please minute these presentations.

Signed by:

KIU WESTERN CAMPUS * School Of Post Graduate Studies & Research * 23 JUN 2016 P. O. BOX 71 BUSHENYI

on behalf of Dr. Medard Turinawe | 06 | 2016

Assoc. Director, Research Innovation, Extension & Publications **Date/Stamp**