

**AN ASSESSMENT OF USER SATISFACTION WITH OUTPATIENT MENTAL  
HEALTH CONSULTATION SERVICES FROM RURAL AND URBAN AREAS IN  
SOUTHERN MALAWI**

**BLESSINGS CHIKASEMA**

**THESIS PRESENTED IN REQUIREMENT FOR THE MASTER OF PHILOSOPHY  
IN PUBLIC MENTAL HEALTH DEGREE**



**STELLENBOSCH UNIVERSITY**  
iYUNIVESITHI  
STELLENBOSCH  
UNIVERSITY

**SUPERVISOR**  
**PROFESSOR MARK TOMLINSON**

**DECEMBER 2018**

## **DECLARATION**

I, **BLESSINGS CHIKASEMA**, electronically submit this thesis for the degree award of Master of Philosophy in Public Mental Health at Stellenbosch University in the Republic of South Africa. I declare that this is the innovative work and a result of my own study with the exception of where it is acknowledged. No previous submission of this thesis has been made at any other high learning institution for another degree award.

**Date** :       DECEMBER 2018

## ABSTRACT

**Background:** The assessment of user satisfaction with outpatient mental health services is essential in mental health service. It influences the mental health care that addresses the unmet needs of patients living with mental health problems. In developing countries such as Malawi there is a dearth of mental health studies to assist in evidence based mental health practices.

**Aim:** To evaluate user satisfaction with outpatient mental health consultation services in southern Malawi and to assess social demographic variables that predict user satisfaction.

**Methods:** The study used a quantitative descriptive cross-sectional study design. The assessment was conducted in Malawi at (Blantyre) and (Thyolo) outpatient psychiatric clinics. The study included randomly sampled participants who met the inclusion criteria and consented to be recruited. A total of 216 exit interviews were conducted using Charlestone Psychiatric Outpatient Satisfaction Scale (CPOSS).

**Results:** Of the participants, 57.4% were males and 42.6% were females, with 55.1% being 29 years and older. Of all the study participants, 80% were satisfied with the outpatient mental health services. Participants presenting to the rural clinic were less likely to be satisfied than participants presenting at the urban clinic (AOR = 0.31; 95% CI: 0.13-0.76;  $p < 0.05$ ). Any admission due to mental illness significantly predicted user satisfaction at the rural (Thyolo) study site (AOR = 0.11; 95% CI 0.02-0.54;  $p < 0.05$ ).

**Conclusion:** The study reveals high satisfaction levels with outpatient psychiatric services, and that participants presenting at the rural facility were less likely to be satisfied with outpatient psychiatric services as compared to the urban facility. Any admission due to mental illness significantly predicted user satisfaction at the rural facility. There is need for policy makers to formulate guidelines to strengthen mental health practices and education at

all health levels as well as the need for further studies in patient satisfaction with psychiatric services.

## OPSOMMING

**Agtergrond:** Die beoordeling van gebruikerstevredenheid met buite-pasiënt geestesgesondheidsdienste is noodsaaklik in geestesgesondheidsdiens. Dit beïnvloed die geestesgesondheidsorg wat die on vervulde behoeftes van pasiënte met geestesgesondheidsprobleme aanspreek. In ontwikkelende lande, soos Malawi, is daar 'n gebrek aan geestesgesondheidstudies om te help met bewysgebaseerde geestesgesondheidspraktyke.

**Doel:** Om gebruikerstevredenheid met buite-pasiënt geestesgesondheid konsultasiedienste in die suide van Malawi te evalueer, en om sosiale demografiese veranderlikes te evalueer wat gebruikersbevrediging voorspel.

**Metodes:** Hierdie studie het 'n kwantitatiewe beskrywende dwarsnit studieontwerp gebruik. Die assessering was uitgevoer in Malawi by (Blantyre) en (Thyolo) buite-pasiënt psigiatriese klinieke. Die studie sluit ewekansige steekproefdeelnemers in wat aan die insluitingskriteria voldoen het en ingestem het om verwerf te word. 'n Totale aantal van 216 uitgangsonderhoude was uitgevoer met gebruik van die Charlestone Psychiatric Outpatient Satisfaction Scale (CPOSS).

**Resultate:** Die steekproef bestaan uit 57,4% mans en 42,6% vroue, met 55,1% 29 jaar en ouer. Van al die studie deelnemers was 80% tevrede met die buitepasiënt-geestesgesondheidsdienste. Deelnemers aan landelike klinieke was minder geneig om tevrede te wees in vergelyking met deelnemers aan stedelike klinieke (AOR = 0.31; 95% CI: 0.13-0.76;  $p < 0.05$ ). Enige opname as gevolg van geestesongesteldheid het die tevredenheid van

gebruikers op die landelike (Thyolo) studie-perseel beduidend voorspel (AOR = 0.11; 95% CI 0.02-0.54;  $p < 0.05$ ).

Gevolgtrekking: Hierdie studie toon hoë bevredigingsvlakke met buite-pasiënt psigiatriesedienste, en dat deelnemers aan die landelike fasiliteit minder geneig was om tevrede te wees met buite-pasiënt psigiatriesedienste in vergelyking met die stedelike fasiliteit. Enige toelating weens geestesongesteldheid het gebruikersbevrediging beduidend voorspel by die landelike fasiliteit. Daar is behoefte vir beleidmakers om riglyne te formuleer om geestesgesondheidspraktyke en -opvoeding op alle gesondheidsvlakke te versterk, asook 'n behoefte aan verdere studies in pasiënt tevredenheid met psigiatriese dienste.

## **ACKNOWLEDGEMENTS**

Special thanks should go to my supervisors; Professor Mark Tomlinson and Associate Professor Katherine Sorsdahl for their effective inputs and guidance. Their wonderful inputs and guidance helped me throughout the writing of this research report.

Special thanks should also go to Miss Jacqueline Gamble for thesis editing and technical comments;

I salute to all my lecturers and all supporting staff during the MPhil in Public Mental Health course conducted in South Africa.

Thanks should also go to The Hospital Director and staff of Queen Elizabeth Central Hospital; The District Health Officer and staff of Thyolo District Hospital for the support during the study;

Special thanks should also go to my research assistant Beatrice Kasinja, without forgetting the study participants for their collaboration;

Andy Bauleni for the statistical work;

My very special thanks should as well go to Centre for Public Mental Health whose AFFIRM scholarship has tremendously assisted me to pursue this academic achievement.

## **DEDICATION**

I dedicate this study to my mother Georgina Chikasema Kanyamula for the love and moral support rendered to me as well as for missing my attention during this academic journey.



## TABLE OF CONTENTS

DECLARATION	II
ABSTRACT	III
ACKNOWLEDGEMENTS	VII
DEDICATION	
VIII	
TABLE OF CONTENTS	IX
LIST OF FIGURES	IX
LIST OF TABLES	X
LIST OF ABBREVIATIONS	XI
DEFINITION OF OPERATIONAL TERMS	XII
CHAPTER ONE: INTRODUCTION AND OVERVIEW OF THE RESEARCH	1
1.1 INTRODUCTION	1
CHAPTER TWO : LITERATURE REVIEW	5
2.1 INTRODUCTION	5
2.1.1 <i>Type of studies measuring patient satisfaction</i>	5
2.2 DEFINITION OF SATISFACTION	6
2.2.1 <i>Technical quality and user satisfaction</i>	8
2.2.2 <i>Physical environment of the health facility and user satisfaction</i>	9
2.3 FACTORS AFFECTING USER SATISFACTION	10
2.3.1 <i>Socio-demographic factors</i>	10
2.3.2 <i>Waiting time and privacy</i>	11
2.3.3 <i>Information or advice and user satisfaction</i>	12
2.3.4 <i>Health status and user satisfaction</i>	13

2.3.5 <i>Mode of delivery and user satisfaction</i>	13
2.3.6 <i>User expectation and user satisfaction</i>	14
2.4 CONCEPTUAL FRAMEWORK OF PATIENT SATISFACTION	14
FIGURE 2.2. CONCEPTUAL FRAMEWORK OF USER SATISFACTION	16
2.5 GENERAL SATISFACTION	16
2.5.1 <i>Measuring user satisfaction</i>	17
2.6 USER SATISFACTION WITH HEALTH CARE SERVICES IN MALAWI	19
2.7 MENTAL HEALTH SERVICES IN LMICs	20
2.7.1 <i>Mental health workforce shortages</i>	20
2.7.2 <i>Accessibility</i>	22
2.7.3 <i>Use of alternative medicine</i>	22
2.7.4 <i>Stigma and discrimination</i>	23
2.7.5 <i>Financial constraints</i>	23
2.8 MENTAL HEALTH SERVICES IN MALAWI	24
2.9 DIFFERENCES IN MENTAL HEALTH SERVICE AVAILABILITY BETWEEN RURAL AND URBAN AREAS	26
2.10. SIGNIFICANCE OF THE STUDY	28
2.11 AIM OF THE STUDY	28
2.12 RESEARCH QUESTIONS	29
2.13 RESEARCH HYPOTHESIS	29
2.14 STUDY OBJECTIVES	29
CHAPTER THREE: RESEARCH METHODOLOGY	30
3.1 RESEARCH DESIGN	30
3.2 STUDY SETTING	30
3.2.1 <i>Blantyre</i>	31

3.2.2 <i>Thyolo</i>	33
3.3 PARTICIPANTS	33
3.3.1 <i>Inclusion criteria</i>	34
3.3.2 <i>Exclusion criteria</i>	34
3.4 SAMPLE SIZE CALCULATION	34
3.5 PILOT STUDY	36
3.6 SAMPLING AND DATA COLLECTION	38
3.7 PROCEDURE	38
3.8 MEASURES	39
3.9 DATA MANAGEMENT AND QUALITY ASSURANCE	40
3.10 DATA ANALYSIS	40
3.11 ETHICAL CLEARANCE	41
3.12 CONFIDENTIALITY	41
3.13 VOLUNTARY PARTICIPATION	41
3.14 RISK TO PARTICIPANTS	42
CHAPTER FOUR: RESULTS	43
4.1 INTRODUCTION	43
4.2 DESCRIPTIVE ANALYSIS	43
4.2.1 Socio-demographics	43
4.2.2 Distance, mode of transportation and cost of visits to clinics	45
4.3.1.3 Mental health status and treatment regime	46
4.3.2 <i>Reliability testing of the Scale CPOSS</i>	48
4.3.3 <i>Descriptive results across CPOSS scale</i>	49
4.3.4 <i>Results for anchor items in CPOSS</i>	50
4.4 DETERMINING USER SATISFACTION	51

4.4.1 Unadjusted and adjusted associations between socio-demographic factors, travel and mental health status and satisfaction with services	52
4.4.2 Unadjusted and adjusted associations between socio-demographic, travel, mental health status and level of satisfaction by site	54
CHAPTER FIVE: DISCUSSION	58
5.1 INTRODUCTION	58
5.2 General satisfaction	58
5.3 Differences between urban and rural clinics in user satisfaction with outpatient psychiatric care	65
5.3.1 Shortage of psychotropic medications	66
5.3.2 Shortages of specialised mental health care providers	66
5.3.3 Accessibility to mental health care facilities	69
5.3.4 Higher rates of poverty and poor socio-economic status	70
5.4. Factors that predicted user satisfaction	71
5.5 RELIABILITY OF CPOSS	74
5.6 STUDY STRENGTHS AND LIMITATIONS	75
5.7 RECOMMENDATIONS	76
<i>Recommendations for mental health practices</i>	76
<i>Recommendations on policy</i>	77
<i>Recommendations for future research</i>	77
CHAPTER SIX: CONCLUSION	79
REFERENCES	80
APPENDICES	106
APPENDIX A: TABLE 4.7 BASELINE RESULTS ACROSS CPOSS SCALE OF STUDY PARTICIPANTS AT RURAL (THYOLO) FACILITY	106

APPENDIX A: TABLE 4.8 BASELINE RESULTS ACROSS CPOSS SCALE OF STUDY PARTICIPANTS AT RURAL (THYOLO) FACILITY	107
APPENDIX C : TABLE 4.9 UNADJUSTED AND ADJUSTED ASSOCIATIONS BETWEEN SOCIO-DEMOGRAPHIC/TRAVEL/HEALTH STATUS AND LEVEL OF SATISFACTION BY SITE	108
APPENDIX D: PARTICIPANT INFORMATION AND INFORMED CONSENT	110
APPENDIX E: QUESTIONNAIRES (SOCIO–DEMOGRAPHIC DETAILS AND CPOSS)	115
APPENDIX F: RESEARCH ASSISTANT CONFIDENTIALITY AGREEMENT FORM	128
APPENDIX G: STELLENBOSCH UNIVERSITY RESEARCH ETHICS COMMITTEE	129
APPENDIX H: QUEEN ELIZABETH CENTRAL HOSPITAL APPROVAL LETTER	130
APPENDIX I: THYOLO DISTRICT HOSPITAL ENDORSEMENT LETTER	131
APPENDIX J: NATIONAL HEALTH SCIENCE RESEARCH COMMITTEE APPROVAL LETTER	132

## LIST OF FIGURES

Figure 2.1 : <i>Behavioural model of patient satisfaction</i>	8
Figure 2.2 : <i>Conceptual framework of user satisfaction</i>	16
Figure 3.1 : <i>Map of Malawi showing Blantyre and Thyolo districts</i>	31

**LIST OF TABLES**

TABLE 4.1 <i>SOCIAL DEMOGRAPHIC FACTORS</i>	44
TABLE 4.2 <i>DISTANCE, MODE OF TRANSPORTATION AND TRAVEL EXPENSES RELATED TO CLINIC VISITS</i>	46
TABLE 4.3 <i>MENTAL HEALTH STATUS AND TREATMENT REGIME</i>	48
TABLE 4.4 <i>BASELINE RESULTS ACROSS CPOSS SCALE OF STUDY PARTICIPANTS</i>	51
TABLE 4.5 <i>UNADJUSTED AND ADJUSTED ASSOCIATIONS BETWEEN SOCIO-DEMOGRAPHICS, TRAVEL, MENTAL HEALTH STATUS AND LEVEL OF SATISFACTION IN THE TOTAL SAMPLE</i>	52
TABLE 4.6 <i>UNADJUSTED AND ADJUSTED ASSOCIATIONS BETWEEN SOCIO-DEMOGRAPHICS / TRAVEL / HEALTH STATUS AND LEVEL OF SATISFACTION BY SITE</i>	56

## LIST OF ABBREVIATIONS

<b>CHAM</b>	Christian Health Association of Malawi
<b>CMD</b>	Common Mental Disorder
<b>CPOSS</b>	Charlestone Psychiatric Outpatient Satisfaction Scale
<b>CSQ</b>	Client Satisfaction Questionnaire
<b>DHO</b>	District Health Office
<b>LMICs</b>	Low- and Middle-Income Countries
<b>MNS</b>	Mental, Neurological and Substance use disorders
<b>mhGAP</b>	Mental Health Gap Action Programme
<b>QECH</b>	Queen Elizabeth Central Hospital
<b>SMMHEP</b>	Scotland - Malawi Mental Health Project
<b>TDH</b>	Thyolo District Hospital
<b>VSSQ</b>	Verona Service Satisfaction Questionnaire
<b>WHO</b>	World Health Organization



## DEFINITION OF OPERATIONAL TERMS

**Health:** It is defined as “a state of optimal physical, mental and social well being; the popular idea that is not merely the absence of disease or infirmity is not complete.” (Anderson & Dorland, 2003, p. 818).

