

**STIGMA TOWARDS PEOPLE WITH MENTAL ILLNESS: A CROSS-SECTIONAL  
STUDY AMONG NURSING STAFF IN HEALTH FACILITIES IN AMOLATAR  
DISTRICT, UGANDA**

**By**

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## **DEDICATION**

*This dissertation is dedicated to my children Liam Morgan Eyena and Samantha Andrews Alela who were a part of this project and my husband Andrew Eyena for believing and encouraging me.*

*To all the health workers who work in the rural settings and hard to reach areas in Uganda.*

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## **ACRONYMS AND ABBREVIATIONS**

CAMI: Community Attitudes towards Mental Illness

DALYs: Disability Adjusted Life Years

DSM-IV: Diagnostic and Statistical Manual of Mental Disorders 4<sup>th</sup> edition

LAMIC: Low and Middle Income Countries

MAKS: Mental Health Knowledge Schedule

SMI: Several Mental Illness

WHO: World Health Organisation

YLDs: Years Lived with Disability

YLL: Years of Life Lost

## OPERATIONAL DEFINITIONS

Mental health literacy: “Knowledge and beliefs about mental illness that help its recognition, prevention and management.” (Jorm et al., 1997)

Stigma: “Term that reflects three closely related constituent elements: problems of knowledge (ignorance or misinformation), problems of negative attitudes (prejudice), and problems of behaviour (discrimination)” (Thornicroft, 2006).

Severe mental illness: Severe mental illness includes “diagnoses which typically involve psychosis (losing touch with reality or experiencing delusions) or high levels of care, and which may require hospital treatment.” ([www.mentalhealthwales.net/mhw/whatis.php](http://www.mentalhealthwales.net/mhw/whatis.php))

## **ABSTRACT**

### **Introduction**

Mental health of Ugandans could be improved through mainstreaming the services into primary care systems. Nurses constitute a high percentage of the workforce in health; therefore they can significantly contribute towards several experiences by patients with mental illness. Stigma towards mental illness and individuals living with mental illness is among the major hindrances to effective mental health service delivery amongst healthcare workers. Therefore it is important for stigma to be explored among general nurses as mental health services are being integrated into the primary health care. The aim of this study was to explore stigma among general nurses towards mental illness and individuals living with mental illness.

### **Methods**

This was a cross-sectional quantitative study. Self-administered questionnaires were distributed to nurses working in Amolatar district health facilities that measured knowledge, attitudes and behaviour towards individuals living with mental illness, in addition to their familiarity with a person with mental illness. Descriptive statistics were used to determine the extent to which stigma was reported in this population. Bivariate and multivariate analyses were done using linear and logistic regressions to identify the predictors of the knowledge, attitudes and behaviours of nurses regarding mental illness and individuals living with mental illness.

### **Results**

Sixty-three general nurses participated in the study. Most of the participants identified schizophrenia as an SMI, however 79% considered stress to be mental illness and only a quarter of respondents scored above 80% on knowledge about mental illness. Most of the participants believed that psychotherapy was the most effective treatment for mental disorders. The nurses were benevolent (mean 3.06, s.d 0.29) and showed acceptance towards mental health services and individuals living with mental illness in the community (mean 3.56, s.d 0.30) however the nurses tended towards authoritarianism (mean 3.74, s.d 0.34) and social restrictiveness (mean

2.98, s.d 0.27). Level of contact with individuals living with mental illness predicted community mental health ideology and authoritarianism. No demographic variables were associated with level of knowledge using MAKS score and intended behaviour using RIBS tool.

## **Conclusion**

This study has provided some of the first data on stigma among primary health care nurses towards people with mental illness in Uganda and has added to knowledge of stigma towards people with mental illness by health care providers in LAMIC. Many of the findings were positive and bode well for the planned integration of mental health in primary health care. The negative findings of this study have shown that there are many areas for improvement which could be tackled by interventions such as public and community education, and in-service training regarding causes and management of mental disorders. Further research could be done to understand more about the negative attitudes found in many LAMIC.

## **CHAPTER ONE: INTRODUCTION**

### **1.0 Background**

Globally, mental disorders account for a large proportion of the global burden of disease. According to disability-adjusted life years (DALYs), mental disorders account for 7.4% of disease burden worldwide (Whiteford et al., 2013). In 2010 mental disorders accounted for 17.3 million years lived with disability (YLDs) and 8.6 million years of life lost (YLLs) (Whiteford et al., 2013). However, the mental health burden in Uganda is far greater than the global average. According to the Uganda Bureau of Statistics and Macro International Incorporated (2007), functional disability was found among 7% of the households in Uganda. Functional disability included “difficulties with seeing, hearing, communicating, walking, or climbing stairs, remembering or concentrating or performing self care”. In addition, 58% of these households had at least one person living with a mental disorder (Uganda Bureau of statistics & Macro International Inc, 2007). Despite this high prevalence of mental disorders in Uganda, few access mental health services (Abbo, 2011).

One of the fundamental elements that may improve the mental health of people in Uganda is integrating mental health services in primary care and is one of the components in the long term strategic plan of the country (WHO, 2011). Health care professionals, such as nurses, play key role in identifying, diagnosing, treating, referring and rehabilitating people with mental illness since they have frequent contact with patients (Bjorkman, Angelman, & Jonsson, 2008). In the United States of America, nurses comprise about 15.3 percent of the health work force and therefore can play a major role in contributing to the various experiences by patients with mental illness (U.S Bureau of Labor Statistics, 2010).

There are a number challenges within mental health service delivery in Low and Middle Income Countries (LAMIC), including Uganda. First, only one percent (1%) of health care expenditures is specifically directed towards mental health care (WHO-AIMS,

2006). Second, there is a limited availability of human resources; in Uganda, there are approximately 1.13 healthcare providers per 100,000 of the population working in mental health (Ndyanabangi et al., 2012). Among these health workers, the ratios of professionals per 100,000 people are; nurses 0.78, psychiatrists 0.08, psychiatric clinical officers 0.2, other medical doctors 0.04, and clinical psychologists, social workers, and occupational therapists each with a ratio of 0.01. Only 4% of nurses and 1% of the medical doctors had specialization in psychiatry (Ndyanabangi et al., 2012). Third, though nurses are the most prevalent cadres of healthcare providers practicing in Uganda, only three percent (3%) of their training is devoted to mental health (with the exception of psychiatric nurses) as compared to ten percent (10%) for medical doctors (Ndyanabangi et al., 2012). Finally, another major barrier to effective mental health service delivery is the stigma associated with mental disorders amongst healthcare workers (Ndyanabangi et al., 2012).

The stigma and discrimination by healthcare providers towards people living with mental illness may result into problems with accessibility, treatment, and outcomes of mental illness (Birch, Lavender, & Cupitt, 2005; Hert et al., 2011; Phelan & Basow, 2007; Sartorius, 2002). Although there have been a number of conceptualizations of stigma over the years (Goffman, 1963; Link & Phelan, 2001). Stigma generally incorporates problems with knowledge, behaviour and attitudes towards people living with a mental disorder (Thornicroft, 2007). These three aspects of stigma have been widely explored in developed countries (Lauber, Nordt, Braunschweig, & Rössler, 2006). However, presently there are no available studies documenting the knowledge, attitude and behaviour of general nurses towards mental illness and people living with mental illness in Uganda. The present study attempts to address this gap.

### **1.1 Rationale for the study**

There are a number of reasons for investigating stigma, which includes the knowledge, attitudes and behaviour of general nurses towards mental illness and people living with mental illness in Uganda. First, nurses form the largest group of human resource in

primary healthcare settings and have more contact with patients attending health facilities. In Africa and specifically in Uganda where attempts are being made for mental health care to be integrated into primary care (Bhana, Petersen, Baillie, Flisher, & Consortium, 2010; Ssebunnya, Kigozi, Kizza, & Ndyabangi, 2010), it is very important for nurses to be aware of stigma and its implications, so as to ensure that patients receive quality of mental health nursing care and so that they can encourage their clients to visit the health facilities for services. If high levels of stigma do exist, interventions that address stigma should be provided to these cadres of healthcare workers. Nurses also play a great role in referring people with mental illness to specialized health facilities, and in order to refer those individuals to the right places, they may require a greater understanding of mental health issues.

Second, human resources in health are viewed by people with mental illness to be among the most influential in regard to stigma and discrimination against those with mental illness (Sartorius, 2007). Schulze (2007) documented three areas where health workers can be linked to stigma in mental health. They could stigmatize or be stigmatized along with the patients or act as advocates for the people with mental illness who are experiencing stigma (Schulze, 2007). The present study sought to explore stigma among general nurses towards mental illness and people living with mental illness.

Third, several researchers have documented that stigma amongst healthcare providers towards mental illness and people living with mental illness may not only hinder patients from seeking mental health services, but also it could affect their recovery and proper planning for their care (Birch et al., 2005; Hert et al., 2011; Phelan & Basow, 2007). Therefore understanding stigma among nurses towards mental illness and the mentally ill will help highlight on the interventions to be designed for healthcare workers in primary health care for better delivery of mental health care.

## **1.2 Aim**

The aim of this study was to explore the stigma among primary health care nurses towards people living with mental illness in Uganda.

### **Study Objectives**

This study specifically sought:

1. To describe general nurses' knowledge of mental health and to determine factors that may be associated with this knowledge.
2. To describe the attitude of nurses towards people living with mental illness and to identify factors that may be associated with these attitudes.
3. To determine the behavioural discrimination of general nurses towards people living with mental illness and to determine factors that may be associated with this behaviour.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.0 Introduction**

This chapter will describe previous work done worldwide and in Africa that have investigated stigma towards people living with mental illness by health care providers and the associated factors. The definition of mental illness and the global picture will be first described followed by theoretical frameworks that have attempted to describe stigma. This will be followed by a detailed description of stigma, namely the three constructs of knowledge (ignorance or misinformation), attitude (prejudice) and behaviour (discrimination). The factors that predict each construct of stigma will also be discussed.

### **2.1 Mental illness: Worldwide experience**

Mental disorders are defined as a “cognition, emotion regulation or behaviour that indicate a dysfunction in mental functioning that are usually associated with significant distress or disability in work relationships or other areas of functioning” (American Psychological Association, 2013). This phenomenon is shared by many individuals globally with neuropsychiatric disorders representing four of the ten leading causes of disability in 2001 and 25% of the general population worldwide suffering from any of the mental illnesses or behavioural disorders at some point during their lifetime (WHO, 2001). In the same year, mental disorders accounted for 30.8% of the total disability (WHO, 2001). The leading cause of YLDs worldwide has been identified to be mental and substance use disorders (Whiteford et al., 2013). Furthermore, psychiatric disorders account for 13% of global disease burden (WHO, 2009).

Depressive disorders accounted for the highest number of DALYs with 40.5%, followed by 14.6% for anxiety disorders, 10.9% for drug abuse, 9.6% for alcohol use disorders, 7.4% for schizophrenia, 7.0% bipolar disorder, 4.2% for pervasive developmental disorders, 3.4% for childhood behavioural disorders, and finally 1.2% for eating disorders. Population growth and ageing contributed to 37.6% increase in the burden of mental and substance use disorders between 1990 and 2010 (Whiteford et al.,

2013). Mental disorders have also been found to be associated with more than 90% of the one million deaths due to suicide and this figure is underestimated because there are several deaths whose causes are unknown (WHO, 2009). It should be noted that people with mental illness are prone to suffering from physical conditions because of reduced immunity, poor health behaviours, non adherence to medical treatment and social barriers to seeking treatment (WHO, 2009).