**Mental health outpatient clinic/ Outpatient psychiatric clinic :** this is “a facility that focuses on the management of mental disorders and the clinical and social problems related to it on an outpatient basis” (World Health Organization, 2015, p. 66).

**Mental health:** It is a “a state of being in which a person is simultaneously successful at working, loving and resolving conflicts by coping and adjusting to the recurrent stresses of everyday living” (Uys & Middleton, 1997, p. 753).

**Mental illness:** the term “refers to disorders generally characterized by dysregulation of mood, thought, and/or behavior as recognized by diagnostic statistical manual” (American Psychiatric Association, 2000).

**Satisfaction :** This has been defined as “the subjective evaluation of care received against the individual’s expectations” (Sitzia & Wood, 1997, p. 1829).

**Patient satisfaction :** It is defined as “the patient’s personal evaluation of the care he or she has experienced, reflecting both care realities and patient characteristics.” (Bergenmar, Nylén, Lidbrink, Bergh, & Brandberg, 2006, p. 550).

**User/Consumer/Patient :** World Health Organization, (2015, p. 67) define the terms as “a person receiving mental health care”. The terms are used in different settings and various health care givers and people with mental health problems. They are used synonymously in this study.

## **CHAPTER ONE: INTRODUCTION AND OVERVIEW OF THE RESEARCH**

### **1.1 Introduction**

Mental, Neurological and Substance use disorders (MNS) contribute significantly to the global burden of disease. In the decades between 1990 and 2010, MNS burden has amplified due to global increase and ageing population resulting in low productivity among the affected population (Patel et al., 2016). Whiteford, Ferrari, Degenhardt, Feigin, and Vos (2015) report that MNS disorders account for 10.4% of disability-adjusted life years (DALYs). However, it has been argued that the true global burden of mental health problems may be underestimated (Vigo, Thornicroft, & Atun, 2016). These underestimates are due to an “overlap between psychiatric and neurological disorders; the grouping of suicide and self-harm as a separate category; conflation of all chronic pain syndromes with musculoskeletal disorders; exclusion of personality disorders from disease burden calculations; and inadequate consideration of the contribution of severe mental illness to mortality from associated causes” (Vigo et al., 2016, p. 171). Taking this into account, using published data, it is reported that the global burden of mental health problems accounts for 32.4% of years lived with disability (YLD) and 13% of DALYs (Vigo et al., 2016).

Despite this high burden, many people living with a mental health problem do not receive care resulting in a large treatment gap. About four out of five people in LMICs who need services for MNS conditions do not receive them (World Health Organization [WHO], 2010). The increase in burden of mental disorders has also increased the costs of treatment which is a concern for mental health care affordability (Lund, Petersen, Kleintjes, & Bhana, 2012; Shidhaye, Lund, & Chisholm, 2015). There are efforts aimed at improving the coverage of this treatment gap by implementing WHO’s mental health Gap Action Plan (mhGAP) guidelines (WHO, 2010). Closure of the treatment gap in LMICs would mean improved

health life and large economic productivity gains, hence global benefits of advocating and increasing mental health care services (Chisholm et al., 2016).

However, a number of barriers to the the delivery and access of mental health services have been reported in the literature. The World Health Organisation (WHO) reported that in certain LMICs' health budgets, approximately 2% is allocated to mental health activities (WHO, 2015). Other challenges include stigma and discrimination, health insurance coverage for mental disorders, scarcity of community and hospital based services, lack of evidence based practice, psychotropic medication stock outs, and inadequate mental health guidelines (Crabb et al., 2012; Kauye et al., 2011; Lund, Tomlinson, & Patel, 2016; Thornicroft, & Tansella, 2003; Wagenaar et al., 2015).

In Malawi, most people who are affected with mental health problems do not receive the appropriate mental health care. There are a number of reasons for this such as a critical shortage of mental health professionals in the country (Wright, Common, Kauye, & Chiwandira, 2014). For example, there is only one psychiatrist and one psychologist for a population of 15 million (Kauye, Jenkins, & Rahman 2014; WHO, 2011). Lack of infrastructure is also a challenge in delivering mental health services. Specialised mental health facilities are scarce in Malawi, contributing only 0.3% to total health facilities availability (Malawi Human Rights Commission [MHRC], 2012). With these challenges existing in Malawi and other LMICs, people affected with mental problems often seek care from traditional and religious healers rather than formal mental health care from mental health care professionals (Ndetei, Szabo, Okasha, & Mburu, 2006).

Despite the challenges to providing mental health services in LMICs, Mental health institutions aim to provide high quality mental health services (Wainberg et al., 2017). When measuring quality of health services, user satisfaction can be considered as a key indicator and outcome that describes the quality of services (Westaway, 2003). Findings from other studies reveal that patient satisfaction with health services is associated with good patient general health as patients adhere to health recommendations and continued use of health services (Cleary, 1999; Goossensen, Zijlstra, & Koopmanschap, 2007; Hamann, Leucht, & Kissling, 2003; Lochoro, 2004). In addition, user satisfaction evaluation has a positive impact regarding health care transformation hence improving health services (Bleich, 2009).

User satisfaction and service quality evaluation have been considered as methods critical in developing strategies for improving health services, including medical results and economical costs, for a considerable period of time. User satisfaction has been defined as “the expression of patient’s judgment on the quality of care received in all aspects, but particularly as concerns the interpersonal process” (Donabedian, 1988, p. 1745). Satisfaction with health services is higher when the preconsultation expectations of users are met by health service providers (Rao, Weinberger, & Kroenke, 2000). There are positive outcomes of high satisfaction with services in psychiatric care, such as treatment adherence, optimal rates of mental health consultation, and intention to revisit for outpatient mental health care as well as follow up. Several factors have been mentioned in literature to affect user satisfaction with services using different assessment satisfaction scales (Attkisson, 2013; Attkisson & Greenfield, 1994; Crow et al., 2002). These include poor infrastructure; overburdened and thus unavailable service providers; long waiting hours due to shortage of human resources; stigma associated with mental illness; and inadequate treatment and quality of care (Afe, Bello-Mojeed, & Ogunsemi, 2016; Agyeman-Duah, Theurer, Munthali, Alide, & Neuhann,

2014; Al-Doghaither, Abdelrhman, Saeed, Al-Kamil, & Majzoub, 2001; Alkariri, 2010; Andaleeb, Siddiqui, & Khandakar, 2007; Asadi-Lari, Tamburini, & Gray, 2004; Zendjidjian et al., 2014; Crow et al., 2002; Mekonen et al. (2016); Berhane & Enquesselassie, 2016; Ukpong, Mosaku, Aloba, & Mapayi, 2008).

Currently there are no studies available investigating user satisfaction of mental health services comparing rural and urban areas in Malawi. The purpose of this study was to evaluate user satisfaction with outpatient consultation mental health services in Blantyre and Thyolo district outpatient psychiatric clinics and gather socio-demographic information from the users to determine associations between the socio-demographic variables and user satisfaction.

## **CHAPTER TWO : LITERATURE REVIEW**

### **2.1 Introduction**

This chapter outlines the literature regarding user satisfaction with outpatient mental health services and measurements used. A discussion and description of mental health services in LMICs as compared to high-income countries (HICs) is presented. The chapter also focuses on mental health differences between urban and rural areas.

An organized search of studies on patient satisfaction with mental and general health services were selected. HINARI, MEDLINE (PubMed) and Science Direct databases were searched using Medical Subject Heading (MeSH) terms for published journal articles. Terms such as “satisfaction”, “user’s expectation”, “outpatient mental health services”, “factors influencing patient satisfaction”, “determinants of patient satisfaction with mental health services”, and all terms included in MeSH as sub-headings of patient satisfaction were used to capture journal articles relating to patient satisfaction. The search included journal articles published in English between 1978 and 2016. This time frame was selected to include as many studies as possible related to patient satisfaction conducted in LMIC’s, as much of the literature has developed over the last three decades years. Reference sections for other key articles were also searched as it assisted further identification of relevant published journal articles to the study, to be reviewed. All studies reporting epidemiological data on patient or user satisfaction with outpatient mental health services and their relationship to level of satisfaction were included for review.

#### **2.1.1 Type of studies measuring patient satisfaction**

All quantitative studies that had measured patient satisfaction with mental and general health services using reliable and valid instruments were selected. Studies that assessed patient satisfaction in general medical care were included due to high prevalence of common mental

disorders in general health care (King et al., 2008 ; Udedi, Swartz, Stewart, & Kauye, 2014). The studies included those that used instruments like: (a) Charleston Psychiatric Outpatient Satisfaction Scale (CPOSS), (b) Service Satisfaction Scale (SSS), (c) Verona Service Satisfaction Scale (VSSS), and (d) Client Satisfaction Questionnaire (CSQ) (Afe et al., 2016; Attkisson & Greenfield, 1994; Pellegrin, Stuart, Maree, Frueh, & Ballenger, 2001; Ruggeri, 2000). In the literature review, studies from LMICs and HICs were included.

## **2.2 Definition of satisfaction**

Satisfaction can be defined as individual assessment of the services received against the expectations to the offered services (Sitzia & Wood, 1997). It is associated with evaluation of waiting time and availability of the services, consultation time and number of contacts with patients per time, therapeutic relationship, social acceptability of consumers, and clear information regarding reasons for consultation (Elisha, Khawaled, Radomislensky, & Ponizovsky, 2012; Lally, Byrne, McGuire, & McDonald, 2013; Pellegrin et al., 2001).

User satisfaction is also defined as “the expression of patient’s judgment on the quality of care received in all aspects, but particularly as concerns the interpersonal process” (Donabedian, 1988, p. 1745). An operational definition of user satisfaction describes “it is a positive evaluation of distinct dimensions of health service care” (Linder-Pelz, 1982, p. 578). The concept of patient satisfaction is thus defined in many ways, satisfaction being an individual judgement of an activity. As satisfaction is considered to be the emotional attachment of an individual with an activity, it has been proposed that satisfaction is a cognitive response to a particular activity (Chakraborty & Majumdar, 2011).

Sitzia and Wood (1997) observe that assessment of user satisfaction is gained through measuring the level of an individual's belief and expectations that the services possess certain attributes. Andersen (1995) explains that "satisfaction has multiple domains and it is not a single concept. This is shown by Andersen's revised behavioral model phase three of 1980–1990 which consists of three components with a linear relationship, namely 1) primary determinants; 2) health behaviors; and 3) health outcomes" (Andersen, 1995, p. 7) see Figure 2.1.

Andersen (1995, p. 6 - 7) explains that "primary determinants are the direct cause of health behaviours which include characteristics of the population". For example, in patients who have been diagnosed with a severe mental disorder such as schizophrenia, their mental health seeking behaviour is high as compared to patients with less severe symptoms. Within the health care system, the unavailability of essential drugs and equipment (Agyeman-Duah et al., 2014) in hospitals contributes to dissatisfaction and hence poor health seeking behaviours or utilisation of services by patients, and within the external environment, lack of political will results in failure to provide sufficient funding for health programmes for the provision of quality health care.

The model posits that health behaviours determine health outcomes. Health behaviours include personal health characteristics (i.e., diet and exercise) and the utilisation of health services. If users fully utilise available health services, they will in turn live a healthier life. The model indicates that health behaviours are the direct cause of health outcomes (i.e., perceived health status, evaluated health status, and consumer satisfaction) (Andersen, 1995). Therefore, the key to improvements in health outcomes is the accessibility and utilisation of health services which directly result in improved health status and consumer satisfaction due to convenience, availability and quality of health services.



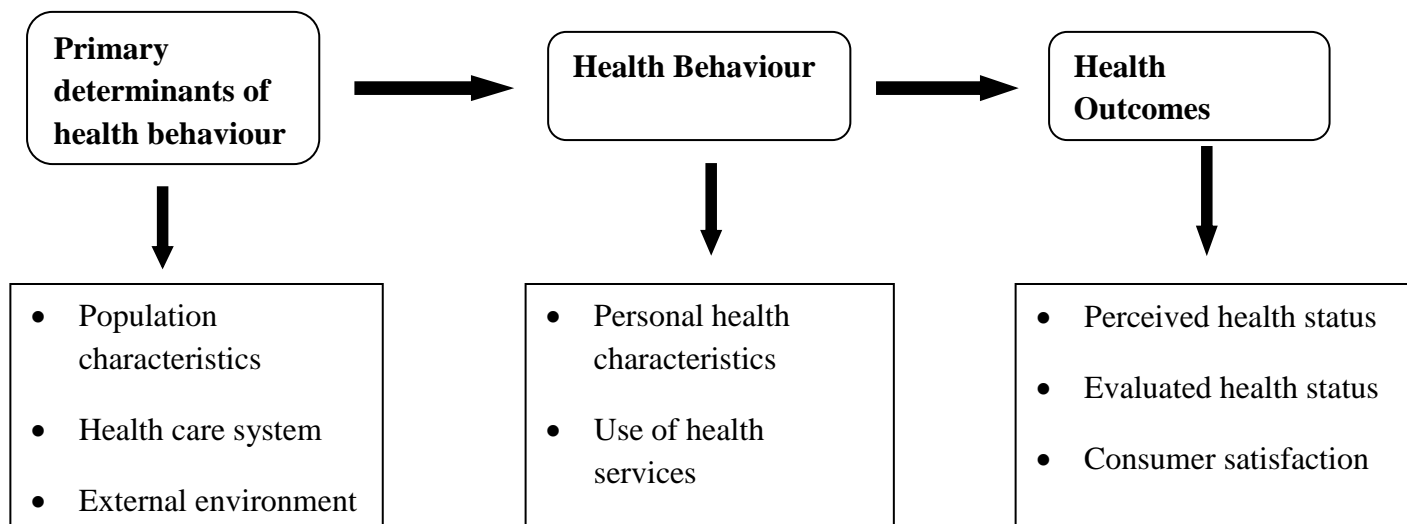


Figure 2.1. Behavioural model of patient satisfaction (Adapted from Andersen, 1995, p. 7)

Therefore, Andersen's behavioural model shows that user satisfaction includes the technical quality of care as well as the physical environment and population characteristics to determine satisfaction (Ware, Davies-Avery, & Stewart, 1978). These are discussed in turn, below.