Although Uganda has as higher prevalence of mental disorders compared to the world wide picture, few individuals with mental illness seek mental health services (Abbo, 2011). By 2007 it was estimated that 35% of the total population experienced some form of mental disorder (Sanyu, 2007). In Uganda, out of 100,000 people, 15.35 are admitted in the psychiatric hospitals and 53% are female (WHO, 2011). Among the patients treated in the psychiatric hospital in Uganda, 33% were suffering from mood disorders and 17% from epilepsy (WHO, 2011). The average length of stay in hospital is 15 days and most of the patients are usually discharged back to the community, with the family members being the carers (WHO, 2011). The family members experience subjective, objective burden (Idstad, Ask, & Tambs, 2010) and chronic sorrow while taking care of their family member with mental illness (Olwit, Musisi, Leshabari, & Sanyu, 2015). Among the social consequences that caregivers face include disrupted social networks, stigma and discrimination which expose many caregivers to high levels of depression, stress and anxiety (Yıkılkan, Aypak, & Görpeliöglu, 2014). In Uganda, as in many countries globally, many of these social consequences result from cultural beliefs held by communities concerning mental illness.

Generally in Africa, most of the people diagnosed with mental illness are always considered as dirty, dangerous, useless, senseless or violent (Chikaodiri, 2009; Egbe et al., 2014). In many African communities, there are beliefs that mental disorders are a result of either a family problem or evil spirits (Gureje, Lasebikan, Ephraim-Oluwanuga, Olley, & Kola, 2005). In this regard, people living with mental illness are regarded as outcasts who should be kept away from others (Gureje et al., 2005).

Another common societal belief is that patients with mental illness are to blame for their illness, particularly with alcohol and substance disorders (Gureje et al., 2005). These common beliefs are often referred to as stigma in the literature and stigma has been explained from different perspectives by different researchers.

## **2.2 Conceptualizing Stigma**

A number of theoretical frameworks have been developed in an attempt to explain stigma, many of them derived from other diseases or disorders and situations where stigma poses significant threats to treatment outcomes and the wellbeing of those exposed. These disorders include those causing physical defects, physical disability, and cancers (Goffman, 1963). Among the first researchers of stigma was Goffman, who defined it as , “attribute that is deeply discrediting” and that makes a person feel reduced “from a whole or usual person to a tainted, discounted one” (Goffman, 1963). Several researchers including Link & Phelan (2001) have built on Goffman’s ideas and carried this work forward. Thornicroft et al (2007) further conceptualized stigma by incorporating various theories and describes one of the more recent concepts of stigma (Thornicroft, 2007). It is now generally acknowledged that stigma is an amalgamation of knowledge (ignorance or misinformation), behaviour (discrimination) and negative attitudes (prejudice). Given the considerable efforts in explaining the concept of stigma, a significant amount of research has focused on developing both valid and reliable tools for investigating the stigma associated with mental disorders utilizing this theoretical framework. This study will structure the discussion of literature about stigma using the conceptual model of Thornicroft et al (2007) which is well suited to exploring stigma among nurses towards people living with mental illness in Uganda. This structured review will be focused around this topic.

In order to ensure that the entire available literature investigating stigma towards people with mental illness by health workers is provided, CINAHL, MEDLINE, PsycINFO and PubMed electronic databases were searched for articles published between 2005 and 2015. The search terms used were;

1. “Stigma AND mentally ill AND nurses OR health workers”
2. “Knowledge OR Mental literacy AND health workers”

CINAHL, MEDLINE, and PsycINFO electronic data bases were searched through EBSCO host and 54 studies came up and 44 remained after removing the duplicates. There were 10 duplicates with the databases. Among the 44 studies, only 23 were relevant to the topic of study and the rest were not relevant and they were discarded. The articles that were discarded were either not describing stigma in mental health or did not include health workers as their study population. PubMed was searched independently and with the same search terms used, a total of 21 studies came up and only 4 were relevant to this topic. A total of 23 articles were included in this section. See the detailed flow diagram in appendix A.

### **2.3 Knowledge of Mental Illness**

Thornicroft et al (2007) recognized that stigma was occasionally related to inadequate knowledge about mental illness that led to stigmatization. A majority of the research investigating knowledge stems from the work of Anthony Jorm on mental health literacy. Mental health literacy was described by Jorm et al (1997) as “knowledge and beliefs about mental illness that help their recognition, prevention and management.” Mental health literacy has been widely investigated amongst communities and many researchers have concluded that there is inadequate knowledge about mental illness (Sorsdahl & Stein, 2010; Thornicroft et al., 2007). For example, in South Africa, Sorsdahl & Stein (2010) assessed stigma among the general population with a sample size of 1081. Participants responded on a 5-point scale, to questions about the causes (18 items) and treatment (13 items) of the symptoms after reading a vignette of someone living with mental illness. Each vignette presented to participants described one of the following mental disorders: depression, schizophrenia, panic disorder, post traumatic stress disorder and substance abuse. The vignettes were derived with guidance from DSM-IV criteria and 31% of the participants correctly identified their cases as mental illness. In addition, 47% identified the case vignettes as a “normal response,”

and 29% reported the behaviours to be typical of a general medical condition (Chaudhary & Mishra, 2009). This study has shown how a community may be misinformed about mental illness which may affect their behaviour towards people living with mental illness.

Mental health literacy has not only been investigated in the general public but also among healthcare providers. Several studies have investigated the knowledge, or “mental health literacy” of healthcare providers. Chaudhary and Mishra (2009) explored the knowledge and practice of general practitioners regarding psychiatric disorders in Ludhiana (India) and its surrounding areas. Of the sample of 158 general practitioners, 95% knew the etiology of mental disorders and, were familiar with the available possible treatment options. However, 79.6% of the general practitioners did not know the criteria for diagnosing mental illness and had not received any form of training to deal with mental illness. These findings may not be surprising since researchers have suggested that many healthcare workers lack sufficient training on mental health (WHO-AIM, 2006). Similarly, a recent study carried out in India found that 98.5% of general practitioners providing mental health services in primary healthcare settings feel there is need for more training and orientation in the management of patients with psychiatric disorders in order to improve quality of health care (Chaudhary & Mishra, 2009).

A comparative study was also conducted among specialists in mental health in Brazil and Switzerland where participants were required to identify a major depression in a case vignette. Generally the findings showed that more health workers in Brazil (94.7% overall, nurses 92.6%) correctly identified the case vignette than those in Switzerland (71% overall, nurses 64.9%) (Des Courtis, Lauber, Costa, & Cattapan-Ludewig, 2008). The Brazilian mental health nurses recommended more effective treatment plans as compared to the Swiss nurses (Des Courtis et al., 2008). Similarly, another study conducted in China among the mental health practitioners (39 psychiatrists and 31 nurses) and they were given case vignettes about a person with depression and

schizophrenia. The results showed that 87.1% of the nurses detected depression case and 90.3% recognised the schizophrenia case (Liu, Gerdtz, & Liu, 2011). The participants also agreed that medication and psychotherapy was useful to the patients with depression and schizophrenia (Liu et al., 2011). Generally these findings show that mental health literacy (detection) among nurses working in either mental health settings or primary health care ranges widely from 64.9% to 93%. There are generally very few studies that have investigated predictors of knowledge about mental illness.

No such studies have been conducted in Uganda, although one study was found to investigate the perception of health workers towards mainstreaming mental health services in primary health care levels. Most primary care nurses reported never to have received any mental health training during their nursing education (Ssebunnya et al., 2010) . In spite of these findings, there is a scarcity of literature on the mental health literacy of healthcare workers and this study sought to provide some information about mental health knowledge among general nurses in Uganda.

#### **2.4 Attitude toward people living with mental illness**

The second component of stigma concerns attitudes towards individuals living with mental illness, which is widely researched in comparison to knowledge and behaviour. A number of studies have focused on community attitudes towards people living with mental illness (Corrigan, Watson, & Barr, 2006; Gureje et al., 2005; Tsang et al., 2007) For example, a trend analysis was conducted on the population in eastern Germany. Knowledge and social restrictiveness from people with SMI were assessed over eight years (1993 and 2001). Interestingly, after an intervention consisting of health education, the desire for social distance still remained among the population (Angermeyer & Matschinger, 2005). These stigmatizing attitudes have not only been seen within the general public but also among the health care workers.

Several studies conducted in developed countries have investigated attitudes towards people living with mental illness amongst healthcare providers at both mental health

and general healthcare facilities (Bjorkman et al., 2008; Chambers et al., 2010; Courtis et al., 2008; Hamdan-Mansour & Wardam, 2009). A study done in a general hospital in Hong Kong among health workers reported that they believed that the patients diagnosed with mental illness cannot decide on their treatment plans and they were considered to be dangerous compared to others (Chow, Kam, & Leung, 2007).

Chambers et al (2009) explored the attitude of nurses working in mental health settings across five European countries, namely Portugal, Ireland, Finland, Italy and Lithuania and 810 registered nurses were interviewed using the Community Attitudes towards Mental Illness (CAMI) scale which has four subscales namely “authoritarianism, benevolence, social restrictiveness and community mental health ideology”. Authoritarianism means that “the person diagnosed with mental illness is being viewed as inferior and requires coercive handling”. Benevolence refers to “a paternalistic and sympathetic view of people with mental illness.” Social restrictiveness refers to “the belief that the mentally ill are a threat to society and should be avoided” and community mental health ideology refers to “acceptance of mental health services and mentally ill patients in the community” (Taylor & Dear, 1981). Generally those nurses had a positive attitude in the different domains with means and standard deviations of 2.21(0.49), 3.92(0.49), 2.11(0.52) and 3.80 (0.57) respectively. More positive attitudes are indicated by scores above the average of 2.5 and more negative attitudes by scores below 2.5. Among the socio-demographic factors that were associated with attitude towards people living with a mental disorder were gender and position held. The female gender had higher scores for benevolence than males and regarding post held, the nurse managers had more positives attitude across all the four domains.

Another study was carried out in Iran among 80 nurses working in psychiatric wards who participated by filling in a questionnaire that consisted of questions on stereotypes (cognitive), prejudice (emotional) and discrimination (behaviour) (Ebrahimi, Namdar, & Vahidi, 2012). They found that 72.5% had medium level of stigma, 48.8% showed social isolation from the people with mental disorders and 62.5% had positive

emotional (prejudice) responses towards the mentally ill. Among Swiss and Brazilian mental health workers, the Brazilian mental health workers showed more positive attitudes to community psychiatry and the Swiss mental health workers portrayed more stigmatization and social distance to the people with mental illness (Des Courtis et al., 2008).