### 2.2.1 Technical quality and user satisfaction

This refers to the competence of the mental health team in offering quality care to the users through communication and interaction. It also involves showing the highest level of professionalism when dealing with users, and among fellow health workers, in the multi-dimensional care of users.

Poor attitudes of health providers towards psychiatric users are the source of dissatisfaction with services and they hinder the efficiency of the services (McCabe & Leas, 2008). Schröder, Ahlström, and Larsson (2006) explain that user perception of health workers' level of interaction is related to quality of psychiatric care. Studies reveal that users who perceive

health workers to be poorly interactive have shown lower levels of satisfaction unlike, those who perceive health workers to be interactive (Burnett-Zeigler, Zivin, Ilgen, & Bohnert, 2011; McCabe & Leas, 2008).

McCabe and Leas (2008) found that mental health users complained that health workers were uncaring, distant and did not listen to them, hence making it difficult for them to communicate their problems. Burnett-Zeigler et al. (2011) on the other hand showed that 96% of the users were satisfied with the health workers' ability to listen. Therefore, user satisfaction can be determined by listening to their previously unheard voices or feelings within the mental health clinic.

### **2.2.2 Physical environment of the health facility and user satisfaction**

The quality of the health facility physical environment is determined by accessibility and convenience, user utilisation of the facility, cleanliness, comfort of the waiting area, well ventilated rooms with enough space, clean and safe running water, and good sanitation. Accessible services are affordable, convenient to users in terms of time and physical location, and do not present users with physical and social barriers (Engender Health Firm [EHF], 2003). Accessibility to a health facility is an important physical environmental factor in psychiatric care. It also plays a major role in treatment continuity as patients who have to travel long distances are likely to discontinue psychiatric treatment (James, Omoaregba, Akhigbe, Morakinyo, & Lawani, 2014).

Convenience of the health facility for users may remove barriers to access, such as travelling long distances to the health facility from their dwellings, long waiting times due to patient overload, and poor privacy within the clinic (Afe et al., 2016; Asher et al., 2015; Boe, Riley, & Parsons, 2009; Gaiosio & Mishima, 2007; Udedi et al., 2014).

## **2.3 Factors affecting user satisfaction**

User satisfaction is determined by patients' general impression or expectation of the mental health facility. In evaluation of patients' satisfaction in this study, the following five satisfaction dimensions were considered: access to care, physical environment, patient expectations, waiting time, information and interaction (Alkhalaileh, Al-Hadi Hasan, Al-Kariri, & Abu Ibaid, 2017).

Several factors affect user satisfaction with services. Some are external factors and others are individual factors that also relate to the psychological state of the user. These factors are socio-demographic factors, general satisfaction, waiting time and privacy, information and advice about illness, and health status of and individual (See Figure 2.2). A synthesis review of these factors in association with satisfaction follows.

### **2.3.1 Socio-demographic factors**

Studies have investigated mental health user satisfaction with services (Afe et al., 2016; Alkariri, 2010; Anteneh, Andargachew, & Muluken, 2014; Nabbuye-Sekandi et al., 2011). Socio-demographic characteristics of the users have an impact on the expectations of users with health care, hence determining user satisfaction (Avis, Bond, & Arthur, 1995). The following socio-demographic factors such as tribe, language, gender, age, and academic level, influence user satisfaction (Avis et al., 1995). In China, "age and gender have been found to influence perception of care with older users more satisfied than the young and middle aged patients while men tended to be more satisfied than women" (Liu & Wang, 2007, p. 266). Mekonen et al. (2016), while assessing satisfaction and associated factors of outpatient psychiatric services in Ethiopia, found that being male was associated with less satisfaction. While in Ireland, at a university teaching hospital where outpatient psychiatric

care is offered, no significant associations were found between socio-demographic or clinical variables with levels of satisfaction (Lally et al., 2013).

In assessment of patient satisfaction with mental health care services in Pakistan (Gani et al., 2011), gender and economic status was not associated with satisfaction but there was a significant association with age. There is a difference between younger and older people in the way they perceive health services. For example, in China, age influenced perception of care, with young and middle aged group patients not being as satisfied as older patients (Liu & Wang, 2007).

Two studies in United States reported that users with a disability aged below 65 were less satisfied than those with a disability, but aged over 65 (Iezzoni, 2002; Jackson, Chamberlin, & Kroenke, 2001). Another study in Pakistan reported that age is significantly associated with user satisfaction. However, there was no association for gender with user satisfaction (Gani et al., 2011). Hall and Dornan (1990) evaluated patient socio-demographic factors as user satisfaction predictors. They reported that older age and less education are associated with high satisfaction. The same study revealed that gender, size of family and ethnicity had no association with satisfaction.

### **2.3.2 Waiting time and privacy**

Another determinant of user satisfaction is length of waiting time and privacy in consulting mental health personnel. A study in Ireland reported that users consulting for the first time were not satisfied with waiting time and were less satisfied with the availability of a comfortable room for psychosocial counseling (Ul-haq, 2012). A similar study in Saudi Arabia reported that waiting area, confidentiality measures and environmental structure

received the lowest rates of satisfaction (Qatari & Haran, 1999). Another study in Uganda assessed user satisfaction with services in an outpatient clinic at Mulago referral hospital (Nabbuye-Sekandi et al., 2011). The study reported that satisfaction was lower in those reporting longer waiting hours. Shorter waiting times was an indicator for increased user satisfaction with health services (Boe et al., 2009; Gaiosio & Mishima, 2007). Interestingly, in Ethiopia, 50.6% of study participants reported high satisfaction with waiting hours (Mekonen et al., 2016).

Summers and Happell (2003) reported that long waiting time caused dissatisfaction with services in the clinic. In contrast, Antonysamy, Wieck, and Wittkowski (2009) reported that users were satisfied with waiting time in psychiatric settings. Dissatisfaction with long waiting times is a determinant for anxiety, aggression, and discontinuity of consulting the health centres in users and their guardians (Summers & Happell, 2003).

### **2.3.3 Information or advice and user satisfaction**

In Europe, among people living with schizophrenia, satisfaction with mental health services was assessed (Ruggeri, 2000). Users were least satisfied with information and advice about their illness. In contrast, in Ethiopia, 61.5% of study participants showed satisfaction with information about patients' mental health problems (Mekonen et al., 2016). Another study in North Yorkshire determined the quality of life and user satisfaction with mental health care (WHO, 2010). The study showed that information and advice to the users about their mental health was found to satisfy the user. It can be argued that shared vision with users fosters user satisfaction by improving service outcome while reducing the risks of non-adherence with mental health care (Martin, Williams, Haskard, & Dimatteo, 2005).

### **2.3.4 Health status and user satisfaction**

There is an association between user satisfaction and individual health status, as reported by some studies (Holcomb, Parker, Leong, Thiele, & Higdon, 1998; Raleigh et al., 2007). One study found that increased incidence of hospitalisation and increased levels of psychopathology was associated with lower levels of satisfaction (Ruggeri, 2000). Crow et al. (2002) found evidence that less satisfaction was associated with poor quality of life and physical health status, as well as psychosocial distress and disability. Less satisfaction among schizophrenics as compared to major depressive patients with psychiatric outpatient service was also reported in Ethiopia (Mekonen et al., 2016).

In the United States of America, users reporting behavioural problems showed a significant decline in satisfaction from discharge to follow up (Blader, 2007). Conversely, it has been found that symptom relief leads to satisfaction of users (Kane, Maciejewski, & Finch, 1997), and a multi-disciplinary approach to mental health care can lead to satisfaction with mental health services (Tambuyzer & Van Audenhove, 2015).

### **2.3.5 Mode of delivery and user satisfaction**

The systems utilised in mental health service delivery determine the extent of user satisfaction. Determining factors in the quality of mode of service delivery include psychoeducation on mental health and treatment options, continuity of service providers, and accessibility of services. Crow et al. (2002) identified factors that determine user satisfaction with health services. These include “expectations, health status, socio demographic characteristics of the study participants” (p. 35), waiting time and privacy, information, and health status. Ruggeri’s (2000) study found that satisfaction with mental health service can be a result of:

(1) the ability of the service to provide a standard of mental health care beyond a certain quality threshold; and

(2) the perception of each user that the mental health care received has been tailored to the users' own problems.

The role of determinants in user satisfaction should be considered in research into mental health differences found in urban and rural areas.

### **2.3.6 User expectation and user satisfaction**

User expectation is the relationship between user health needs and actual experience of the health services they receive from the facility (Crow et al., 2002). It is the measure of a mental health team as well as the physical environment of the facility, and the users' general impression of the mental health care delivery and quality of the services that are offered. However, while important, research assessing expectation as a determinant of satisfaction is problematic due to the variables introduced by the differing expectations of each individual (Crow et al., 2002).

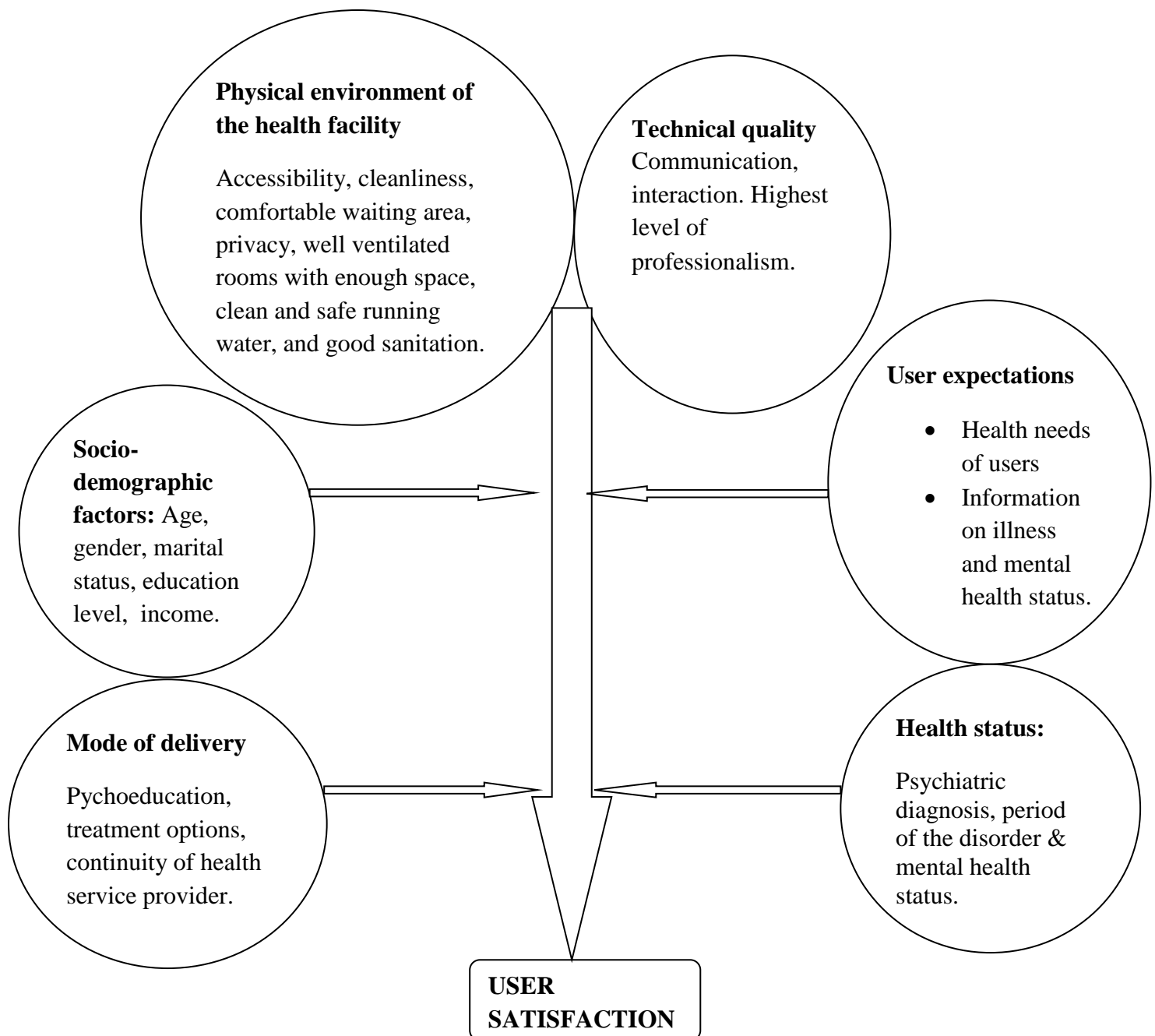
## **2.4 Conceptual framework of patient satisfaction**

Figure 2.2 illustrates the self-developed conceptual framework of patient satisfaction. Patient satisfaction is an indicator of the quality, efficiency and effectiveness of care provision at any health facility. Mental health service providers need to identify determinants of user satisfaction as well as factors related to service provision in order to improve services.

The conceptual framework (see Figure 2.2) shows that the physical environment of the facility, technical quality, user expectation, mode of delivery, socio-demographic factors and health status influence user satisfaction (Crow et al., 2002). When mental health managers are

able to identify these indicators in service provision they can ensure that these indicators determine the improvements in service delivery, thus addressing the unmet needs of users. Delgadillo (2010) clarifies that assessment of user satisfaction enables services to attain a complete and balanced view on the overall quality of service provision, and also offers an opportunity to involve users in identifying areas for improvement. The assessment of user satisfaction is thus a fundamental requirement for the financial and clinical success of all organisations providing health care, regardless of specialisation (see Figure 2.2).