In Sweden, a cross sectional study carried out among nurses in psychiatric and somatic care, reported that negative attitudes were found mostly in opinions regarding schizophrenia, alcohol abuse, and drug addiction compared to depression (Chambers et al., 2010). People with these disorders were considered dangerous, with 75% of the participants identifying drug addiction, 50% identifying alcohol addiction and finally 40% considered schizophrenia. People addicted to drugs and those diagnosed with schizophrenia were considered volatile, with 77% and 70% participants agreeing respectively. Finally, people with alcohol or drug addiction were blamed for their disorder (Bjorkman et al., 2008). Generally, a number of studies have shown that psychiatric nurses hold more positive attitudes towards mental illness compared to the general community (Munro & Baker, 2007; Ross & Goldner, 2009). However there are some studies with divergent findings. For example, Panayiotopoulos et al. (2013) conducted a study in Cyprus where both the general population and the mental health workers participated. They reported that the mental health workers were less confident about the competencies of people living with mental illness compared to the general public (Panayiotopoulos, Pavlakis, & Apostolou, 2012).

Researchers have carried out studies in LAMIC, investigating the attitudes of healthcare providers towards people living with mental illness. The majority of studies focused on medical students and doctors (Adewuya & Oguntade, 2007; Ukpong & Abasiubong, 2010), and very few considered general healthcare workers, including nurses (Chikaodiri, 2009; Gureje et al., 2005). A study conducted in Kenya among 148 primary care health workers across all the provinces found that they were not willing to admit patients with mental illness in medical wards (Muga & Jenkins, 2008). Another

study was done among health workers excluding nurses in Nigeria using the CAMI scale. The researchers found that the participants had negative attitudes with most being authoritarian and socially restrictive (Ukpong & Abasiubong, 2010).

The health workers' attitudes have been associated with a number of factors. Health care providers who were older hold more positive attitudes towards mental illness compared to the younger ones (Bjorkman et al., 2008; Hamdan-Mansour & Wardam, 2009). Regarding gender there are mixed findings documented. In some studies, women were reported to have lower levels of stigmatizing attitudes as compared to men (Bjorkman et al., 2008; Hamdan-Mansour & Wardam, 2009), yet the contrary was reported by Panayiotopoulos et al (2013) who found that men were more optimistic about the capabilities of patients with mental illness. A study conducted among health workers in a general hospital in Nigeria found that female respondents were showing more negative attitudes toward people living with mental illness as opposed to men (Chikaodiri, 2009). Higher level of education and posts held have been reported to be associated with low levels of stigma among nurses (Chambers et al., 2010; Ebrahimi et al., 2012). On the contrary, other researchers have found that health workers who had a postgraduate degree had more negative stereotypes and were less positive about the capability of a patient with mental illness compared to those who had a lower level of education (Panayiotopoulos et al., 2013). Additionally, evidence has shown that regular contact with individuals living with mental illness is strongly associated with a more positive attitude (Ebrahimi et al., 2012).

Presently, little is known about the attitudes amongst healthcare providers towards mental illness and people living with mental illness in Ugandan settings. A study investigating the opportunities and challenges of integrating mental health services into primary health care identified attitudinal problems to be one of the main challenges (Kigozi & Ssebunnya, 2009). Despite this finding, there are no available studies that have explored the stigma associated with mental disorders amongst general nurses in Uganda.

## **2.5 Behaviour towards people living with mental illness**

The third component of stigma as described by Thornicroft et al (2007) is the actual behaviour of rejecting people with mental illness (discrimination). Most of the evidence that is presently available considers imaginary views rather than actual experience, where researchers ask the participants to imagine how they would behave if faced with a person with mental illness (Thornicroft et al., 2007). However, more recently much more emphasis has been put on moving from hypothetical views to being more realistic. Even though it would be ideal to report data on actual behaviour, few studies have reported this and I will focus on intended behaviour.

A few studies have investigated discriminatory behaviours towards people with mental illness, highlighting the beliefs and portrayals of people with mental illness which have led to adverse effects on employment, income, housing, and self-worth (Corrigan et al., 2006; Tsang et al., 2007). An example of the research done with imaginary behaviour was conducted among mental health workers in Sweden. The health workers were asked about behaviour concerning employment and having a relationship with a person with mental illness. According to the findings, most staff (75.6%) believed that an employer would favour an applicant without mental illness, 67.4% believed that most young women would be unwilling to relate with a history of hospitalization due to mental illness and finally 66.4% would not hire a person who had formerly suffered from mental illness to take care of their children (Hansson, Jormfeldt, Svedberg, & Svensson, 2013).

In a cross-cultural survey, actual employers were asked about their feelings towards hiring persons who had been diagnosed with a psychotic disorder in the past. More than a quarter admitted strong concerns about the security of fellow workers, clients and worried about their job output and absenteeism during relapse (Tsang et al., 2007). It is not surprising that even the general public is less willing to support or help someone

find a job or maintain employment if they were diagnosed with any mental illness (Corrigan et al., 2006).

Healthcare providers have also been found to show discriminating behaviours towards people living with mental illness. In a study conducted in Nigeria, healthcare providers were asked about their views of having a psychiatric ward within a general hospital. Out of 362 participants who were interviewed, 192 (53%) did not want their place of work to be next to the psychiatric wards (Chikaodiri, 2009). The majority of the health workers (64.1%) expressed uncertainties about treating psychiatric patients and recommended isolation of people living with mental illness (Chikaodiri, 2009). These findings are similar to the those found in a study conducted in Kenya where the general health workers were not willing to admit patients with mental illness in the general wards (Muga & Jenkins, 2008).

Among the factors that were found to have an association with behavior towards people living with mental illness was level of contact, the higher the contact the less discriminating tendencies (Ebrahimi et al., 2012).

In Uganda, this component of stigma has not been explored among general nurses and this study may help contribute to this body of knowledge. Therefore, the purpose of the present study was to investigate stigma (knowledge, attitude and behaviour) among general nurses towards people with mental illness and factors that predict it, a population and context which have not been well described previously.

## **CHAPTER THREE: METHODS**

### **3.0 Introduction**

This chapter describes the study design, study setting, study participants and how the sample size was considered. The study procedure and the measures that were used in the study are described, in addition to how the data was managed and analyzed.

### **3.1 Study design**

This study employed a cross-sectional quantitative study design. A cross-sectional design was chosen as it allows researchers to ‘describe what exists, determine the frequency of occurrence, and allow for the categorization of information obtained’ (Polit & Hungler, 1995).

### **3.2 Study Setting**

This study was carried out in the community health facilities of Amolatar district. The district population is served by one community hospital, one health center IV, three health center IIIs and eight health center IIs. The health care system in Uganda is in different levels starting from the national level to the village level. The highest level is the ministry of health, followed by the national referral hospital, and then the regional referral hospitals. These are then followed by the district hospitals which are in every district. There are health center IV, health center III, health center II and lastly, the village health team following the district hospital. Amolatar district is located in the north east of Uganda. It is one of the new districts with a projected population of 120,000 in 2010 and with 1,758 square kilometres (Uganda Bureau of statistics & ICF international Inc, 2012). This population is mainly engaged in farming and fishing. Amolatar district is surrounded by lake Kwana in the north, lake Kyoga in the southwest and the River Nile in the south and western part. See Appendix B for a map of Amolatar.

### **3.3 Participants**

General nurses over the age of 18 years, working in a health facility in Amolatar district, and who were available at the time of data collection, were included in the study. Psychiatric nurses were excluded from the study since psychiatric nurses receive different training from the general nurses and knowledge is considered to have a potential relationship with stigmatising behaviour among the health care providers towards people with mental illness (Ndetei, Khasakhala, Mutiso, & Mbwayo, 2011). Nurses who were on leave at the time of data collection were excluded. All nurses who were willing to participate in the study and met the inclusion criteria were included in the study.

### **3.4 Sample Size**

A total of 63 nurses participated in the study. The minimum required sample size for a multiple regression study, given the desired probability level of 0.05, 6 predictors in the model, an anticipated effect size of 0.15 (moderate), and the desired statistical power level of 0.80 is 97. The researcher included all the nurses who were willing to participate in the study at the time of data collection, i.e. 63 nurses out of 65 nurses working in the district. The response rate was 97% as 2 nurses refused to participate in the study citing time limitations. Only 6 covariates were considered during analysis to due to the small sample size.

### **3.5 Procedure**

Nurses were recruited to participate in the study at their stations of work. The researcher introduced herself to the person in charge of the health facility and explained the reason for being there and sought and obtained permission to carry out research in the different health facilities. The monthly general meetings at the health facilities were not held regularly in most of the facilities, thus the researcher approached participants one by one after obtaining permission from the person in charge of the health facility. The potential study participant identified the time when it was convenient to fill in the questionnaire and informed us when to pick up the questionnaire on a specific day.

The researcher and research assistants described the study in detail and obtained written informed consent from the general nurses who were willing to participate in the study. The study participants were informed that the approximate time for filling the self-administered questionnaires was 30-40 minutes; as well as of the purpose of the study and how they may benefit from participating. After obtaining consent, the questionnaires were given to the participants and they informed the researcher and research assistants when to pick up the questionnaire. When picking up the questionnaire, the research assistants quickly looked through to cross check if there were any questions to ask the participants about his/her responses or any clarification needed by the participant.

### **3.6 Measures**

In addition to socio-demographic information (age, gender, educational level, marital status, post held and years of work) the following scales were included in the questionnaire:

Mental Health Knowledge Schedule (MAKS). Mental health related knowledge was measured using MAKS. This scale was developed by Evans-Lacko et al (2010), to measure the knowledge of mental health among the public but it is being used to measure knowledge among primary healthcare nurses in this study who have not received any education on mental health or have had little time allocated to mental health during their education. It contains 12 questions with the first 6 items (Part A) evaluating stigma-related mental health knowledge (professional help seeking, recognition, support, employment, treatment and recovery) and the next 6 items (Part B) comprising questions regarding the categorization of mental disorders (Evans-Lacko et al., 2011). Three studies were used to evaluate the tool and the overall internal consistency among items was 0.65 (Cronbach's alpha).

Each item was rated by a respondent on a scale of 1-5, with 5 indicating total agreement, 3 indicating neutrality and one indicating total disagreement. The total score was calculated so that higher MAKs scores indicate greater knowledge.

Community Attitudes Towards Mental Illness (CAMI) Scale. The CAMI scale was used to measure attitude of the nurses in this study. Taylor and Dear (1981) describe attitudes toward people living with mental illness in four domains; “attitudes may be authoritarian, socially benevolent, socially restrictive, or oriented toward community integration”. Authoritarianism means that “the person diagnosed with mental illness is being viewed as inferior and requires coercive handling.” Benevolence refers to “a paternalistic and sympathetic view of individuals with mental illness” Social restrictiveness refers to “the belief that the mentally ill are a threat to society and should be avoided” and community mental health ideology refers to “acceptance of mental health services and individuals with mental illness in the community”(Taylor & Dear, 1981).

The CAMI scale is composed of 40 items with equal distribution among the four domains (10 items for each). Each item was scored points ranging from one to five, with one indicating total agreement and five indicating total disagreement. Once appropriate items have been reversed, depending upon the wording and direction of the statement, a low score on any dimension indicates a high level of approval with that principle, and a high score represents general disagreement with that principle. The midpoint score of the four different domains of attitude is 2.5. This scale has not been validated in Uganda. However, it is the most suitable tool to measure attitude of general nurses in this study because it is standardised and it has been used in several African studies, for example, in South Africa (Sorsdahl & Stein, 2010), Ghana (Barke, Nyarko, & Klecha, 2011) and Nigeria, among health care professionals (Ukpong & Abasiubong, 2010).