**Figure 2.2. Conceptual framework of user satisfaction**

### 2.5 General satisfaction

Research indicates that there is general satisfaction with mental health services. One study in West Galway psychiatric day hospital in Ireland assessed user satisfaction with outpatient mental health care (Ul-haq, 2012). Findings showed that users who consulted the psychiatric

day hospital were mostly satisfied with the mental health services available. Another study at a tertiary mental health care setting in Pakistan, evaluated user satisfaction with mental health service. The study found that “among the participants, 72% were mostly satisfied, 18.7% mildly satisfied and 9.3% were dissatisfied with the psychiatric care” (Gani et al., 2011, p. 43). A study in Ethiopia assessed satisfaction and associated factors of outpatient psychiatric services using the Charleston Psychiatric Outpatient Satisfaction Scale (CPOSS) (Mekonen et al., 2016). The study reports a “magnitude of services satisfaction of 61.2%” (Mekonen et al., 2016). Therefore, a conclusion can be drawn that users perceive providers’ technical capability, and availability of services, especially prescribed medication, as predictors of general satisfaction (Nabbuye-Sekandi et al., 2011). Other associated factors of outpatient service satisfaction are male gender, being widowed, living in an urban area, schizophrenic diagnosis, unfavourable attitudes of health providers, and poor social functioning (Mekonen et al., 2016).

### **2.5.1 Measuring user satisfaction**

Measuring user satisfaction is important for users, service providers, health institutional managers as well as policy makers. User satisfaction measurement allows institutions to evaluate their services in order to make necessary adjustments in the provision of services based on the needs of users, and offers an opportunity for users to evaluate health providers and the services offered. Furthermore, evaluation of services has a role in quality assurance and health system improvement (Harris & Poertner, 1998; Sitzia & Wood, 1997).

Quantifying the levels of user satisfaction is complex. According to Mpinga and Chastonay (2011, p. 64) “it requires the following:

- a) a clear definition of the objectives;

- b) the identification of the target populations;
- c) well defined tools and ways to collect the data; and
- d) a strategy for analyzing the data and its utilization” (Mpinga & Chastonay, 2011, p. 64).

User satisfaction is assessed using different methodologies, including several data collecting instruments such as self administered questionnaires, focus group discussions, and individual interviews, and through telecommunications process or mailing questionnaires (Al-Abri & Al-Balushi, 2014; Aldana, Piechulek, & Al-Sabir, 2001; Alkhalaileh et al., 2017; Antonysamy et al., 2009; Asadi-Lari et al., 2004; Attkisson & Greenfield, 1994; WHO, 2000). User satisfaction is measured by interviewing users to report their experiences in the services offered and to assess the worth of received services (Crow et al., 2002; Mpinga & Chastonay, 2011). Therefore, different methodologies either quantitative or qualitative are adopted in measuring user satisfaction.

However, much of this research is problematic due to widespread use of non-standardised methods, thus making comparisons difficult. Many instruments that have been used to collect data have little or no data on their reliability and validity (Ruggeri, 2000).

The following are validated instruments used in evaluating user satisfaction:

- a) Verona Service Satisfaction Scale (VSSS) (Ruggeri, 2000);
- b) Charleston Psychiatric Outpatient Satisfaction Scale (CPOSS) (Pellegrin et al., 2001);
- c) Client Satisfaction Questionnaire (CSQ), which has been developed to measure user satisfaction with mental health services (Ruggeri, 2000; Sriram & Jabbarpour, 2005);
- d) Service Satisfaction Scale (SSS-30) (Attkisson & Greenfield, 1994).

User satisfaction is a subjective measure without a definite relationship to external stimuli (Bjorngaard, 2008). Users who receive the same treatment and stimuli may have a different perception of the services offered. It is argued that there is lack of conceptual agreement in the field of user satisfaction (Bjorngaard, 2008; Williams, 1994).

## **2.6 User satisfaction with health care services in Malawi**

To date, as reflected in the literature search conducted in the present research, no studies have assessed patient satisfaction with outpatient mental health care services, with a specific focus on comparing urban and rural health facilities, in Malawi. However, studies have been conducted which assess satisfaction with other mental and general health services in Malawi.

A study evaluated “the views of family members about nursing care of psychiatric patients admitted at a mental hospital in Malawi” (Chorwe-Sungani, Namelo, Chiona, & Nyirongo, 2015, pp. 181). The study reported that relatives of patients experienced nurses in the mental health hospital as caring and competent and they were satisfied with information given to them about their sick relative. However, participants were dissatisfied with the lack of respect that health personnel in general showed towards their patients (Chorwe-Sungani et al., 2015).

Another study assessed client service satisfaction at Saint John of God Community Services, the only private institution that provides mental health services in urban areas in the northern part of Malawi. Using Service Satisfaction Scale-30 (SSS-30), the study reports that a majority of clients were satisfied with the mental health care they received. Treatment and relief of patient symptoms, accessibility of health care, and appraisal of help received largely determined overall satisfaction (Chilale, 2010). However, this study was carried out at a

private mental health institution in Malawi where services are paid for, unless in cases where the patient is admitted through a referral system from a government hospital.

## **2.7 Mental health services in LMICs**

Current treatment of mental disorders has been shown to be effective through evidence based treatment options depending on the skills available within health care, presenting complaint, and cultural acceptability (Lazarus & Freeman, 2009). These interventions include psychotropic medication, counselling and psychotherapeutic interventions (Cowen, Harrison, & Burns, 2012). However, in LMICs a number of treatment challenges affect mental health services which include:

- 1) Shortages in the workforce,
- 2) Accessibility,
- 3) Use of alternative medicine,
- 4) Stigma and discrimination, and
- 5) Financial constraints (Crabb et al., 2012; Lund & Flisher, 2009; Muula, 2006; Thornicroft & Tansella, 2003; Wright et al., 2014).

Each of these barriers to mental health treatment will be discussed in turn.

### **2.7.1 Mental health workforce shortages**

In LMICs, mental health service delivery is hindered by shortages in the workforce (Jamison et al., 2006; Manafa et al., 2009). It is estimated that the number of mental health workers is short in low-middle income countries as compared to high income countries with a median ratio of 1:50 per 100,000 respectively. It is further reported that globally, the median number of mental health workers is at 9 per 100,000 or less than one mental health worker for every

10,000 people (WHO, 2015). Specifically, there are 6.6 psychiatrists per 100,000 population in high-income countries, compared to less than 0.5 per 100,000 population in low- and lower-middle income countries (WHO, 2015).

In Ghana, a study identified several positive factors that motivated mental health professionals, including: 1) desire to help patients who are vulnerable and in need, 2) positive day-to-day interactions with patients, 3) intellectual or academic interest in psychiatry or behavior, and 4) good relationships with colleagues (Jack, Canavan, Ofori-Atta, Taylor, & Bradley, 2013). The study also identified factors that demotivated health personnel, such as: 1) lack of resources at the hospital, 2) a rigid supervisory hierarchy, 3) lack of positive or negative feedback on work performance, and 4) few opportunities for career advancement within mental health (Jack et al., 2013).

In the same vein, a study in Malawi revealed that health workers require academic and career advancement, staff appraisal and a clear job description, which are unavailable in many health facilities, in order to avoid dissatisfaction, and hence a “brain drain” (Manafa et al., 2009). Additionally, in rural areas there is a lack of reward for skilled health professionals who live in areas in which the majority of people in LMICs reside (Saraceno et al., 2007).

The world health organisation states that in high income countries, a population of 100,000 is cared by over 30 mental health care nurse as compared to 0.4, 2.5 and 7.1 mental health care nurses in low-income countries, lower-middle-income countries and 7.1 in upper-middle income countries respectively (WHO, 2015). The incapacity of countries to engage more nurses in mental health services is attributed to lack of interest in mental health care, insufficient rewards for mental health nursing, mental health stigma and inadequate safety in

working environments (World Health Organization and International Council of Nurses, 2007). Nurses from LMICs emigrate to other countries, such as Europe (Manafa et al., 2009; World Health Organization and International Council of Nurses, 2007).

### **2.7.2 Accessibility**

Given the shortages of mental health personnel in LMICs, accessibility of mental health treatment presents a significant barrier to mental health care. The inequities in availability of mental health care are evident between countries and regions, and more especially between urban and rural areas (Saraceno et al., 2007). Lack of competent mental health personnel challenges efforts in LMICs to scale up evidence based treatments for MNS disorders (Bruckner et al., 2011).

### **2.7.3 Use of alternative medicine**

Due to a lack of mental health personnel and poor integration of psychiatric services into other health programmes, evidence based psychiatric care remains inaccessible to many patients, particularly in rural areas. Patients use religious and traditional healers who are available to offer treatment for mental disorders rather than mental health clinics which are inaccessible (Mbwayo, Ndetei, Mutiso, & Khasakhala, 2013; Ndetei et al., 2006). For example, a Nigerian study reported that spiritual healers, traditional healers and general practitioners are the first to be contacted by 13%, 19% and 47% of users respectively (Gureje & Alem, 2000). Furthermore, holistic care is available to patients in alternative psychiatric care as the psychosocial issues of the patients are addressed, as compared to biomedical treatment where psychotropic medication is often the only form of treatment offered in many areas. Addressing the lack of integrated psychiatric services in community health programmes is one of the initiatives advocated by the global mental health movement.

#### **2.7.4. Stigma and discrimination**

Stigma towards mental illness prevents access to services (Wainberg et al., 2017). The treatment gap in mental health can be attributed to the stigma associated with mental illness that prevents users from seeking mental health treatment (Crabb et al., 2012; Egbe et al., 2014). Stigma has been found to be another factor in addition to lack of knowledge, and negative attitudes and practices regarding mental illness (Ndetei, Khasakhala, Mutis, & Mbwayo, 2011; Sriram & Jabbarpour, 2005).

In South Africa, stigma towards mental illness was evident in members of the family, colleagues, community members and health professionals (Egbe et al., 2014). Experiencing stigma worsens the health status of users and prevents them from having a normal life (Egbe et al., 2014; Franz et al., 2010). About 75% of patients with schizophrenia experience stigma, and over a third of family members would not disclose the illness of a relative to the community due to fear of further stigma and discrimination (MacArthur, 2008).

#### **2.7.5. Financial constraints**

Mental health services programmes lack funding in many countries. Mental health expenditure in LMICs is low as compared to HICs (WHO, 2015). Further to this, inpatient care is allocated more funding, especially mental care hospitals. This financial constraint limits mental health activities in LMICs.

The large gap in mental health treatment can be attributed to the above described factors. It is important that health personnel and policy makers understand these challenges and barriers to maximise service utilisation among users (Lambert, Gale, Bird, & Hartley, 2003; MacArthur, 2008; Shidhaye et al., 2015; Udedi et al., 2014). For this goal to be achieved, there is a need



to understand what user satisfaction is, in current mental health service. This will facilitate a comprehensive approach to address the barriers to mental health service (Bruckner et al., 2011b).

## **2.8 Mental health services in Malawi**

Despite Malawi having a policy on mental health, there are no disability benefits for mentally affected persons. Mental health policy assists mental health activities through comprehensive care of mental illness such as treatment and prevention of mental disorders as well as promotion and advocacy (Lang, 2008). Unfortunately, in Malawi, mental disorders are not considered a disability (Amos & Wapling, 2011). The mental treatment act was amended in 1948 and while the mental health draft bill was reviewed in 2004 it is yet to be enacted (Lang, 2008; Malawi Human Rights Commission, 2014; WHO, 2011).

The state is responsible for all health activities including mental services (Ministry of Health, 2013). Despite the state shouldering the responsibility for mental health activities, about 1% of the total health budget allocated to ministry of health is for mental health (WHO, 2011). It is estimated that mental health facilities in Malawi represent 0.3% of the health facilities available (Malawi Human Rights Commission, 2014). Public hospitals owned by the government provide free mental health services on scheduled clinic days and via outreach clinics (Ministry of Health, 2013). Outreach facilities and health centres are usually the entry point for persons affected with mental illness in the mental health system. Community members or relatives of the patient are the ones that have the task of bringing patients for physical and mental health assessment at the clinic. Furthermore, outreach health facilities and health centres serve as a stepdown service for users who were previously hospitalised at

the mental institution and are discharged or advised to continue psychotropic medication at their nearest health facilities.

Users with severe psychotic symptoms are referred for admission at a mental care hospital. There is one public mental care hospital located in the southern region of Malawi, namely Zomba Mental Hospital in Zomba district. Patients from the central region of the country are referred to Bwaila Psychiatric Unit at Kamuzu Central Hospital. Patients in the northern part of Malawi are referred to the only private mental health facility (Saint John of God Hospital) under the Christian Health Association of Malawi (CHAM). Malawi Human Rights Commission (2014) reported that apart from psychotropic medications prescribed in mental care hospitals, they also offer psychosocial interventions to patients, although these are limited due to insufficient personnel. The commission also found that at community level there are minimal or no mental health activities at all.

One of the challenges in Malawi's mental health care is the lack of mental health service intergration at primary health care (Malawi Human Rights Comission, 2014). Despite no admission beds specifically allocated for mental health patients, district hospitals serve as outreach facilities for persons with severe and acute psychopathology. The services being offered at district hospitals include short stay admissions in general medical wards pending referral to the only public psychiatric hospital in Zomba. Main services being offered are psychotropic medication refill and follow-ups of users discharged from the psychiatric hospital. However, challenges exist such as essential psychotropic medication stock outs, poor infrastructure, and shortage of skilled mental health professionals.

To the best of my knowledge, no study has been conducted in Malawi to formally assess the mental health services offered in public mental health facilities to determine user satisfaction with outpatient mental health services. The assumption is that users are satisfied with outpatient mental health services due to the limited choice available to them for mental health care in Malawi. Limited access to mental health services is predicted to be highly valued by people who have limited choice.

## **2.9 Differences in mental health service availability between rural and urban areas**

Rural areas have been identified as settings experiencing higher levels of mental health care service deprivation than urban areas (Kumar, 2011). However, Kumar (2011) warns that problems are inherent in research which seeks to quantitatively analyse mental health problems and their treatment, prevention and general outcome in rural environments. Similarly, Paykel and associates (Paykel, Abbot, Jenkins, Brugha & Meltzer, 2003) state that studies and reports determining the differences in availability of mental health services in urban and rural area remain indecisive. Despite these limitations, studies which reveal differences in mental health service availability between rural and urban areas have a bearing on research exploring how users perceive mental health services.

In India, rural areas experience substantial deprivation and inaccessibility of medical services (Kumar, 2011). Unique characteristics exist in rural areas that act as barriers to mental health care (Mascayano, Armijo, & Yang, 2015; Pullen & Oser, 2014; Sweetland et al., 2014). These unique characteristics are lack of accessibility to health facilities and unavailability of skilled mental health professionals, such as psychiatric nurses, psychologists, psychiatrists, rehabilitation officers and social workers (Hauenstein et al., 2007; Jenkins et al., 2010).