The Level of Contact Report developed by Corrigan et al (2001) will be used to measure level of contact. This will help determine how prior contact may predict attitude towards mental illness. The Level of Contact Report lists 12 situations that vary in level of contact with persons living with mental illness. These situations were adapted from other scales used in stigma research (Link, Cullen, Frank, & Wozniak, 1987) and varied from least intimate contact ("I have observed, in passing, a person that

I believe had mental illness"), to medium intimacy ('I have worked with a person who had a severe mental illness at my place of employment"), to high intimacy ("I have mental illness"). The scale's reliability is 0.83. Research respondents were required to tick the situations on the 12-item list that they have experienced in their lifetime and the highest level of contact (intimacy) was considered. Each item was coded in the level of intimacy with 11 indicating most intimate contact with a person with mental illness, 7 indicating medium intimacy, and 1 showing little intimacy.

Reported and intended behaviour scale (RIBS) was used to assess behaviour. This scale was developed by Evans-Lacko et al (2011) and it inquires on four different contexts: (1) "living with," (2) "working with," (3) "living nearby" and (4) "continuing a relationship with someone with a mental health problem." The first four items of the RIBS are designed to assess prevalence of behaviour in each of the four contexts while items 5-8 ask about intended behaviour within the same contexts. The overall internal consistency, based on Cronbach's alpha among items 5-8 was 0.85.

RIBS items 5-8 were scored on an ordinal scale of 1-5. Items in which the respondent strongly agreed with engaging in the stated behaviour had a value of 5, whereas individuals who strongly disagreed that they could engage in the stated behaviour received 1 point. "I don't know" scored 3 points. The total score for each participant was calculated by adding together the response values for items 5-8. Higher scores indicated positive intended behaviour.

These measurement tools have not been validated in Uganda, however they have been used in some African countries for example South Africa (Sorsdahl & Stein, 2010), Nigeria (Ukpong & Abasiubong, 2010) and Ghana (Barke, Nyarko & Klecha, 2011) . In addition, these tools were not translated to any language because all the nurses knew English since it is the medium of communication used in schools and it is considered to be the national language in Uganda. The questionnaire was pretested among 5 general nurses in Mulago hospital to make sure that it is easily understood and it is very clear to the participants.

### **3.7 Data analysis**

Data was analysed using SPSS Version 22.0. Frequency distributions and descriptive statistics were calculated for categorical and continuous variables. A number of regression models were developed to examine the independent associations between demographic variables, familiarity with people living with mental illness and each construct of stigma. The first model used multiple linear regressions to examine the unadjusted (bivariate) and adjusted (multivariate) associations between demographic variables and knowledge of mental illness (the MAKS). The second, third, fourth and fifth models used multiple linear regressions to examine the unadjusted (bivariate) and adjusted (multivariate) associations between demographics variables and the four CAMI constructs of authoritarianism, benevolence, social restrictiveness and community mental health ideology respectively. Finally, the sixth model used multiple linear regressions to examine the unadjusted (bivariate analysis) and adjusted (multivariate) association between demographic variables and intended behaviour (RIBS). Logistic regression was used to determine any factors that were associated with reported behaviour (Categorical). For all the models, only variables that were significant in the unadjusted (bivariate analysis) were included in the adjusted (multivariate analysis) in addition to age and gender which are considered to have confounding effect in most of the health studies. The main hypothesis that was generated was; the more the level of familiarity, the less the stigmatising attitude and behaviour. The other covariates were chosen because the available literature reported their influence on stigma.

### **3.8 Ethical Considerations**

Ethical clearance was obtained from the University of Cape Town (UCT) Ethics Committee. Approval was also obtained from Uganda National Council of Science and Technology (UNCST) for the research to be carried out in the country. Permission from

the director district health officer was obtained before any data collection. This study adhered to Helsinki declaration of 2013.

Before any questionnaires are given out, the study participants were fully informed about the purpose of the study and the procedure of data collection. Confidentiality was maintained throughout the research process, questionnaires did not contain clear identity of the participants. The completed questionnaires were kept under lock and the key. After data entry in the computer, the data was kept in a folder that is protected with a password that is known to only the people involved in the study. The participants were informed that there are no negative consequences if they refused to participate or withdrew from study. Their participation was voluntary and they should feel free to withdraw their participation at any time without prejudice. A feedback report will be written at the end of the study where study findings will be disseminated to the study participants through their leaders.

## CHAPTER FOUR: RESULTS

### 4.0 Introduction

This section presents findings of data collected during the months of July, August and September 2014 on stigma towards mental illness and individuals living with mental illness by general nurses in Amolatar district. The findings have been presented according to the study objectives under the sub sections of: a) socio demographics of the sample; b) knowledge of mental illness; c) attitudes towards people living with mental illness; and d) behaviour that is reported and intended towards people living with mental illness.

### 4.1 Socio-demographics of the sample

Of the 63 respondents who participated in the study, the majority of the respondents were female 65% (n=41) and 94% (n=59) were married. Most of the participants had a certificate in nursing 91% (n=57) which is the lowest level of nursing education in Uganda where individuals study for 2 years. The mean age was 33.2 years old (sd=7.0) and majority of the participants (54.0%) had worked as a nurse between 6 to 10 years (see Table 1).

**Table 1: Socio demographic characteristics**

<b>Variable</b>	<b>Frequency</b>	<b>%</b>
<b>Sex</b>		
Male	22	34.9
Female	41	65.1
<b>Age</b> (mean 33.2, sd 7.0 ) (range 23-52)		
<b>Marital status</b>		
Married	59	93.7
Single	2	3.2
Divorced	2	3.2
<b>Educational level</b>		
Certificate	57	90.5
Diploma	6	9.5

<b>Number of children</b>		
1-5	51	81.0
6-10	10	15.9
>10	1	1.6
<b>Period of work</b>		
1-5	26	41.3
6-10	34	54.0
<b>Post held</b>		
Nursing Assistant	23	36.5
Enrolled Nurse	34	54.0
Nursing Officer	6	9.5
<b>Total</b>	<b>63</b>	<b>100</b>

#### 4.2 Knowledge of mental illness

The majority of respondents agreed that people with a severe mental illness (SMI) can fully recover (95%), medication was effective for treating SMI (92%) and they knew what advice they would give a friend who may be suffering with mental illness (97%). Only 2% of the respondents agreed that people with mental health problems want to have paid employment and 3% agreed that people with an SMI actually seek professional help (See Table 2; Part A). In addition, the majority of the respondents could identify most of the mental disorders described (71% - 97%), however 78% believed that stress was a mental disorder (see Table 2; Part B).

**Table 2: Responses to stigma related Mental Health Knowledge using MAKs (strongly or slightly agree)**

Variable	Responses
<b>MAKS Part A</b>	
Most people with mental health problems want to have paid employment (true)	1.6%
If a friend had a mental health problem, I know what advice to give them to get professional help (true)	96.8%

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Medication can be an effective treatment for people with mental health problems (true)	91.9%
Psychotherapy (e.g. talking therapy or counselling) can be an effective treatment for people with mental health problems (true)	88.9%
People with severe mental health problems can fully recover (true)	95.2%
Most people with mental health problems go to a healthcare professional to get help (false)	3.2%
<b>MAKS Part B</b>	
The following items report agreement as to whether each condition is a type of mental illness	
Depression (true)	96.9%
Stress (true)	77.8%
Schizophrenia (true)	70.8%
Bipolar disorder (manic depression) (true)	90.8%
Drug addiction (true)	82.8%
Grief (true)	19.1%

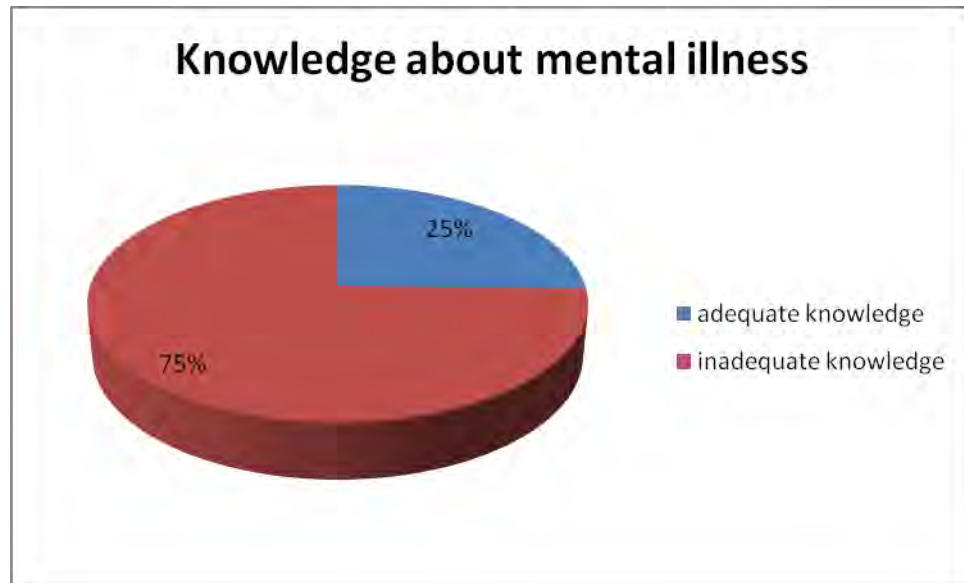
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(True and false are representing whether the participant believes that the statement is true or false about mental illness. The percentages indicate the participants who strongly or slightly agreed with the statements).

#### **4.2.1 Level of Knowledge by total scores**

To be considered to have adequate knowledge of mental illness, the participant needed to have scored above 80% on the knowledge questions (scoring above 48 of the total score of 60). From the Figure 1 below, only 25.4 % of the participants had adequate knowledge about mental health.

**Figure 1: Knowledge adequacy**



A linear regression was conducted between demographic variables and the total knowledge score for the participants. The unadjusted model showed no demographic variables were associated with level of knowledge using MAK score. The adjusted model included age and gender with total knowledge score and they were still not associated with level of knowledge (see Table 3).

**Table 3: Model of multiple linear regression on knowledge**

MAK score						
Variables	Unadjusted			Adjusted		
	B	95%CI	p-value	B	95% CI	p-value
Age	-0.02	-0.20- 0.17	0.87	-0.02	-0.21 – 0.18	0.88
Gender	-0.17	-2.77-2.43	0.90	-0.04	-2.81 – 2.73	0.98
Education level	1.04	-3.17-5.26	0.62			

Level of familiarity	0.03	-0.59- 0.65	0.93
Duration of work	0.00	-0.30- 3.01	1.00
Post held	0.37	-1.62-2.36	0.71

### 4.3 Attitude towards people living with mental illness.

The CAMI scale includes 4 subscales which include authoritarianism, community mental health ideology, social restrictiveness, and benevolence. Authoritarianism implies that “the person diagnosed with mental illness is being viewed as inferior and requires coercive handling”. Community mental health ideology refers to “acceptance of mental health services and individuals living with mental illness in the community”. The respondents tended towards authoritarianism and positive community mental health ideology with means of 3.74 (sd=0.34) and 3.56 (sd=0.30) respectively, which were above midpoint of 2.5 (see Table 4).