Comparatively, urban areas are at an advantage in terms of socio-economic status and education levels of mental health-seeking individuals, and availability of mental health resources. For example, a study in India that evaluated rural and urban differences in accessing mental health treatment in patients with psychosis reported that families in urban areas had significantly higher levels of education and higher income (Thirthalli, Reddy, Kare, Das, & Gangadhar, 2017). High levels of education and integration of mental health in schools increases access to services for families (Fazel, Hoagwood, Stephan, & Ford, 2014), while higher socio-economic status, thus higher income, enables families access to medical insurance or affordability of private mental health services (Rowan, McAlpine, & Blewett, 2013). The availability of mental health services also favours urban areas in LMICs, as evidenced in Malawi where psychiatric care is more centralised in urban settings (Kauye et al., 2011). Furthermore, more than two thirds of well trained health workers are located in urban clinics. For example, an analysis of human resources conducted by the Ministry of Health in Malawi revealed that 77% of the general medical practitioners, 71% of nursing professionals, 79% of the paramedical practitioners and 70% of the health management workers are situated in urban areas (Ministry of Health, 2010).

Therefore, the quality of mental health care in rural areas as compared to urban areas is thwarted by poor geographical position and unavailability of mental health workers, hence hindering people's access to quality mental health services (Calloway, Fried, Johnsen, & Morrissey, 1999). The physical and technical differences that exist in rural areas act as barriers for people in rural areas to accessing quality mental health care, hence contributing to poor mental health status. However, poor attitudes, different perceptions, stigma and discrimination towards mental health existing among health workers may affect mental

health services delivery in both rural and urban areas (Crabb et al., 2012; Crow et al., 2002; Kokota, 2015).

With these inequalities, there are variations in the prevalence of mental disorders and perceptions towards services between urban and rural areas. For example, a study in South Africa evaluated “common mental health problems in the urban and rural communities in the rural Limpopo Province, and in a peri-urban township near Cape Town” (Havenaar, Gearlings, Vivian, Collinson, & Robertson, 2008, p. 209). The study reported a “high prevalence of mental health and substance abuse problems in both communities, and with highest rates in the peri-urban township” (Havenaar et al., 2008, p. 211-212).

The burden of MNS disorders and mental health care service inequalities confirms a need to investigate user satisfaction with outpatient mental health services in both rural and urban areas.

### **2.10. Significance of the study**

The study will inform mental health care service delivery, assisting health personnel in mental health departments regarding areas that need improvement. Additionally, the study can serve as a performance indicator of mental health services to justify the need for an increase in financial support for mental health activities within mental health facilities, particularly rural mental health facilities.

### **2.11 Aim of the study**

The study aimed at evaluating user satisfaction with outpatient mental health consultation services in urban (Blantyre) and rural (Thyolo) areas.

## **2.12 Research questions**

1. What is the level of user satisfaction with outpatient mental health consultation services in rural and urban areas in southern Malawi?
2. What are the factors that predict user satisfaction with mental health care service?

## **2.13 Research hypothesis**

It was hypothesised that there was no difference in user satisfaction between urban and rural outpatient mental health clinics.

## **2.14 Study objectives**

The specific objectives for this study were:

1. To measure the level of user satisfaction with outpatient mental health clinics in urban and rural mental health clinics.
2. To determine differences in user satisfaction between urban and rural outpatient mental health clinics.
3. To investigate users' socio-demographic and clinical variables that may influence user satisfaction in outpatient mental health clinics.

## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.1 Research design**

The study used a quantitative descriptive cross-sectional study design.

### **3.2 Study setting**

The Southern region of Malawi is the most populated region with 12 districts. These are Balaka, Blantyre, Chikhwawa, Chiradzulo, Machinga, Thyolo, Zomba, Mangochi, Mulanje, Mwanza, Nsanje, and Phalombe. The region has the highest population of 5,876,784 contributing 45% of the total population of Malawi which is estimated at 16 million (National Statistical Office [NSO], 2008). The study was conducted in rural and urban psychiatric clinics in the Southern region of Malawi; in Blantyre at Queen Elizabeth Central Hospital (QECH) psychiatric clinic, and in Thyolo at Thyolo District Hospital (TDH) psychiatric clinic.

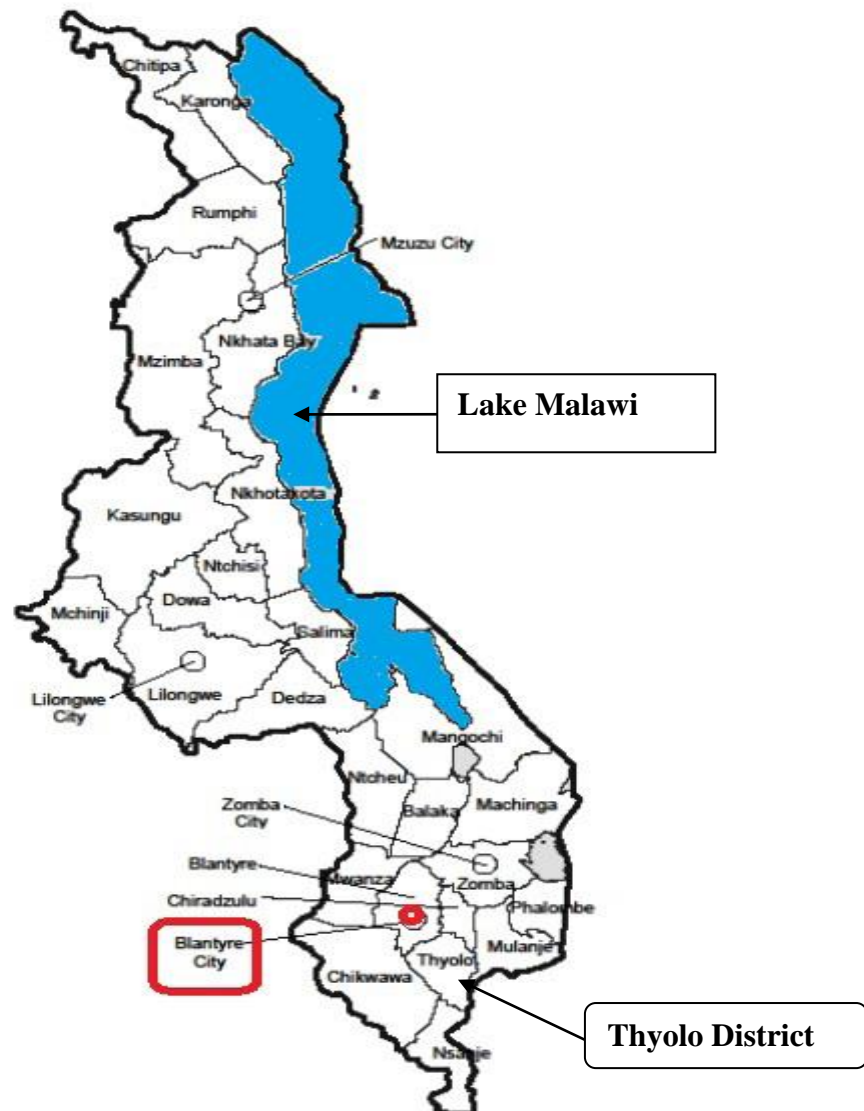


Figure 3.1. Map of Malawi showing Blantyre and Thyolo districts (Adapted from Maoulidi, 2013, p. 4 as cited in NSO, 2011)

### 3.2.1 Blantyre

Blantyre is a commercial city and industrial area for the region with a population of 661,444 with 325,022 females (NSO, 2008). The average population per square kilometre is 3,006 people (NSO, 2008).



The city covers over 228 square kilometres (Chanza, 2013). About 36% of Blantyre residents are self employed, 12% are employed in the public sector and 45% are employees of the private sector (Mpoola and United Nations Human Settlements Programme, 2011). Unemployment is at 8% while poverty is at 24% (NSO, 2008).

Blantyre has one medical college, one nursing college, two para-medical colleges, 20 government public health centers, four private hospitals, three CHAM and 100 private clinics. There is one referral hospital, namely Queen Elizabeth Central Hospital (QECH), which is also a teaching hospital. However, QECH also provides primary and secondary services since Blantyre does not have its own district hospital, however plans are underway to construct a new district hospital (Maoulidi, 2013; Mpoola & United Nations Human Settlements Programme, 2011). Additionally, there are private pharmacies and drug stores operated by companies and business entrepreneurs in the city.

Malaria is a major cause of mortality in Malawi, while Cholera and other water borne outbreaks are common due to poor sanitation in the informal settlements (Mpoola & United Nations Human Settlements Programme, 2011; NSO & ICF Macro, 2011). HIV and AIDS remain a public health challenge for the city. For example, in 2004 and 2010 Malawi Demographic Health Survey (MDHS) showed that the HIV prevalence rates for men were 10.1% and 8.1% respectively but for women were 13.3% and 12.9% respectively (NSO & ICF Macro, 2011).

### **3.2.2 Thyolo**

Thyolo District has a total land surface area of 1,715 square kilometres. The district lies within the Shire highlands. The topography of the district comprises a hill zone in the south, plains in the central and north areas, and a rift valley of steeply sloping land to the southwest of the district. It is bordered to the north by Blantyre and Chiradzulu, to the west by Chikhwawa, to the east by Mulanje, and to the south by Nsanje. A large portion of Thyolo's area is owned by tea estates with the remainder of the land left to local people for small scale farming. The district population was estimated at 617,000 in 2010 with an HIV-prevalence rate of 21% in 2004, and it is predominated by young people with close to half of the population under the age of 15 (NSO & ORC Macro, 2005). The district is affected by high HIV prevalence among patients attending mental health care facilities, estimated at 14.8% of the population, and women are three times more likely to be HIV-positive than men (Lommerse, Stewart, Chilimba, van den Akker, & Lund, 2013). Employment rates are higher among females than males. As regards to employment in females, 15.6% work in service and sales while 77.5% are farmers. In males, 12.7% are unskilled manual workers, 17.8% work in services and sales, 20.6% are skilled manual labourers and 42.2% are farmers. Despite the challenge with high prevalence of diseases, it is served by 29 health facilities, with 19 (65.5%) of the health facilities belonging to the Ministry of Health under the Malawi Government, and the remaining facilities belonging to CHAM and tea estates.

### **3.3 Participants**

Participants in the study were patients receiving outpatient mental health care in Blantyre and Thyolo psychiatric clinics.

### 3.3.1 Inclusion criteria

- Male and female adult (18 years old and above) patients consulting outpatient mental health care at Blantyre and Thyolo hospitals on scheduled clinic days.
- All patients who were stable with no psychotic symptoms such as delusions, hallucinations, or flight of ideas, as described by Gelder, Cowen, and Harrison (2006).

### 3.3.2 Exclusion criteria

- Eligible patients who were too ill (acute episode).
- Patients attending the clinic for the first time.

### 3.4 Sample size calculation

To calculate the sample size, a study conducted by Andaleeb et al. (2007) in Bangladesh evaluating patient satisfaction with health services was used as a source of reference. Although the study focused on general patient care and not outpatient mental health care, the study was chosen because it had many similarities with the current study. For example, the study was conducted in a LMIC and compared patient satisfaction (although the sites were public, private and foreign hospitals).

In the Andaleeb et al. (2007) study, the mean satisfaction with the local public hospital was 3.49 while that with the local private hospital was 3.95, giving a difference in means of 0.46. The standard deviation for the full sample was 0.89. The effect size was then calculated from the difference in means divided by the standard deviation and incorporated into the following formula:

$$\text{Effect size} = \frac{\delta}{\sigma} = \frac{0.46}{0.89} = 0.5168$$

- $\delta$  : the precision is a specified difference in groups (in this case the difference in mean satisfaction between private and public hospitals).
- $\sigma$  : is the population standard deviation from the outcome, which was satisfaction.

A formula by Friedman, Furberg, and DeMets (2010) was used and the calculated values were inserted into the formula:

$$n = \frac{2(z_{\alpha} + z_{\beta})^2}{Effect\ Size^2}$$

- Where  $n$  = the sample size per group (assumed equal);
- $z_{\alpha}$  = the  $(1 - \alpha/2)$  percentile of the standard normal distribution for two-sided test;  $(1 - \alpha)$  percentile for 1-sided test;
- $z_{\beta}$  = the  $(1 - \beta)$  = Power of the study.

A confidence of 95% was used in this study, making ( $z_{\alpha} = 1.96$ ), while the power for the study was 90%, and  $z_{\beta} = 1.285$ . To minimise type II error, the power of 90% was significant as it helped to correctly note the difference that actually existed.

To calculate the actual sample size the above values were inserted into the formula:

$$n = \frac{2(1.96 + 1.285)^2}{0.5168^2} = 79$$

Seventy-nine participants from each facility was calculated as the sample size, with a total of 158 respondents. However, there was the possibility that the difference in effect size could vary since this study was conducted in Bangladesh, which is a different country. Therefore, alternative sample sizes had to be calculated and one chosen. For this study, it was estimated

that this difference in effect size could be 10% higher or 10% lower than 0.5168. Sample size estimates were done using different power levels, as shown below.

**Table 3.1**

*Sample Size Calculation Per Group*

<b>Difference in effect size</b>	<b>1 – <math>\beta</math> = 90%</b>	<b>1 – <math>\beta</math> = 80%</b>
0.5168	79	60
0.5684 (10% increase)	65	49
0.4651 (10% decrease)	97	73

In the current study, the estimated difference in effect size was 10% lower and when power was set at 90%, the sample size for each facility was 97, with a total of 194 respondents.

Then 10% non response rate was considered (Israel, 1992).

$$n = \frac{\text{Sample size}}{1 - \% \text{ of non response rate}} = \frac{194}{0.9} = 215.6$$

Therefore a total sample of 216 was calculated, with 108 for each facility.

### **3.5 Pilot study**

Piloting of the study was conducted by an independent research assistant on 10 patients each from rural (Thyolo) and urban (Blantyre) outpatient mental health clinics. General acceptability of the questionnaire (CPOSS) was revealed by patients. However, during the pilot study one disturbance was noted. Due to inadequate rooms in outpatients departments for the hospital, it was noted that the rooms that were allocated for data collection were also supposed to be used for other activities such as individual counselling for patients during piloting. This caused some delays in completion of the questionnaire. Special rooms for data collection were then identified to rectify this challenge. Some amendments were made to the

original questionnaire to match patients' social demographic details and clinics set up as follows:

- The pilot study showed that the questionnaire should be reduced from a 15-item to a 12-item questionnaire due to the irrelevance of some of the items in the Malawian context. The three items excluded from the questionnaire, as they were deemed not applicable to the Malawian context of this study were: Information provided about payment for services, Parking area, and Clear and correct monthly bill.
- The first item of the CPOSS is helpfulness of the secretary/admin clerk. This was changed to “Helpfulness of the secretary” in order to suit the clinic. The presence of an administration block within the hospitals and close to outpatient mental health clinics, with an administrative clerk who did not interact with patients upon consultation, resulted in the option of “admin clerk” confusing patients. Since there were mental health volunteers, patient attendants and nursing staff to welcome patients at outpatients mental health clinics “Helpfulness of the secretary” did not confuse patients hence it was adopted in the questionnaire.
- As study participants were more fluent in the local language “Chichewa” as opposed to “English”, a decision was reached to administer the questionnaire in Chichewa.
- It was decided that the the researcher and the research assistant should read out the questionnaire to the study participants. This mode of questionnaire administration was preferred as it minimised the chances of leaving some of the questions unattended by the participants. The model helped to achieve a good response rate as well as clarification if need be for study participants.

### **3.6 Sampling and data collection**

Systematic sampling (Polit & Beck, 2010) was used in this research study. The population which received outpatient mental health care at Thyolo district hospital and QECH from January to December 2012 was 600 and 800 respectively (Queen Elizabeth Central Hospital, 2012; Thyolo District Hospital, 2012). To determine sampling procedure, the population (600 and 800) for each mental health facility was divided by the required sample size (216) to find the sampling interval (Polit & Beck, 2010). This led to the sampling interval of every 5<sup>th</sup> and 7<sup>th</sup> user in rural and urban clinics respectively (Polit & Beck, 2010).

Data collection was conducted from 5th October to 24th December 2015. Outpatient psychiatric clinics were conducted on Mondays and Thursdays for Thyolo district hospital, and Mondays and Wednesdays for QECH (Queen Elizabeth Central Hospital, 2012; Thyolo District Hospital, 2012). Data were collected on every clinic day for that particular health facility. The starting point was the first user consulting on a clinic day at the beginning of the data collection period (Polit & Beck, 2010).

### **3.7 Procedure**

Potential participants were approached by either the researcher or the research assistant who described the study objectives in detail and obtained written informed consent from the users willing to participate in the study (see Appendix A). The study participants were informed that the approximate duration of the interview was 15-20 minutes; as well as the purpose of the study and how they may benefit from participating. When study participants clearly understood the purpose of the research study, a consent form was signed by the participant, guardian and the researcher. Illiterate participants were allowed to print on the consent form with their thumb and the research assistant or the researcher assisted in reading out the

consent form. The researcher collecting data and an impartial witness also signed the consent form. The questionnaires were administered in Chichewa as the participants were more fluent in this local and vernacular language in the southern part of Malawi. Confidentiality was observed by giving participants a code number and keeping their names hidden.

### **3.8 Measures**

The Charleston Psychiatric Outpatient Satisfaction Scale (CPOSS) was used. In addition to CPOSS, socio-demographic information (nature of illness, age, gender, educational level, years of work and area of work, diagnosis, duration of illness, medication, number of hospital admissions, distance to the clinic and mode of transport to the clinics) was used.

The CPOSS is a satisfaction data collecting tool designed to measure adult psychiatric outpatient satisfaction with mental health services among users visiting outpatient mental health clinics. It is a 15-item questionnaire with domains of satisfaction. “Responses are rated on a 5-point likert scale ranged from 1 (“very dissatisfied”) to 5 (“very satisfied”), with higher score indicating more satisfaction” (Pellegrin et al., 2001, p. 816-817). However, items that ask availability of parking and information about payment and monthly bills were removed as they are irrelevant in Malawi context (see section 3.5). The psychometric properties of the CPOSS have been investigated in Israel and it demonstrates excellent internal consistency and good convergent validity with Cronbach’s  $\alpha$  to be 0.94 and 0.88 for the client’s and guardian versions respectively (Elisha et al., 2012). Similarly, Pellegrin et al. (2001) found the internal reliability of the instrument  $\alpha$  to be 0.87. However, the validity and reliability has not been established in Malawi. This is due to a dearth of mental health research in LMICs such as Malawi.



Translation of the instrument into vernacular language “Chichewa” was done prior to administration of the CPOSS. Translation and back translation of the CPOSS was done into English and Chichewa. The questionnaire was pretested on 10 users from each outpatient clinic to ensure that it was easily understood and clear to the participants.

### **3.9 Data management and quality assurance**

One research assistant was employed for the study (see Appendix C). The research assistant was trained for two days regarding the data collecting tool and how to collect data. Completed questionnaires were checked for accuracy, consistency and completeness on each data collection day by the investigator. This was done in order to rectify errors at the study site. The questionnaires were filed in a folder and kept safe in a locked cabinet. The checked data were coded and entered into a Statistical Package for Social Sciences (SPSS) version 22.0. Protection and privacy of the data folder were ensured with a password protected file.

### **3.10 Data analysis**

Analysis was conducted using SPSS version 22.0. Frequency distributions and chi-square analysis were used for binary variables and descriptive analysis of the CPOSS was conducted. I then examine the unadjusted and adjusted associations between high satisfaction as the dependent variable, and participant socio-demographic characteristics (Gender, age, marital status, type of work, educational level, religion, diagnosis for the participant, treatment for the diagnosis, side effects, duration of illness, times seen at the clinic, if once stopped attending the clinic, traditional / spiritual healer consultation, distance between home and clinic, mode of transportation to clinic, estimated travel expenditure for clinic visits and location), mental health status and treatment characteristics as independent variables. Reliability analysis of the CPOSS is presented using cronbach alpha. Three multivariate

logistic models were conducted to control for participant socio-demographic characteristics, mental health status and treatment characteristics. The first model was based on high satisfaction in the total sample, while the remaining two models investigated high satisfaction with the rural and urban sites separately. The regression model results were reported as odds ratios (ORs) with 95% confidence intervals (CIs) which was used to assess the strength. The findings are presented using texts, tables and figures. Statistical significance was based on 2-sided tests and set at  $p = 0.05$  to test association.

### **3.11 Ethical clearance**

Ethical clearance to carry out the study was gained from the Research Ethics Committee (REC): Human Research (Humanities) at Stellenbosch University, South Africa (see Appendix D). In Malawi, permission to conduct the study was also obtained from The Chairman, National Health Sciences Research Committee (NHSRC) (see Appendix G). Further permission was obtained from hospital directors and heads of department of the health facilities (see Appendices E and F).

### **3.12 Confidentiality**

Participants' confidentiality was maintained as the interview was conducted in a private room where only the participant and the researcher or the research assistant were present. Code numbers were used on the questionnaires to maintain anonymity of participants. The completed questionnaires were kept in a secured place accessed by the researcher only.

### **3.13 Voluntary participation**

Voluntary participation was encouraged among study participants. Participants were at liberty to withdraw from the study at any point without giving reasons. There were no punishments

or injustices for participants' withdrawing from the study. There was no financial remuneration given, however participants were thanked for their voluntary participation.

### **3.14 Risk to participants**

Data collection was integrated within the outpatient consultation schedules to minimise waiting time for interviews. There were no invasive procedures as participants were being interviewed about their experiences with the services received at the mental health clinic they were attending. Participants were informed of their right to refuse to answer and opt out of the study without giving any reasons if they felt uncomfortable with any question during the interview.

## **CHAPTER FOUR: RESULTS**

### **4.1 Introduction**

This chapter describes the study results. First, an overall description of the socio-demographic characteristics, mental health status and treatment regime of study participants will be presented. Second, a description of participant responses to the CPOSS regarding user satisfaction with the outpatient mental health services is presented. Then a reliability testing of the CPOSS using cronbach alpha. Lastly, the regression model, reported as odds ratios is presented.

### **4.2 Descriptive analysis**

The study included participants of age 18 and above who presented at Thyolo and QECH outpatient psychiatric clinics for their various mental health problems and met the inclusion criteria as described in section 3.3.1. A total of 216 participants who qualified were enrolled into the study for a period of 12 weeks (5<sup>th</sup> October – 24<sup>th</sup> December, 2015). Each clinic recruited 108 participants. No participant that was recruited declined to participate in the study and all completed the data set with a response rate of 100%.

#### **4.2.1 Socio-demographics**

Table 4.1 illustrates the baseline socio-demographic characteristics of the study participants between the study sites. Over half (56.9%) of the participants were male. Just over 70% of the sample were not married and only 12.5% were unemployed during the time of the interview. Almost 90% had not completed high school, while just over 95% identified themselves as Christians.

Significant differences in socio-demographic variables were found between the rural and urban sites. For example, a statistically significant difference in age ( $p = 0.001$ ) was found

between study participants of the urban and rural facilities. Less than half (42.6%) of the study participants presenting at the rural clinic were in the age category of 29 years and above, and a smaller proportion of 32.4% presenting at the urban clinic were within the 18–28 age group. A majority (98.1%) of participants seen at the rural clinic did not complete high school as compared to 81.5% of participants recruited at the urban clinic. There were no significant different in terms of gender, marital status, type of work, or religion (see Table 4.1).

Table 4.1 *Social Demographic Factors*

	<b>Total Sample (n = 216)</b>	<b>Thyolo (Rural) n = 108</b>	<b>Q.E.C.H. (Urban) n = 108</b>	<b>p-value</b>
<b>Variable</b>	<b>Number (%)</b>	<b>Number (%)</b>	<b>Number (%)</b>	
<b>Gender</b>				
Male	123 (56.9)	68 (63)	55(50.9)	0.74
Female	93 (43.1)	40(37)	53(49.1)	
<b>Age</b>				
18 – 28	97(44.9)	62(57.4)	35(32.4)	0.001*
29 +	119 (55.1)	46(42.6)	73(67.6)	
<b>Marital status</b>				
Married	62(28.7)	26(24.1)	36(33.3)	0.133
Not Married	154(71.3)	82(75.9)	72(66.7)	
<b>Type of work</b>				
Employed	189(87.5)	100(92.6)	89(82.4)	0.174
Unemployed	27(12.5)	8(7.4)	19(17.6)	
<b>Educational level</b>				
Did not complete high school	194(89.8)	106(98.1)	88(81.5)	0.001*
Completed high school	22(10.2)	2(1.9)	20(18.5)	
<b>Religion</b>				
Christian	206(95.4)	106(98.1)	100(92.6%)	0.052
Other	10(4.6)	2(1.9)	8(7.4)	

**p <0.05\***

#### **4.2.2 Distance, mode of transportation and cost of visits to clinics**

Table 4.2 shows the distance between home and clinic, mode of transportation, and estimated expenditure for transport to outpatient psychiatric clinics for the total sample, and for the rural and urban facility separately. Overall, over half (n = 119, 55.1%) of all the study participants lived a distance of over 10 kilometers from the outpatient psychiatric clinic. Approximately two thirds (n = 140, 64.8%) of the study participants used one of the following modes of transport to outpatient mental health clinics: bicycle, bus or vehicle. Above two thirds (n = 152, 70.4%) of study participants incurred travel costs in order to visit the clinics for mental health consultation.

There was a significant difference in terms of distance between home and clinic as well as mode of transport, and estimated expenditure for clinic visit. Almost two thirds (65.7%) of the study participants from urban areas lived a distance of over 10 kilometers from the urban clinic facility, and less than half (44.4%) of the study participants from rural areas lived a distance of over 10 kilometers from the nearest clinic. With regards to mode of transportation for clinic visits, about 75.9% of participants living in urban areas used either bicycle, bus or personal vehicle, while slightly half (53.7%) of participants living in rural areas used similar modes of transport. There was a statistical significant difference ( $p = 0.004$ ) regarding estimated expenditure for clinic visits. A majority (80.6%) of participants living in urban areas incurred travel costs to visit the urban clinic while less than half (39.8%) of participants living in rural areas did not incur travel costs for clinic visits (see Table 4.2).

Table 4.2 *Distance, Mode of Transportation and Travel Expenses Related to Clinic Visits*

	<b>Total Sample (n = 216)</b>	<b>Thyolo (Rural) n = 108</b>	<b>Q.E.C.H. (Urban) n = 108</b>	<b>p- value</b>
<b>Variable</b>	<b>Number (%)</b>	<b>Number (%)</b>	<b>Number (%)</b>	
<b>Distance between home and Clinic</b>				
0-10	97(44.9)	60(55.6)	37(34.3)	0.002*
>10	119(55.1)	48(44.4)	71(65.7)	
<b>Mode of transportation to clinic</b>				
Walking	76 (35.2)	50(46.3)	26(24.1)	0.001*
Bicycle/Bus/Vehicle	140(64.8)	58(53.7)	82(75.9)	
<b>Estimated travel expenditure for clinic visits</b>				
Free	64(29.6)	43(39.8)	21(19.4)	0.001*
Not free	152(70.4)	65(60.2)	87(80.6)	

**p<0.05\***

#### 4.3.1.3 Mental health status and treatment regime

Table 4.3 presents the mental health status and treatment regime of the study participants for the total sample and between the study sites. The results show that more than half (56.9%) of study participants were diagnosed with a severe mental disorder (schizophrenia and bipolar disorder) while almost 80% were prescribed antipsychotic medication and/or mood stabilisers. In terms of any side effects with the treatment, a small proportion (23.1) of study participants developed side effects with medications. Almost two thirds (63%) of the study participants had previously been admitted to a psychiatric or district hospital due to their mental health problems (see Table 4.3).

When comparing rural and urban sites, a statistically significant difference was found for the following: diagnosis of the users, type of treatment received at the clinic, side effects of treatment and consultation of traditional or spiritual healers. Just over 60% of study participants in rural clinic were diagnosed with Common Mental Disorder (CMD) and a 25.9% of study participants diagnosed with CMD were seen in the urban clinic. Above two

thirds (69.4%) of the study participants in the rural facility had a prescription for antipsychotic medication and mood stabilisers. A majority (85.2%) of study participants did not develop side effects from medication at the rural facility and close to two thirds (65.5%) from the urban facility did not develop side effects.

Less than a third (15.7%) of study participants from rural facility admitted to having consulted a traditional or spiritual healer for their mental health problems and a small proportion (14.3%) from the urban facility were also consulting a traditional or spiritual healer for their mental health disorders. There were no statistical significant differences between users in terms of: if once stopped attending clinic, time seen at the clinic, duration of illness and any admission due to mental illness (see Table 4.3).