Benevolence refers to “a paternalistic and sympathetic view of individuals living with mental illness” and social restrictiveness refers to “the belief that the individuals living with mental illness are a threat to society and should be avoided”. Benevolence and social restrictiveness were slightly above the average of 2.5 with means of 3.06 (sd=0.29) and 2.98 (sd=0.27) respectively (refer to Table 4 below).

**Table 4: Attitude of general nurses towards people living with mental illness**

Scale	Mean	SD
Authoritarianism	3.74	0.34
Benevolence	3.06	0.29
Social Restrictiveness	2.98	0.27
Community Mental health Ideology	3.56	0.30

In the first regression model predicting authoritarianism, both the unadjusted (B=0.10; 95% CI=0.06 – 0.13; p< 0.001) and adjusted models (B=0.10; 95% CI=0.06 – 0.14;

p<0.001) found that the level of familiarity was the only significant predictor. Similarly in the models for community mental health ideology, the level of familiarity was the significant predictor for unadjusted B=0.07; 95% CI=0.03 – 0.10; p=0.001) and for the adjusted model (B=0.06; 95% CI=0.03 – 0.10, p=0.002); see Table 5 below. There were no other significant predictors of attitude towards mental illness and people living with mental illness.

**Table 5: Predictors of attitudes towards mental illness and people living with mental illness**

Variables	Unadjusted			Adjusted		
	B	95%CI	p-value	B	95%CI	p-value
<b>Authoritarianism</b>						
Age	-0.00	-0.02 – 0.01	0.54	0.00	-0.01 – 0.01	0.68
Gender	-0.05	-0.24 – 0.13	0.56	-0.09	-0.25 – 0.07	0.24
Education level	0.09	-0.21 – 0.38	0.56			
Level of familiarity	0.10	0.06 – 0.13	<b>&lt;0.01</b>	0.10	0.06 – 0.14	<b>&lt;0.01</b>
Duration of work	0.00	-0.02– 0.02	0.90			
Post held	-0.03	-0.17 – 0.11	0.71			
<b>Benevolence</b>						
Age	0.01	-0.00 – 0.02	0.24	0.01	-0.01 – 0.02	0.26
Gender	0.00	-0.15 – 0.16	0.98	0.01	-0.15 – 0.17	0.91
Education level	0.12	-0.13 – 0.37	0.34			
Level of familiarity	0.02	-0.02 – 0.05	0.38			
Duration of work	0.02	-0.00 – 0.03	0.09			
Post held	-0.05	-0.17 – 0.06	0.38			
<b>Social Restrictiveness</b>						
Age	0.01	-0.01 – 0.02	0.30	0.01	-0.00 – 0.02	0.25
Gender	-0.08	-0.22 – 0.06	0.26	-0.07	-0.22 – 0.07	0.30
Education level	-0.13	-0.36 – 0.10	0.25			
Level of familiarity	-0.00	-0.04 – 0.03	0.82			

Duration of work	-9.94	-0.02 – 0.02	0.99			
Post held	-0.10	-0.20 – 0.01	0.08			
<b>Community mental health ideology</b>						
Age	-0.01	-0.02 – 0.00	0.07	-0.01	-0.02 – 0.00	0.13
Gender	0.05	-0.11 – 0.20	0.53	0.09	-0.06 - 0.25	0.24
Education level	0.14	-0.11 – 0.39	0.28			
Level of familiarity	0.07	0.03 – 0.10	<b>0.00</b>	0.06	0.03 - 0.10	<b>0.00</b>
Duration of work	-0.01	-0.02 – 0.01	0.57			
Post held	-0.00	-0.12 – 0.12	0.98			

#### 4.4 Behaviour: Reported and intended behaviour towards people living with mental illness

The majority of the participants worked nearby (65%) a person diagnosed with mental illness, and 69% intended to continue a relationship with a person diagnosed with mental illness. Interestingly, only 15.4% of respondents intended to work with people with mental illness and 13.8% intended to work nearby people with mental illness (see Table 6).

**Table 6: Reported and intended behaviour**

Behaviour	Response %
<b>Reported behaviour</b>	
Live with	14.1%
Work with	6.3%
Work nearby	65.1%
Continue a relationship	29.7%
<b>Intended behaviour</b>	
Live with	39.0%
Work with	15.4%
Work nearby	13.8%

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Continue a relationship	68.8%
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In the unadjusted and adjusted models, none of the independent variables could predict intended or reported behaviour. Reported behaviour was categorised into two groups: good and poor reported behaviour. Good reported behaviour was considered when a participant responded yes more than twice and poor reported behaviour was considered when the yes responses were less than two (see Table 7 below).

**Table 7: Predictors of behaviour towards people living with mental illness**

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<b>Linear regression models on Intended behaviour</b>						
Variables	B	Unadjusted		Adjusted		
		95%CI	p-value	B	95% CI	p-value
Age	-0.01	-0.13 – 0.10	0.83	-0.01	-0.13 – 0.11	0.86
Gender	-0.09	-1.80 – 1.63	0.92	-0.28	-2.03 – 1.48	0.75
Education level	0.64	-2.10 – 3.39	0.64			
Level of familiarity	0.12	-0.30 – 0.53	0.57			
Duration of work	-0.10	-0.30 – 0.10	0.32			
Post held	0.29	-1.00 – 1.59	0.65			
<b>Logistic regression models on Reported behaviour</b>						
Variables	Exp(B)	95%CI	p-value	Exp(B)	95% CI	p-value
Age	1.00	0.93 – 1.09	0.89	0.95	0.82 – 1.11	0.54
Gender	1.86	0.52 – 6.66	0.34	1.13	0.15 – 8.29	0.907
Knowledge	1.02	0.90 – 1.16	0.73			
Level of familiarity	1.48	0.93 – 2.36	0.10			

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## CHAPTER FIVE: DISCUSSION AND CONCLUSION

### 5.0 Introduction

This study aimed at exploring the stigma of primary health care nurses towards people living with mental illness in Uganda. The main findings are presented below in fulfilment of the study objectives. Each main finding will be discussed following the framework of Thornicroft's conceptual model of stigma (Thornicroft et al., 2007). The findings will be contrasted with the relevant literature, followed by my recommendations for policy, practice and future research.

### 5.1 Overview of findings

**Objective 1:** To describe general nurses' knowledge of mental health and to determine factors that may be associated with this knowledge. The majority of the participants could identify schizophrenia as being mental illness, however 79% believed stress to be mental illness and only a quarter of participants scored above 80% on knowledge about mental illness. Most of the participants believed that psychotherapy and treatment for mental illness are effective. There were no variables that predicted knowledge.

**Objective 2:** To describe the attitude of nurses towards people living with mental illness and to identify factors that may be associated with these attitudes.

The general nurses tended towards authoritarianism and positive community mental health ideology with means of 3.74 (sd=0.34) and 3.56 (sd=0.30) respectively. Benevolence and social restrictiveness were slightly above the average of 2.5 with means of 3.06 (sd=0.29) and 2.98 (sd=0.27). Level of contact with an individual with mental illness predicted authoritarianism and community mental health ideology.

**Objective 3:** To determine the behavioural discrimination of general nurses towards people living with mental illness and to determine factors that may be associated with this behaviour. There was some discrimination portrayed by the nurses whereby the intention to continue working nearby individuals living with mental illness was less even when majority had reported working near individuals living with mental illness. None of the demographic variables included in this study predicted intended or reported behaviour.

## **5.2 Knowledge about mental illness**

The majority of the participants identified the mental disorders correctly (71% - 97%). These findings are similar with those found among the mental health workers and primary health care nurses who could correctly identify the case vignettes given to them of SMI (Des Courtis et al., 2008; Liu et al., 2011). In comparison to the public, it appears that the primary health care nurses could identify mental illnesses more than the general public. For example, in a sample from the South African community, only 31% could correctly identify the typical mental illnesses from vignettes (Sorsdahl & Stein, 2010). This difference could be due to the education content that the health workers receive or perhaps more exposure to people living with mental illness (Ndyabangi et al., 2012). Among the respondents, 79% of the respondents falsely identified stress as mental illness. This finding is higher compared to the findings in England (58.4%-56.8%) in a study that was done as an evaluation from 2009 to 2012 among the general population (Evans-Lacko, Henderson, & Thornicroft, 2013). Stress is mainly reported to be a cause for mental illness in a number of studies conducted in Africa (Adewuya & Oguntade, 2007; Gureje et al., 2005). This implies that the general nurses may still need some additional training on the types of mental disorders and factors that may predispose an individual to mental illness.

Overall, only a few 25% (n=16) of the participants could correctly identify 80% of the information about mental illness. Inadequate mental health knowledge has been reported by several researchers among the public and health workers (Lauber et al., 2006; Mwape et al., 2010b; Nordt, Rössler, & Lauber, 2006; Ssebunnya et al., 2010). These findings are not surprising since the majority of the participants were certificate holders which is the lowest level of nursing education in Uganda where little or no exposure to psychiatry is given during training (Ssebunnya et al., 2010). In addition there is barely any in-house training on mental health given to the nurses (WHO, 2011).

Most of the participants believed that medication for mental illness and psychotherapy are effective and believed that the people living with mental illness could fully recover. Similarly, several researchers have documented that mental health and primary care

nurses believe that medication and psychotherapy are effective in managing mental illness (Des Courtis et al., 2008; Kukululu & Ergün, 2007; Liu et al., 2011). This is a positive finding for the integration of mental health services into primary health care in Uganda.

In conclusion, very few African studies had explored stigma among primary health care nurses as noted in chapter 2. This study has addressed this gap by providing data from Uganda, at a critical time in the country as mental health services are being integrated into primary care services. In the next section the main findings on the nurses' attitudes will be discussed in the light of the literature and recommendations will be made.

### **5.3 Attitude towards individuals living with mental illness**

The general nurses showed benevolence towards individuals living with mental illness. This is a good attitude and it is similar to what the nurses working in a mental health setting across five European countries and in South Africa portrayed (Chambers et al., 2010; Netswera, Rankhumise, & Lethoba, 2006). Ukpong & Abasiubong (2010) also found that health workers in a teaching hospital in Nigeria were benevolent towards the people with mental illness. These findings are comparable to positive emotional (prejudice) responses that were found among Iranian nurses who were working in the psychiatric wards (Ebrahimi et al., 2012). This positive attitude is significant because it could positively influence the way the nurses interact with individuals with mental illness which may impact on their recovery and self esteem (Birch et al., 2005; Hert et al., 2011).

Generally, nurses were willing to integrate mental health services and individuals living with mental illness into the communities (community mental health ideology). Similarly, the nurses in mental health settings across five European countries (Portugal, Ireland, Finland, Italy and Lithuania) were willing to have mental health services and the individuals with mental illness in the community. These are also comparable to the Swiss and Brazilian mental health nurses who were positive with having mental health

services in the community (Des Courtis et al., 2008). These positive attitudes towards people living with mental illness could be further encouraged through public health messages in television, radio stations and hospitals (Evans-Lacko, Malcolm, et al., 2013). This could be enhanced through policies that favour health promotion on media through subsidising rates and allocating more resources to the mental health budget.

Though the nurses showed positive attitudes as discussed above, there were also some negative attitudes portrayed by the general nurses towards individuals with mental illness in terms of social restrictiveness and authoritarianism. These findings are similar to those found in Nigeria where staff in a teaching hospital were authoritarian and restrictive (Ukpong & Abasiubong, 2010). Social restrictiveness or social distance has been found among several health workers in general health facilities where they are not willing to admit patients in the general health facility or they are not willing to have their workplaces near a psychiatric ward (Chikaodiri, 2009; Des Courtis et al., 2008; Muga & Jenkins, 2008). In Nigeria, 83% of the respondents were of the view that the people with a mental illness should be denied their individual rights and 50% agreed that women who have ever had mental illness should not be allowed to be babysitters (Ukpong & Abasiubong, 2010). Linden & Kavanagh, (2012) conducted a study in Ireland among nurses and reported that nurses working in the inpatient settings were more socially restrictive towards people diagnosed with schizophrenia compared to those working in the community. The difference could be due to the different exposure the community nurses and the inpatients get.

Social distance was also found among mental health professionals including nurses in Switzerland as well as in the general population (Nordt et al., 2006). However, this finding contradicts with what was found among nurses across five European countries where the nurses did not socially restrict themselves from individuals living with mental illness (Chambers et al., 2010). A study carried out in Turkey among mental health nurses also reported that the nurses were positive with people living with a schizophrenia moving freely in the community which indicates that they were not

socially restrictive (Kukulu & Ergün, 2007). This difference may be due to the mental health systems in the developed countries and the LAMIC. The nurse-patient ratios are different and this gives different experiences to the nurses and the patients (BMAU, 2013; Ndyanabangi et al., 2012). The big gap between the number of nurses and the patients may leave them less able to provide individual attention to patients. This difference could also be due to the knowledge gap between the primary health nurses and mental health nurses. For the primary health nurses little or no time is given to mental health training during their education and this leaves them with no clinical contact with people with mental illness or little exposure (Ssebunnya et al., 2010).

Beliefs about social restrictiveness could also be explained by varying cultural views of mental illness that are not explored in the present study. Culturally in an African setting, mental illness is believed to be caused by evil spirits which can be contagious and can only be treated by cleansing by traditional healers (Gureje et al., 2005). These beliefs compel the public, including the nurses, to distance themselves from people who are living with mental illness. Therefore this knowledge gap may lead to misunderstanding of causes of mental illness, fear of mental illness as a contagious disease and perceived dangerousness of the people with mental illness (Kapungwe et al., 2010; Netswera et al., 2006) hence social restrictiveness.

The primary health care nurses showed authoritarianism (mean 3.74 s.d 0.34) towards the people living with mental illness. This finding is similar to those found among health workers in Hong Kong who believed that the patients with mental illness do not have the ability to make decision about their treatment plans (Chow et al., 2007). Ukpong and Abasiubong (2010) also found similar findings among health workers in a teaching hospital in Nigeria. This is similar to the findings of Panayiotopoulos et al (2013) where mental health workers were not confident of the capacities of people with mental illness as compared to the public. On the contrary, nurses from five European countries showed less authoritarianism (mean 2.21 s.d 0.49) (Chambers et al., 2010). The difference could be due the cultural beliefs between Europe and Africa. In Africa,

people with mental illness are regarded as outcasts, possessed with demons and because of the negative beliefs; they view them as inferior and cannot make their own decisions. This attitude is unfavourable to the people with mental illness because their rights may not be observed or they may be treated worse than people without mental illness (Mfoafo-M'Carthy & Huls, 2014). In fact, their properties such as houses and land may be wrongly taken because of coercive handling. Some of the people living with mental illness are locked up in houses so that the public is not aware of them and some are denied education (Ssebunya, Kigozi, Lund, Kizza, & Okello, 2009).

Level of familiarity (social contact) had relationship authoritarianism and community mental health ideology despite the study being underpowered. Increasing levels of familiarity with a person with mental illness increased positive attitudes towards accepting mental health services and those with mental illness in the community however the data is cross sectional and cannot necessarily say it influenced to this direction. These findings are similar to what other researchers found among nurses in Iran (Ebrahimi et al., 2012). This could be because of their close contact with the people with mental illness, they understand the benefits of community support mental services, and many of the commonly held fears and negative beliefs can be dispelled by contact with people living with mental illness (Evans-Lacko, Malcolm, et al., 2013; Henderson & Thornicroft, 2013; Thornicroft, Brohan, Kassam, & Lewis-Holmes, 2008). It is also important to note that previously, mental health services were being provided in a few health facilities and patients had to travel long distances to obtain any services and any services that will be closer to the people will be of great help (Ndyanabangi et al., 2012). The health care workers could also think that the community support mental health services may help to decongest the health facilities and reduce the days of admissions for the patients since some of the services can be offered at the community facilities (Ndyanabangi et al., 2012). Thus, since those with increased levels of familiarity were more likely to have positive attitudes, these healthcare workers may have realised that this integration is feasible. However it is important to explore the general public and mental health end users' opinions about community mental health

services before any support services are set up, therefore further research should be done in this area.

Increasing levels of familiarity (social contact) with a person with mental illness also increased authoritarianism which is a negative attitude which may be misused by health workers and the public. This finding may be due to their experiences with the mentally ill persons and they end up feeling that they cannot make their own decisions on treatment and other aspects in life. This may be because the people with mental illness are stereotyped and viewed as crazy and they cannot think for themselves. People with mental illness are also viewed as difficult, uncooperative, unpredictable, and violent (Muga & Jenkins, 2008; Mwape et al., 2010a; Ndeti et al., 2011; Ukpong & Abasiubong, 2010). With these reasons the primary health workers may think that it is proper to be authoritarian towards the people with mental illness. Additionally, the health workers may make decisions which may not be helpful to the person with mental illness but convenient for the health worker. These findings are contradictory to what is known about social contact. Social contact has been used as an intervention to reduce stigma among the public (Evans-Lacko, Henderson, et al., 2013; Pinfold, Thornicroft, Huxley, & Farmer, 2005). Therefore, more research should be carried out to explore the effects of social contact as it is used in anti-stigma interventional campaigns, and increased clinical contact with this particular group of healthcare workers.

The factors that were not statistically significant predictors of stigma in this study were gender, educational level, age, duration of work and post held even though educational level, duration of work and post held were found in number of studies to be significant predictors of stigma (Bjorkman et al., 2008; Chambers et al., 2010; Chikaodiri, 2009; Ebrahimi et al., 2012; Hamdan-Mansour & Wardam, 2009; Panayiotopoulos et al., 2012; Pinfold et al., 2005). The differences could be due to the small sample size this study which reduces the power. Therefore more studies should be carried out to investigate factors that predict stigma with bigger sample size.

This study has added to the body of knowledge about attitudes of primary health care nurses specifically in Uganda. The next section will discuss significant findings of the behaviour of nurses towards people with mental illness and relate it with already existing literature and recommendations will be made.

#### **5.4 Behaviour towards individuals living with mental illness**

There was some discriminatory behaviour portrayed by the nurses whereby the intention to continue working nearby the mentally ill was less even when majority had reported working near the mentally ill. Only 6% of the general nurses reported working with and 14% intended to work nearby people living with mental illness. Similarly in Kenya, the primary health workers were not willing and others were not comfortable to admit people with mental illness in the general facilities (Muga & Jenkins, 2008). These views were also found among primary health care workers in Nigeria, Brazil and Switzerland (Des Courtis et al., 2008; Muga & Jenkins, 2008). In a study that examined physicians' attitude towards people diagnosed with schizophrenia in Turkey, more than 70% were not willing to a person diagnosed with schizophrenia as a neighbour (Aker, Özmen, & Ögel, 2002).

However in Turkey, more than half of the nurses did not mind having a person diagnosed with schizophrenia as a neighbour (Kukulu & Ergün, 2007). This difference may be due to the different life styles in the different countries whereby those who are outgoing interact more with the neighbours and would care about their psychological distresses and those who are introverts would not mind about their neighbour. Generally, any situations that require close proximity with people living with mental illness such as working with or nearby, being in a relationship or being a neighbour bring out stigmatising reactions (Kukulu & Ergün, 2007). These discriminating behaviours may affect the self esteem of the people with mental illness and this affects their attitude and increases their level of dependence on the family members and the community and may limit their access to timely services (Birch et al., 2005; Hert et al., 2011). However, the discriminatory behaviours may be due to the misinformation or

inadequate knowledge among primary health care workers. This affects their confidence and they may feel that they do not have enough skills to take care of people admitted with mental illness (Payne et al., 2002; Turner et al., 2004).

### **5.5 Implications of study findings**

The results of this study have implications for the future training of nurses in Uganda, and the development of culturally adapted stigma interventions for use in Uganda.

Firstly, Mental health training should be incorporated in the training of nurses especially the certificate level, and strengthened in the other levels of nursing education. This can be done through allocating more time for mental health training in the curriculum and incorporating more clinical exposure to the nurses. Clinical exposure would also increase the familiarity of people living with mental illness to nurses. Given that not only this study, but others (Ebrahimi et al., 2012; Llerena, Cáceres, & Peñas-Lledó, 2002) have found that familiarity is one of the only predictors of stigma. This intervention has been used and evaluated and found to generate positive change in knowledge and attitude among student nurses in university of Athens (Madianos, Priami, Alevisopoulos, Koukia, & Rogakou, 2005). The students were more knowledgeable about mental illness and they had more positive attitude towards individuals living with mental illness as compared to before psychiatry training (Madianos et al., 2005). The students were given 40hours of lectures on clinical psychiatry and 90 hours on clerkship during their undergraduate training (Madianos et al., 2005).

Mental health training can be done in Uganda by incorporating it during nursing education and considering it as a main course for the student nurses so that it is allocated adequate time. For example for the undergraduate students, five weeks could be allocated to psychiatric nursing with more time allocated to clerkship which involves clinical exposure. This intervention would require curriculum review or modification in nursing education at different levels. Professional role learning and preparedness of

nurses to work with people living with mental illness rely on the useful theoretical and clinical exposure to mental health principles and practice (Madianos et al., 2005; Markström et al., 2009; Wynaden, Orb, McGowan, & Downie, 2000).

Secondly, in-service training should be done to enhance nurses' knowledge about management of mental illness and give more exposure to boost their confidence when handling patients with mental illness and this may help reduce stigma. This may also help in changing their attitude towards people living with mental illness to a more positive direction. Mental health trainings have been used before as a way of improving mental health literacy and attitude (Armstrong et al., 2011; Pinfold, Huxley, et al., 2003; Pinfold, Toulmin, et al., 2003). However, training has been more effective in improving mental health literacy than changing negative attitude towards people living with mental illness in LAMIC (Armstrong et al., 2011). The difference in the change in attitude maybe because of other elements like cultural beliefs, which are mainly negative in LAMIC (Armstrong et al., 2011). For example, a study done in India reported caregivers lock up people living with schizophrenia in an attempt to avoid the community's reactions because it is believed that mental illness is caused by spirits or bad deeds (Raguram, Raghu, Vounatsou, & Weiss, 2004). Therefore it is important for the training manuals to contain sections that address some elements such as culture that impact on attitude towards people living with mental illness (Armstrong et al., 2011). Therefore future research should be carried out to develop effective training manuals and tested in Ugandan culture. The policy makers should allocate more resources that may facilitate the effective mental health trainings.