Table 4.3 *Mental Health Status and Treatment Regime*

	<b>Total Sample n = 216</b>	<b>Thyolo (Rural) n = 108</b>	<b>Q.E.C.H. (Urban) n = 108</b>	
<b>Variable</b>	<b>Number (%)</b>	<b>Number (%)</b>	<b>Number (%)</b>	<b>p- value</b>
<b>Diagnosis for the participant</b>				
Severe Mental Disorder	123(56.9)	43(39.8)	80(74.1)	0.001*
CMDs	93(43.1)	65(60.2)	28(25.9)	
<b>Treatment for the diagnosis</b>				
Antipsychotics and Mood stabilisers	169(78.2%)	75(69.4)	94(87)	0.002*
Others	47(21.8)	33(30.6)	14(13)	
<b>Side effects with treatment</b>				
Yes	50(23.1)	16(14.8)	34(31.5)	0.006*
No	166(76.9)	92(85.2)	74(65.5)	
<b>Any admission due to mental illness</b>				
Yes	136(63.0)	66(61.1)	70(64.8)	0.573
No	80(37.0)	42(38.9)	38(35.2)	
<b>Traditional/Spiritual healer consultation</b>				
Yes	20(9.3)	17(15.7)	3(2.8)	0.001*
No	196(90.7)	91(84.3)	105(97.2)	
<b>If once stopped attending clinic</b>				
Yes	48(22.2)	20(18.5)	28(25.9)	0.255
No	168(77.8)	88(81.5)	80(74.1)	
<b>Times seen at the clinic</b>				
1 - 10 times	57(26.4)	30(27.8)	27(25)	0.756
>10 times	159(73.6)	78(72.2)	81(75)	
<b>Duration of illness</b>				
1- 6 years	118(54.6)	55(50.9)	63(58.3)	0.11
7 years and over	98(45.4)	53(49.1)	45(41.7)	

**p < 0.05\***

#### **4.3.2 Reliability testing of the Scale CPOSS**

In determining the reliability of the CPOSS questionnaire, cronbach alpha factor analysis was tested. The study found that the internal reliability of the instrument was slightly lower for the 11 items. Item 12 (recommend this service to a friend or family member) was not included as this item did not use a likert scale. The 11 items analysed had alpha cronbach of 0.668. Five

items (one, eight, nine, ten and eleven) from the CPOSS were removed from cronbach alpha analysis because they had a higher alpha cronbach close to 0.7 during scale reliability testing for acceptable cronbach alpha. The items retained during analysis were: amount of information given to you about your problem, respect shown for your opinions about treatment, matching of treatment plan to your individual needs, helpfulness of the services you have received and overall quality of care provided. The retained CPOSS items during reliability testing gave alpha cronbach of 0.7.

#### **4.3.3 Descriptive results across CPOSS scale**

Table 4.4 illustrates the descriptive results across CPOSS scale of the study participants. Slightly half (53.7%) regarded helpfulness of the secretary to be “very good” and about 35.6% rated “excellent”. A smaller proportion (9.7%) of study participants rated helpfulness of the secretary to be “good” while the smallest proportion (0.5%) was “fair” and “poor” respectively. In regards to amount of waiting time in order to be reviewed by a health worker, more than a third (36.1%) had the opinion that it was “fair” and about 21.3% reported “poor”. This was followed by “very good”, “good” and “excellent” with the following proportions (20.4%), (18.5%), and (8, 3.7%) respectively.

Concerning the amount of information given to users about their problem, approximately 37.0% indicated “poor”, while 23.8% rated “very good”. With regards to respect shown to users for their opinions about a treatment plan, about 29.6% of the participants reported “poor” and 23.6% reported “very good” (23.6%). In terms of amount of waiting time, more than a third (36.1%) reported “fair” and (21.3%) reported poor.

As regards to matching the treatment plan with individual needs, almost half (49.5%) of the study participants rated “very good” while (41.7%) rated “excellent”. A small proportion

(7.4%) rated “good” and (1.4%) “fair”, while none of the study participants reported treatment plan as “poor”. Concerning helpfulness of the services the users received from the clinics, over half (53.2%) of the study participants reported “excellent” and (35.2%) reported “very good”. Concerning other CPOSS questionnaire responses, such as respect shown for your opinions about treatment, appearance of the waiting room, appearance of the office, office hours and location of the outpatient psychiatric clinic, these are shown in Table 4.4.

#### **4.3.4 Results for anchor items in CPOSS**

When asked about the overall quality of care provided, over half (59.3%) of the study participants reported “excellent” followed by a third (33.8%) “very good”, and (4.6%) reported “good”.

Item number twelve of the CPOSS was regarding recommending the services to a friend or a family member. A majority (96.8%) of the study participants reported that they would definitely recommend others (“Yes, definitely”), followed by a smaller proportion (2.8%) who responded, “Yes, probably”. Only one study participant reported not recommending (“No, probably not”) a friend or a family member to the clinic (see Table 4.4).

Table 4.4 *Baseline Results Across CPOSS Scale of Study Participants*

Item	Excellent	Very good	Good	Fair	Poor
1. Helpfulness of the secretary	77(35.6%)	116(53.7%)	21(9.7%)	1(0.5%)	1(0.5%)
2. Amount of time waiting to be seen	8(3.7%)	44(20.4%)	40(18.5%)	78(36.1%)	46(21.3%)
3. Amount of information given to you about your problem	13(6.0%)	47(21.8%)	30(13.9%)	46(21.3%)	80(37.0%)
4. Respect shown for your opinions about treatment	64(29.6%)	81(37.5%)	56(25.9%)	8(3.7%)	7(3.2%)
5. Matching of treatment plan to your individual needs	90(41.7%)	107(49.5%)	16(7.4%)	3(1.4%)	0
6. Helpfulness of the services you have received	115(53.2%)	76(35.2%)	19(8.8%)	59(2.3%)	1(0.5%)
7. Overall quality of care provided	128(59.3%)	73(33.8%)	10(4.6%)	4(1.9%)	1(0.5%)
8 Appearance of the waiting room	33(15.35%)	134(62.0%)	31(14.4%)	17(7.9%)	1(0.5%)
9. Appearance of the office	35(16.2%)	145(67.1%)	30(13.9%)	6(2.8%)	0
10. Office hours	46(21.3%)	126(58.3%)	33(15.3%)	10(4.6%)	1(0.5%)
11. Location of this outpatient service	141(65.3%)	50(23.1%)	18(8.3%)	5(2.3%)	2(0.9%)

#### 4.4 Determining user satisfaction

In determining user satisfaction with the Charleston Psychiatric Outpatient Satisfaction Scale (CPOSS), the means and scores for all CPOSS questions, except for item 7 and 12 which are the anchor items (Pellegrin et al., 2001), were computed. The possible total range of score was 12–60 and the scores from this current study reveals that service satisfaction ranged between 34–55 with a mean score of 42.43 and a standard deviation of 4.63. Two subscales of satisfaction were created using the computed mean score and service satisfaction range. The categories of high and low satisfaction were recorded. The subscales of satisfaction has been shown in the regression model.

#### 4.4.1 Unadjusted and adjusted associations between socio-demographic factors, travel and mental health status and satisfaction with services

As mentioned in section 4.1, unadjusted and adjusted associations between high satisfaction as the dependent variable, and participant socio-demographic characteristics, mental health status and treatment characteristics as independent variables were examined, first looking at the total sample and then at the rural and urban site separately.

The unadjusted and adjusted effects of socio-demographics, mental health status and treatment characteristics on user satisfaction in the total sample are presented in Table 4.5. Whether the patient sought treatment at the urban or rural facility was significantly associated with user satisfaction in both the unadjusted {OR (95% CI) = 0.44 (0.22-0.88)} and adjusted model {AOR (95% CI) = 0.31 (0.13-0.76)}. More specifically, patients presenting at the rural facility were less satisfied with the services provided in comparison to the urban site.

Significant associations were also found between any admission due to mental illness and level of satisfaction with outpatient mental health service, in the unadjusted model {OR(95% CI) = 0.37 (0.17-0.81)}. Therefore, patients previously admitted due to mental illness were less satisfied with the services in the total sample. However, this significance did not persist in the adjusted model {AOR (95% CI) = 0.43(0.17-1.07)} (see Table 4.5 below).

Table 4.5 *Unadjusted and Adjusted Associations Between Socio-Demographics, Travel, Mental Health Status and Level of Satisfaction in the Total Sample*

	High Satisfaction	Low Satisfaction	Unadjusted		Adjusted	
Variable	n (%)	n (%)	OR (95% CI)	p-value	OR (95% CI)	p-value
<b>Gender</b>						
Male	94(43.5)	29(13.4)	0.62(0.31-1.25)	0.18	0.59(0.27-1.30)	0.19
Female	78(36.1)	15(6.9)	Ref		Ref	
<b>Age</b>						

18-28	80(37)	17(7.8)	1.38(0.70-2.72)	0.35	2.05(0.89-4.73)	0.09
29+	92(42.5)	27(12.5)	Ref		Ref	
<b>Marital status</b>						
Married	52(24)	10(4.6)	1.5(0.68-3.20)	0.33	1.41(0.56-3.52)	0.47
Not Married	120(55.5)	34(15.7)	Ref		Ref	
<b>Type of work</b>						
Employed	148(68.5)	41(18.9)	0.45(0.13-1.57)	0.21	0.54(0.13-2.14)	0.38
Unemployed	24(11.1)	3(1.3)	Ref		Ref	
<b>Educational level</b>						
No high school	153(70.8)	41(18.9)	0.59(0.17-2.10)	0.41	0.86(0.21-3.57)	0.83
High school	19(8.7)	3(1.3)	Ref		Ref	
<b>Religion</b>						
Christian	164(75.9)	42(19.4)	0.98(0.20-4.77)	0.98	1.40(0.22-9.04)	0.72
Other	8(3.7)	2(0.9)	Ref		Ref	
<b>Diagnosis for the participant</b>						
Severe Mental Disorder	94(43.5)	29(13.4)	0.62(0.31-1.25)	0.18	0.58(0.21-1.65)	0.31
CMDs	78(36.1)	15(6.9)	Ref		Ref	
<b>Treatment for the diagnosis</b>						
Antipsychotics and Mood stabilisers	133(61.5)	36(16.6)	0.76(0.33-1.76)	0.52	1.24(0.38-4.01)	0.72
Others	39(18)	8(3.7)	Ref		Ref	
<b>Side Effects</b>						
Yes	37(17.1)	13(6)	0.65(0.31-1.37)	0.26	0.71(0.30-1.71)	0.44
No	135(62.5)	31(14.3)	Ref		Ref	
<b>Duration of illness**</b>						
1 - 6 years	94(43.5)	24(11.1)	1.00(0.52-1.95)	0.99	1.01(0.45-2.31)	0.97
7 and above	78(36.1)	20(9.2)	Ref		Ref	
<b>Any admission due to mental illness**</b>						
Yes	101(46.7)	35(16.2)	0.37(0.17-0.81)	0.01*	0.43(0.17-1.07)	0.07
No	71(32.8)	9(4.1)	Ref		Ref	
<b>Times seen at the clinic**</b>						
Zero to 10	46(21.2)	11(5)	1.10(0.51-2.35)	0.82	0.73(0.28-1.94)	0.53
Over 10	126(58.3)	33(15.2)	Ref		Ref	
<b>If once stopped attending the clinic**</b>						
Yes	36(16.6)	12(5.5)	0.71(0.33-1.51)	0.37	0.76(0.31-1.82)	0.54
No	136(62.9)	32(14.8)	Ref		Ref	
<b>Traditional/Spiritual healer consultation **</b>						
No	157(72.6)	39(18)	0.75(0.26-2.18)	0.59	1.41(0.37-5.35)	0.62
Yes	15(6.9)	5(2.3)	Ref		Ref	
<b>Distance between home and Clinic**</b>						
0-10	80(37)	17(7.8)	1.4(0.71-2.72)	0.35	1.51(0.67-3.43)	0.32
>10	92(42.5)	27(12.5)	Ref		Ref	

<b>Mode of transportation to clinic</b>						
Walking	58(26.8)	18(8.3)	0.74(0.37-1.45)	0.37	0.63(0.25-1.61)	0.34
Bicycle/Bus Vehicle &	114(52.7)	26(12)	Ref		Ref	
<b>Estimated travel expenditure for clinic visits</b>						
Free	50(23.1)	14(6.4)	0.88(0.43-1.80)	0.72	1.27(0.45-3.56)	0.66
Not free	122(56.4)	30(13.8)	Ref		Ref	
<b>Location</b>						
Rural (Thyolo)	79(36.5)	29(13.4)	0.44(0.22-0.88)	0.02*	0.31(0.13-0.76)	0.01*
Urban (QECH)	93(43)	15(6.9)	Ref		Ref	

**p < 0.05\*, OR = odds ratio, CI = confidence interval Ref = reference for category**

Looking at the results of the binary logistic regression model presented above, a conclusion was made that satisfaction with outpatient mental health services is dependent on site. Therefore, it was necessary to investigate high satisfaction between the rural and urban sites separately for socio-demographic, travel and mental health status association with level of satisfaction by site.

#### **4.4.2 Unadjusted and adjusted associations between socio-demographic, travel, mental health status and level of satisfaction by site**

In this section, unadjusted and adjusted associations between high satisfaction as the dependent variable, and participant socio-demographic characteristics, mental health status and treatment characteristics as independent variables were examined as mentioned in section 4.1 and 4.4.1. First is the model for the rural site will be presented, then the model for the urban site.

The unadjusted and adjusted effects of socio-demographics, mental health status and treatment characteristics on user satisfaction for the rural site are presented in Table 4.6. Significant association was found between a diagnosis for the participant and level of satisfaction with outpatient mental health services, in the unadjusted model {OR (95%CI) =

0.28(0.12-0.69)}. More specifically, patients who sought treatment at the rural facility and were diagnosed with a severe mental disorder were less likely to be highly satisfied with the outpatient mental health service. However, this significance was not found in the adjusted model {AOR (95%CI) = 1.16 (0.27-4.88)}.

Statistically significant association was also found between any side effects with treatment and level of satisfaction, in unadjusted odds ratio {OR (95%CI) = 0.30(0.10-0.88)}. It shows that patients presenting to the rural facility that had side effects with treatment were less likely to be highly satisfied with outpatient mental health services. Nonetheless, the significance was not found in the adjusted model {AOR (95%CI) = 0.62(0.14-2.82)}.

Another independent variable that showed statistically significant association with level of user satisfaction was any admission due to mental illness, in both unadjusted model {OR (95% CI) = 0.12(0.03-0.43)}, and adjusted model {AOR(95% CI) = 0.11(0.02-0.54)}. More specifically, patients who sought treatment at the rural facility with a history of being admitted previously due to mental illness were less likely to be highly satisfied with outpatient mental health services.

Statistically significant association was also found between distance travelled from home to clinic, in the unadjusted model {OR(95% CI) = 2.67(1.11-6.42)}. Specifically, patients presenting at the rural facility who travelled a distance of 10 kilometers or less were three times more likely to be highly satisfied with services compared to those traveling further distances. Nevertheless in the adjusted model the significance was not found {AOR (95%CI) = 2.40(0.68-8.43)},  $p = 0.17$  see Table 4.6.