Thirdly, culturally sensitive anti-stigma intervention should be developed for use in Uganda while putting into consideration the social contact which has been found to be effective for anti-stigma campaigns (Evans-Lacko et al., 2012; Pinfold et al., 2005). The anti-stigma campaigns should be able to reach a bigger population through targeting use of media houses, such as televisions, radio stations. These have been found be effective in changing people's attitude towards people living with mental illness (Evans-Lacko,

Malcolm, et al., 2013; Mehta, Kassam, Leese, Butler, & Thornicroft, 2009; Pinfold et al., 2005). During these campaigns, some of the influential figures who had ever been diagnosed with mental illness were used and this attracted people's attention (Evans-Lacko, Malcolm, et al., 2013). Social contact was applied and in this study, it has been found to influence the attitude of the nurses towards people living with mental illness. Therefore in case an anti stigma campaign is to be carried out in Uganda, social contact needs to be considered. The messages that are to be used in an anti stigma campaign should also be culturally relevant to Ugandans since it is well known that there are negative cultural beliefs towards mental illness (Abbo, 2011; Olwit et al., 2015).

Finally, task shifting may be embraced with necessary training of nurses, lay or community health workers and appropriate supervision (Kakuma et al., 2011) through integration of mental health services in primary health care. A study was carried out in Zimbabwe where community health workers were trained to provide problem solving therapy for depression and other common mental health services. It was reported that there was improvement of common mental disorders with interventions from primary health care by the community health workers (Chibanda et al., 2011). A study that evaluated acceptability and feasibility of using non specialist health workers to deliver mental health services in Uganda, Ethiopia, India and Nepal reported that it was acceptable and feasible so long as some key issues are put into consideration (Mendenhall et al., 2014). Among the elements were; 1, increased human resource and better accessibility to medication; 2, structured supportive supervision; 3, adequate training and compensation of health workers who are involved in task sharing (Mendenhall et al., 2014). With the uptake of task shifting, the three key elements need to be considered for the intervention to be effective. Socio cultural context need to be put into consideration during identification of personnels for task sharing, training and supervision (Mendenhall et al., 2014).

## **5.6 Study limitations**

There are a number of limitations of this study. First, the study sample size was small reducing the power of the study. However, extensive effort was made to ensure all nurses working in these facilities were included. Furthermore, in this small study it was not possible to explore more factors which could have predicted stigma in this group. There may be reporting bias because the participants were being asked about the behaviour which would have been better done with observation. There may be self reporting bias and the findings are not representative of all nurses in Uganda.

## **5.7 Conclusion**

This study has provided some of the first data on stigma among primary health care nurses towards people with mental illness in Uganda and has added to knowledge of stigma towards people with mental illness by health care providers in LAMIC. Many of the findings were positive and bode well for the planned integration of mental health in primary health care. However, this study have shown that there are many areas specifically authoritarianism, discriminating behaviour and knowledge about mental illness need improvement which could be tackled by interventions such as public and community education, and in-service training regarding causes and management of mental disorders. Further research could be done to understand more about the negative attitudes found in many LAMIC.

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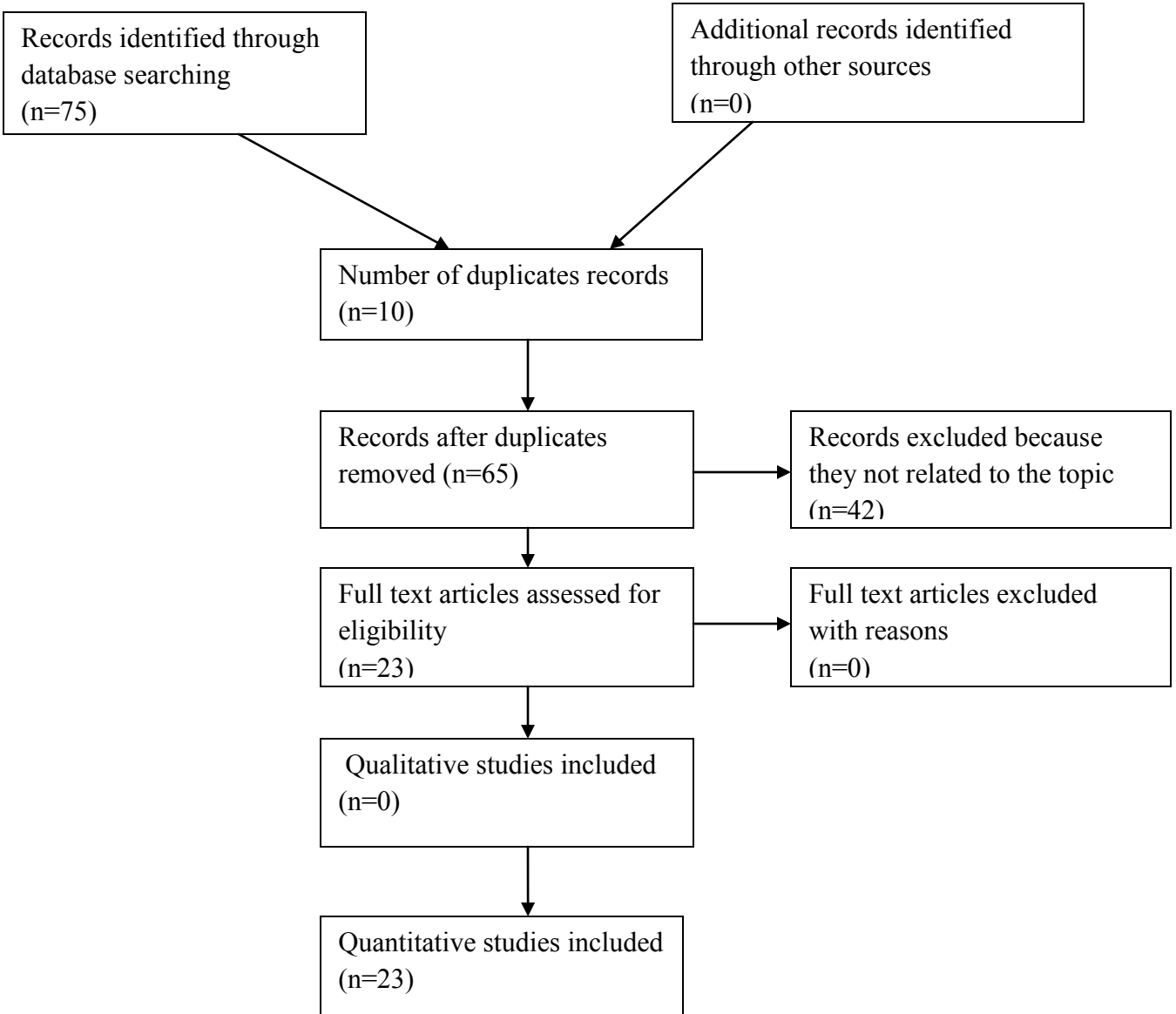
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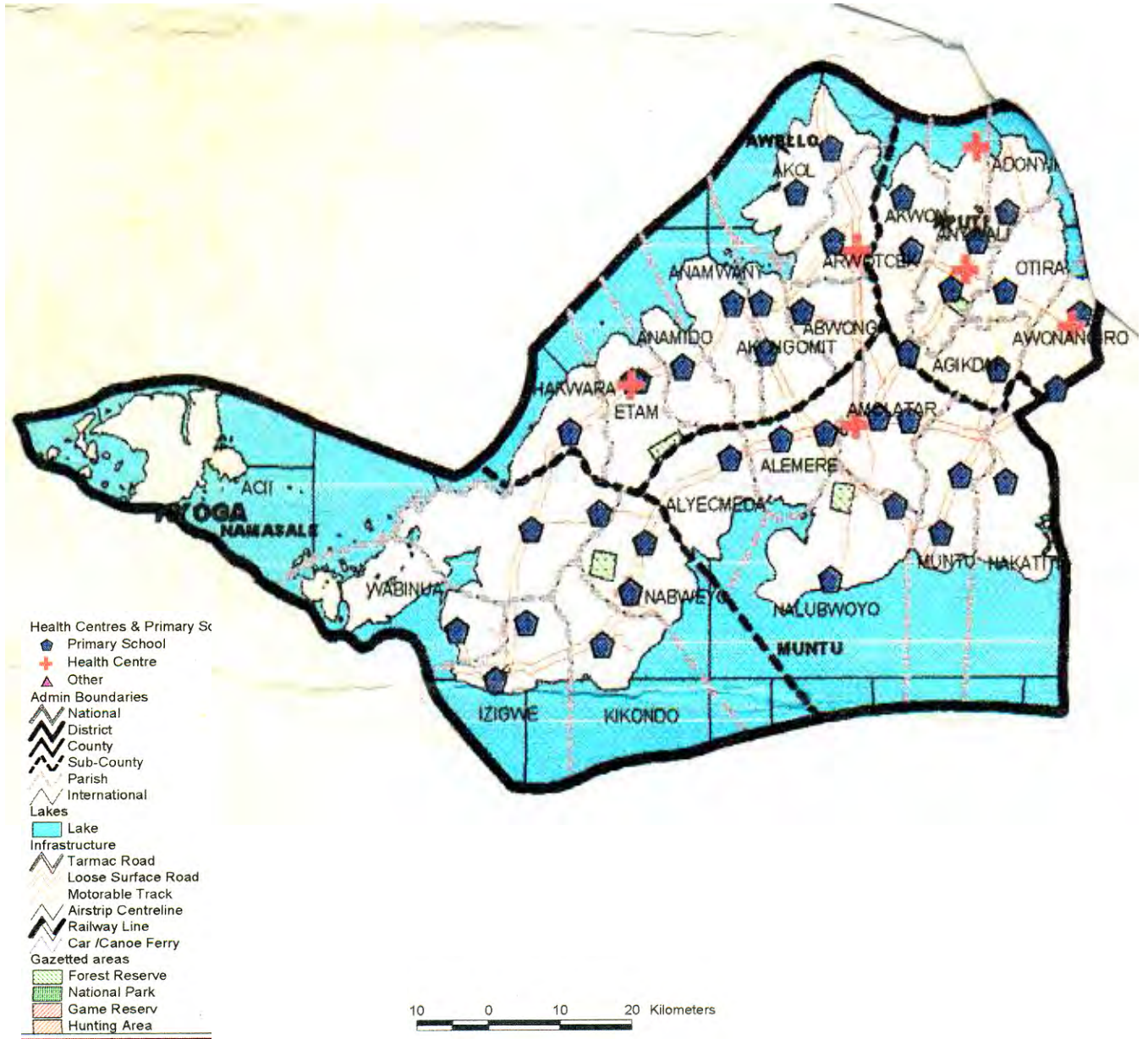
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## APPENDIXES

### Appendix A: Flow Diagram



**Appendix B: Map of Amolatar District**



## **Appendix C: Informed Consent Form**

### **Project Title: Stigma towards people with mental illness: a cross-sectional study among nursing staff in health facilities in Amolatar district, Uganda**

**Introduction:** We are asking you to take part in a research study. The aim of this study is to explore the attitudes of general nurses towards people living with mental illness in Uganda. This study forms part of a master's study at the University of Cape Town, at the Department of Health. You qualify for this study because you are a nurse working in a health facility in Amolatar district, and you are 18 years old. We hope to find 70 nurses to part take in this study.

**What We're Asking of You:** We will ask you to answer a set of questions about yourself for demographic purposes, questions about your personal contact with people with mental health problems, and proximity of this contact and several questions will be asked to measure your attitude towards mental illness and the mentally ill. If you agree to participate in this study, it will take about 20-30 minutes of your time.

**Risks or Discomforts** - There are minimal risks to taking part in this study. Answering some of our questions may make you uncomfortable especially if you have a relative who is mentally ill or if you are mentally ill. If you feel that you would like to talk to a counsellor about your feelings you can approach the researcher with your details and she will arrange for an appointment with an inter-counsellor for you on the same day.

**Benefits of Taking Part in The Study:** If you take part in this study there will be no direct benefits for you. However, you will help us understand nurses' attitudes to mental illness and the people with mental illness which will help us develop an intervention in the future. *There will be no remuneration for taking part in the study.*

**Being In The Study Is Voluntary And Confidential:** Taking part in this study is fully up to you. All your information will be used for research purposes only. Your information will be kept private. If you decide you don't want to be in the study that is okay. If you don't want to answer a certain question during the study, that is also okay.

If you choose not to take part or if you drop out, we will still give you referrals to counselling services you may need.

**Privacy:** Anyone who is working with any of the information you give us has to sign an agreement not to share what you tell us. Your answers will be given a special number instead of your name. No one else will know these are your answers. In research reports, your answers will always be grouped with other people's answers or disguised to protect you from being recognized. All confidential data will be stored in a double-locked file cabinet. The consent forms will be destroyed after one year of the completion of study activities. *Taking part in the study will not affect your current or future employment opportunities in any way.*

**Who to Contact With Questions:** If you have any questions about your rights as a participant, concerns or complaints, Connie Olwit, [connieliz09@gmail.com](mailto:connieliz09@gmail.com) or +256782744668, *Dr Katherine Sorsdahl*, + 27 21 650 65675, or [kattsorsdahl@gmail.com](mailto:kattsorsdahl@gmail.com)

You are also free to contact the Faculty of Health Sciences Human Research Ethics Committee by Telephone: + 27 21 406 6492; fax: +27 21 406 6411; or email: ([Marc.Blockman@uct.ac.za](mailto:Marc.Blockman@uct.ac.za)). Their offices are located on floor E52, Room 23 in the Old Main Building of Groote Schuur Hospital, Observatory, 7925.

*Uganda National Council of Science and Technology by Telephone: +256 41 4750500, Plot 6 Kimera Rd, Kampala.P.O.Box. 6884, Kampala.*

#### **Declaration by participant**

By signing below, I ..... agree to take part in the research study explained to me

#### **I declare that:**

- I have read or had read to me this information and consent form and it is written in a language with which I am fluent and comfortable.

- I have had a chance to ask questions and all my questions have been adequately answered.
- I understand that taking part in this study is **voluntary** and I have not been pressured to take part. I also understand that I do not give up any rights by signing below.
- I may choose to leave the study at any time and will not be penalised or prejudiced in any way.
- I have received an unsigned copy of this form to keep.

Signed at (*place*) ..... on (*date*) .....

.....

Signature of participant

## **Appendix D: Questionnaires**

**Questionnaire Number** \_\_\_\_\_ **Date** \_\_\_\_\_

**Tick in the boxes provided the appropriate answer and fill in the blank spaces provided**

### **Part 1: Socio-Demographics**

1.1 What is your age? \_\_\_\_\_

1.2 Sex  Male  Female

1.3 Education level

Certificate

Diploma

Degree

Masters

1.4 How many children do you have? \_\_\_\_\_

1.5 How many years have you been working as a nurse? \_\_\_\_\_

1.6 What is your present post? \_\_\_\_\_

1.7 What is your marital status?

Single (never been married)

Married

Divorced

Widowed

Other (please state: \_\_\_\_\_)

1.8 Have you ever been diagnosed with a mental disorder? \_\_\_\_\_

1.9 If yes, please write down the mental disorder you were diagnosed with? \_\_\_\_\_

2.0 Have you received treatment from any health facility? \_\_\_\_\_

2.1 Have you ever worked in a psychiatric ward? Yes  No

**PART II: Level of contact scale**

**Please check all of the situations on the item list that you have experienced in your lifetime**

- I have watched a movie or television show in which a character depicted a person with mental illness
- My job involves providing services/treatment for persons with a severe mental illness.
- I have observed, in passing, a person I believe may have had a severe mental illness.
- I have observed persons with a severe mental illness on a frequent basis.
- I have a severe mental illness.
- I have worked with a person who had a severe mental illness at my place of employment.
- I have never observed a person that I was aware had a severe mental illness.
- A friend of the family has a severe mental illness.
- I have a relative who has a severe mental illness.
- I have watched a documentary on television about severe mental illness.
- I live with a person who has a severe mental illness

**PART III: Knowledge of mental health**

**Mental heAlth Knowledge Schedule (MAKS)**

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*Instructions: For each of questions 1-6 below, respond by circling one answer only. Mental health problems here refer, for example, to conditions for which an individual would be seen by healthcare staff.*

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1. Most people with mental health                      Agree      Agree      Neither      Disagree      Disagree      Don't

problems want to have paid employment	Strongly	Slightly	Agree nor disagree	Slightly	Strongly	Know
2. If a friend had a mental health problem, I know what advice to give them to get professional help	Agree Strongly	Agree Slightly	Neither Agree nor disagree	Disagree Slightly	Disagree Strongly	Don't Know
3. Medication can be an effective treatment for people with mental health problems	Agree Strongly	Agree Slightly	Neither Agree nor disagree	Disagree Slightly	Disagree Strongly	Don't Know
4. Psychotherapy (e.g., talking therapy or counselling) can be an effective treatment for people with mental health problems	Agree Strongly	Agree Slightly	Neither Agree nor disagree	Disagree Slightly	Disagree Strongly	Don't Know
5. People with severe mental health problems can fully recover	Agree Strongly	Agree Slightly	Neither Agree nor disagree	Disagree Slightly	Disagree Strongly	Don't Know
6. Most people with mental health problems go to a healthcare professional to get help	Agree Strongly	Agree Slightly	Neither Agree nor disagree	Disagree Slightly	Disagree Strongly	Don't Know

**Instructions: For each of questions 7-12, say whether you think each condition is a type of mental illness by circling only one answer**

7. Depression	Agree Strongly	Agree Slightly	Neither Agree nor disagree	Disagree Slightly	Disagree Strongly	Don't Know
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8. Stress	Agree Strongly	Agree Slightly	Neither Agree nor disagree	Disagree Slightly	Disagree Strongly	Don't Know
9. Schizophrenia	Agree Strongly	Agree Slightly	Neither Agree nor disagree	Disagree Slightly	Disagree Strongly	Don't Know
10. Bipolar disorder (manic-depression)	Agree Strongly	Agree Slightly	Neither Agree nor disagree	Disagree Slightly	Disagree Strongly	Don't Know
11. Drug addiction	Agree Strongly	Agree Slightly	Neither Agree nor disagree	Disagree Slightly	Disagree Strongly	Don't Know
12. Grief	Agree Strongly	Agree Slightly	Neither Agree nor disagree	Disagree Slightly	Disagree Strongly	Don't Know

#### **PART IV: Community Attitudes towards the Mentally Ill Scale**

The following statements express various opinions about mental illness and the mentally ill. Mental illnesses are medical conditions that disrupt a person's thinking, feeling, mood, ability to relate to others, and daily functioning. Please circle the response that most accurately describes your reaction to each statement. It's your first reaction, which is important. Don't be concerned if some statements seem similar to ones you have previously answered.

Please be sure to answer all statements. Please tick the box that applies to you.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1. As soon as a person shows signs of mental disturbance, he should be hospitalized					
2. More tax money should be spent on the care and treatment of adults with mental illness					
3. An adult with mental illness should be isolated from the rest of the community					
4. The best therapy for many adults with mental illness is to be part of a normal community.					
5. Mental illness is an illness like any other					
6. Adults with mental illness are a burden on society					
7. Adults with mental illness are far less of a danger than most people suppose.					
8. Locating mental health facilities in a residential area downgrades the neighbourhood					
9. There is something about adults with mental illness that makes it easy to tell them from normal people.					
10. Adults with mental illness have for too long been the subject of ridicule					
11. A woman would be foolish to marry a man who has suffered from mental illness, even though he seems fully recovered.					
12. As far as possible mental health services should be provided through community-based facilities					
13. Less emphasis should be placed on					

protecting the public from adults with mental illness					
14. Increased spending on mental health services is a waste of tax dollars					
15. No one has the right to exclude adults with mental illness from their neighbourhood.					
16. Having adults with mental illness living within residential neighbourhoods might be good therapy, but the risks to residents are too great					
17. Adults with mental illness need the same kind of control and discipline as a young child.					
18. We need to adopt a far more tolerant attitude toward adults with mental illness in our society					
19. I would not want to live next door to someone who has been mentally ill					
20. Residents should accept the location of mental health facilities in their neighbourhood to serve the needs of the local community					
21. Adults with mental illness should not be treated as outcasts of society.					
22. There are sufficient existing services for adults with mental illness.					
23. Adults with mental illness should be encouraged to assume the responsibilities of normal life					
24. Local residents have good reason to resist the location of mental health services in their neighbourhood					
25. The best way to handle adults with mental illness is to keep them behind locked doors					
26. Our mental hospitals seem more like prisons than like places where adults with mental illness can be cared for					
27. Anyone with a history of mental illness should be excluded from taking public office					
28. Locating mental health services in residential neighbourhoods does not endanger local residents					
29. Mental hospitals are an outdated means of					

treating adults with mental illness					
30. Adults with mental illness do not deserve our sympathy					
31. Adults with mental illness should not be denied their individual rights					
32. Mental health facilities should be kept out of residential neighbourhoods					
33. One of the main causes of mental illness is a lack of self-discipline and will power					
34. We have the responsibility to provide the best possible care for adults with mental illness.					
35. Adults with mental illness should not be given any responsibility					
36. Residents have nothing to fear from people coming into their neighbourhood to obtain mental health services					
37. Virtually anyone can become mentally ill.					
38. It is best to avoid anyone who has mental problems.					
39. Most women who were once patients in a mental hospital can be trusted as baby sitters					
40. It is frightening to think of people with mental problems living in residential neighbourhoods					

### **PART V: Reported and Intended Behaviour Scale- RIBS**

Instructions: The following questions ask about you're your experiences and views in relation to people with mental health problems (for example, people seen by health care staff). For each of the questions 1-4, please answer by ticking **one box only**.

<b>SN.</b>	<b>Question</b>	<b>yes</b>	<b>No</b>	<b>I don't Know</b>
1	Are you currently living with, or have you ever lived with someone with a mental problem?			
2	Are you currently working with, or have you ever worked with someone with a mental problem?			
3	Do you currently have, or have you ever had a neighbor with mental a problem?			
4	Do you currently have, or have you ever had a close friend with mental problems?			

Instructions: for each question 5-8, please respond by ticking **one box only**.

SN.	Question	Agree strongly	Agree slightly	Neither agree Nor disagree	Disagree slightly	Disagree strongly	Don't know
5	In the future, I would be willing to live with someone with a mental health problem						
6	In the future, I would be willing to work with someone with a mental health problem						
7	In the future I would be willing to live nearby to someone with a mental health problem						
8	In the future, I would be willing to continue a relationship with a friend who developed a mental health problem.						