Table 4.6 *Unadjusted and Adjusted Associations Between Socio-Demographics / Travel / Health Status and Level of Satisfaction by Site*

<b>Rural Site (Thyolo)</b>						
	<b>High Satisfaction</b>	<b>Low Satisfaction</b>	<b>Unadjusted</b>		<b>Adjusted</b>	
<b>Item</b>	<b>n (%)</b>	<b>n (%)</b>	<b>OR (95% CI)</b>	<b>p-value</b>	<b>OR (95% CI)</b>	<b>p-value</b>
Male	48 (44.4)	20 (18.5)	0.70(0.28-1.73)	0.44	0.72(0.22-2.33)	0.58
Female	31(28.7)	9 (8.3)	Ref		Ref	
<b>Age</b>						
18-28	49 (45.4)	13 (12)	2.01(0.85-4.76)	0.11	2.38(0.70-8.10)	0.17
29 and above	30 (27.7)	16 (14.8)	Ref		Ref	
<b>Marital status</b>						
Married	21(19.4)	5(4.6)	1.74(0.59-5.14)	0.32	1.45(0.34-6.14)	0.62
Not Married	58(53.7)	24(22.2)	Ref		Ref	
<b>Type of work</b>						
Employed	72(66.6)	28(25.9)	0.37(0.04-3.12)	0.36	1.16(0.82-16.42)	0.91
Unemployed	7(6.5)	1(0.9)	Ref		Ref	
<b>Educational level</b>						
No high school	77(71.3)	29(26.9)	-	-	-	-
High school	2(1.8)	-			-	
<b>Religion</b>						
Christian	78(72.2)	28(25.9)	2.79(0.17-46.05)	0.47	3.99(0.06-259.5)	0.52
Other	1(0.9)	1(0.9)	Ref		Ref	
<b>Diagnosis for the participant</b>						
Severe mental Disorder	25(23.1)	18(16.7)	0.28(0.12-0.69)	0.01*	1.16(0.27-4.88)	0.84
CMDs	54(50)	11(10.2)	Ref		Ref	
<b>Treatment for the diagnosis</b>						
Antipsychotics and Mood stabilisers	51(47.2)	24(22.2)	0.38(0.13-1.10)	0.08	0.61(0.14-2.73)	0.52
Others	28(25.9)	5(4.6)	Ref		Ref	
<b>Side Effects</b>						
Yes	8(7.4)	8(7.4)	0.30(0.10-0.88)	0.03*	0.62(0.14-2.82)	0.54
No	71(65.7)	21(19.4)	Ref		Ref	
<b>Duration of illness</b>						
1 - 6 years	39(36.1)	16(14.8)	0.79(0.34-1.86)	0.59	0.74(0.22-2.54)	0.63
7 and above	40(37)	13(12)	Ref		Ref	
<b>Any admission due to mental illness</b>						

Yes	40(37)	26(24)	0.12(0.03-0.43)	0.01*	0.11(0.02-0.54)	0.01*
No	39(36.1)	3(2.8)	Ref		Ref	
<b>Times seen at the clinic</b>						
Zero to 10	23(21.3)	7(6.4)	1.29(0.49-3.44)	0.61	0.76(0.20-2.95)	0.69
Over 10	56(51.9)	22(20.4)	Ref		Ref	
<b>If once stopped attending the clinic</b>						
Yes	11(10.1)	9(8.3)	0.35(0.13- 0.98)	0.05*	0.31(0.08-1.29)	0.11
No	68(62.9)	20(18.5)	Ref		Ref	
<b>Traditional/Spiritual healer consultation</b>						
Yes	12(11.1)	5(4.6)	0.86(0.27-2.70)	0.79	2.60(0.42-16.04)	0.31
No	67(62)	24(22.2)	Ref		Ref	
<b>Distance between home and Clinic</b>						
0-10	49(45.4)	11(10.1)	2.67(1.11-6.42)	0.03*	2.40(0.68-8.43)	0.17
>10	30(27.7)	18(16.6)	Ref		Ref	
<b>Mode of transportation to clinic</b>						
Walking	36(33.3)	14(12.9)	0.90(0.38-2.100)	0.79	0.52(0.16-1.77)	0.29
Bicycle/Bus & Vehicle	43(39.8)	15(13.8)	Ref		Ref	
<b>Estimated travel expenditure for clinic visits</b>						
Free	32(29.6)	11(10.1)	1.11(0.47-2.67)	0.81	1.43(0.39-5.28)	0.59
Not free	47(43.5)	18(16.6)	Ref		Ref	

**p < 0.05\*, OR = odds ratio, CI = confidence interval Ref = reference for category**

In the second model for QECH (urban) area, both unadjusted and adjusted models showed no statistical significance.

Therefore, the regression model has concluded that there are association of previous hospital admission due to mental illness and location or site of the outpatient mental health clinic with user satisfaction in total sample. Associations were also found in rural facility as regards to; 1) diagnosis of the patient, 2) treatment side effects, 3) previous history of hospital admission due to mental illness, 4) if once stopped attending the clinic, and 5) travelling distance to outpatient mental health clinic with user satisfaction at the rural facility. There were no association at the the urban mental health facility.

## **CHAPTER FIVE: DISCUSSION**

### **5.1 Introduction**

The study aimed at evaluating user satisfaction with outpatient consultation of mental health services in Blantyre and Thyolo district outpatient psychiatric clinics and gather socio-demographic information from the users to determine associations between the socio-demographic variables and user satisfaction. Therefore, a number of important findings resulted from this study. Firstly, it showed that a majority of participants were satisfied with the outpatient mental health services they received at QECH and Thyolo outpatient psychiatric clinics in Malawi. Secondly, participants presenting at the rural clinic were less satisfied with outpatient mental health services than participants at the urban clinic. Thirdly, the study identified socio-demographic factors that predicted user satisfaction at outpatient mental health services in both the rural and urban areas. This chapter will first discuss these findings and compare them to existing findings. It will then consider the implications of the study for mental health service delivery, future research and policy in Malawi. This will be followed by a discussion of the strengths and limitations of the study.

### **5.2 General satisfaction**

High levels of satisfaction were found among patients who consult for mental health outpatient services in southern rural and urban areas of Malawi. This was measured with the CPOSS scale, which although has not been validated in Malawi, has revealed adequate reliability in other study settings. Almost 80% of study participants were satisfied with outpatient mental health services they received. High satisfaction in this study is a result of high scores that were reported by study participants in a number of items of the CPOSS. These items are: a) helpfulness of the secretary, b) matching of treatment plan to individual needs, c) helpfulness of the services received, d) overall quality of care provided, e) location

of the outpatient clinic, and f) recommendation of the clinic to a friend or family member. Many of these items are in line with the goals of the global mental health movement in LMICs, hence the finding of high satisfaction with services.

This finding is consistent with a number of studies that have investigated user satisfaction among patients receiving psychiatric care in both inpatient and outpatient facilities. For example, among inpatients receiving psychiatric care in Pakistan, it was found that 72% were satisfied with psychiatric services (Gani et al., 2011, p. 43) while 79.8% were satisfied with the psychiatric services they received in two adult psychiatric outpatient clinics (Barak et al., 2001, p. 131-133). The prevalence of satisfaction in this study was higher than the 61.2% level of satisfaction found in a study in Ethiopia that assessed satisfaction and associated factors of outpatient psychiatric services (Mekonen et al., 2016).

Other studies have reported lower levels of satisfaction. For example, in India, the general satisfaction level of patients accessing psychiatric services from an outpatient department was a little over 50% (Holikatti et al., 2012), while mental health service satisfaction in five European sites among people with schizophrenia (Amsterdam, Copenhagen, London, Santander and Verona), varied among study sites (Ruggeri et al., 2003). The authors conclude that the variation in total level of satisfaction among these European study sites is secondary to different psychiatric services rendered in the different areas and the varying community settings and characteristics (Ruggeri et al., 2003). Given these findings, it is reasonable to suggest that, similarly, the differences in levels of satisfaction found in the current study could be due to differences in the allocated mental health resources (WHO, 2015; World Health Organization & Department of Mental Health and Substance Abuse, 2008) and

perceptions or unfavourable attitudes towards psychiatric care among patients (Mekonen et al., 2016).

High levels of satisfaction with outpatient mental health services in the study areas may also be a result of initiatives aimed at improving access and quality psychiatric services (Kauye et al., 2014; Kauye et al., 2011; Kokota, 2015; Wright & Chiwandira, 2016). The quality of psychiatric services in the study is evidenced by the highest scores of some items in the data collection tool. Furthermore, this is a result of adopting the main goal of the global mental health movement which has as its quest mental health for all in LMICs (Freeman, 2016). In line with the global mental health movement, mental health services and United Nations agencies are required to take action towards ending the “widespread discrimination, stigma, prejudice, violence, social exclusion and segregation, unlawful or arbitrary institutionalization, overmedication and treatment practices [seen in the field of mental health] that fail to respect ... autonomy, will and preferences” (Funk & Drew, 2017, p. 1). Additionally, an examination of social determinants of health, a more preventative approach, task shifting or task sharing, and a commitment to human rights are the central characteristics to achieving the goal of the global mental health movement (Freeman, 2016).

In Malawi, health services found in various health facilities play a role in providing mental health services for affected people (Herzig, 2003). These initiatives include: (a) primary mental health workers training projects, (b) training of psychiatric clinical officers and nurses, and (c) attempts in reduction of mental illness stigma and discrimination. These initiatives will now be discussed in turn.

Firstly, Malawi has made considerable efforts in scaling up evidence based treatment strategies for MNS disorders (WHO, 2010) through mental health gap training for primary health workers. The project, funded by Scotland Malawi Mental Health Education Project (SMMHEP) through the College of Medicine, Department of Mental Health and Zomba Mental Hospital, trained primary health workers in management of CMDs (Arhens, Chasweka, Kokota, Thom, & Steward, 2016). This is in line with efforts for primary care to be integrated with mental health services in order to increase accessibility of psychiatric treatment in LMICs such as Malawi (Petersen, Lund, Bhana, Flisher & The Mental Health and Poverty Research programme Consortium, 2012; Lund et al., 2016; Patel et al., 2013). This training was conducted in the southern region of Malawi in five districts, namely Mulanje, Thyolo, Machinga, Ntcheu and Nsanje. This initiative aimed to increase the knowledge of primary health workers in clinical management of mental disorders (Kauye et al., 2011; Kauye et al., 2014; Kokota, 2015). Furthermore, increases in psychiatric diagnosis and improved management was revealed in Malawi when appropriate training tools were used in psychiatric training for primary health workers (Kauye et al., 2011; Kauye et al., 2014). It is thus evident that the SMMHEP has improved accessibility of psychiatric care in the southern part of Malawi, which could be a contributing factor to the high level of user satisfaction with outpatient mental health services found in the present study.

Secondly, in line with the global mental health movement, Malawi is addressing the limited number of skilled mental health workers by investing in mental health through a task shifting or task sharing approach (Kauye et al., 2011; Kauye et al., 2014; Kokota, 2015). Task shifting has potential benefits which include the efficient use of locally available health care providers as they are conversant with local clinical manifestations of mental illness, and thus increase stigma reduction and mental treatment availability (Kagee, Tsai, Lund, & Tomlinson, 2013;

van Ginneken et al., 2013). Lack of psychiatric specialists in the Malawi health service led the department of non-communicable diseases to adopt a task shifting model in the mid-20th century. Further, the Malawi College of Medicine, Kamuzu College of Nursing, and Para Medical Colleges such as Malawi College of Health Sciences and Christian Health Association of Malawi (CHAM) training colleges are examples of institutions that have demonstrated efforts to incorporate relevant basic psychiatric modules in their training curricula (Baig et al., 2008; Beaglehole et al., 2008; Medical Council of Malawi and Nurses Council of Malawi, 1990). Specifically, Saint John of God College of Health Sciences is training clinical officers and nurses in psychiatry. In Malawi, a graduate clinical officer is a trained paramedical officer who has undergone four years of training in a paramedical college in the management of tropical infectious and non-communicable diseases, but these clinical officers have minimal knowledge of psychiatric care. The psychiatric clinical officers and nurses undergo a two year course in psychiatry at Saint John of God College of Health Sciences in order to competently provide quality mental health care in various hospitals throughout the country (Medical Council of Malawi and Nurses Council of Malawi, 1990). Therefore, the availability of trained psychiatric clinical officers and nurses in Malawi has contributed to the management of psychiatric disorders. This serve to alert LMICs to the advise of WHO that countries take urgent actions to improve access to evidence-based care by task shifting (Patel et al., 2016; Thornicroft & Tansella, 2003; WHO, 2008). A study in South Africa has revealed that “[t]he adoption of the concept of task shifting can substantially reduce the expected number of health care providers otherwise needed to close mental health service gaps at primary health care level in South Africa at minimal cost and may serve as a model for other middle-income countries” (Petersen et al., 2012, p. 1).

Thirdly, there are initiatives by the Malawi health services with the goal of addressing stigma associated with mental health problems. Stigma presents an obstacle to accessing mental health treatment in LMICs (Wainberg et al., 2017), especially among vulnerable populations such as women, the poor, adolescents and tribal minorities (Jack-Ide & Uys, 2013; Saraceno et al., 2007). Stigma regarding mental illness prevents people from seeking treatment (Crabb et al., 2012; Egbe et al., 2014). In addition to contributing to poor mental health seeking behaviour (Mascayano et al., 2015), stigma also impacts on how people view mental illness and treatment practices (Ndetei et al., 2011; Sriram & Jabbarpour, 2005). Implementation of anti-stigma campaigns regarding people with mental problems have been prioritised due to the influence of stigma on mental health seeking behaviour in many LMICs (Egbe et al., 2014; Patel, 2014; Patel et al., 2013;). In line with anti-stigma campaigns in LMICs, “there is modest evidence for the effectiveness of anti-stigma interventions beyond four weeks follow-up in terms of increasing knowledge and reducing stigmatizing attitudes” (Mehta et al., 2015, p. 377) towards mental illness. To combat issues of stigma regarding mental illness, SMMHEP has supported attempts to establish mental health support groups in Thyolo, QECH (Blantyre), Mulanje, Ntcheu, Machinga and Nsanje outpatient mental health clinics.

SMMHEP assisted the establishment of mental health support groups in a number of study clinics in order to address issues of stigma and treatment accessibility (Arhens et al., 2016). The support groups are referred to as Mental Health Users and Carers Association of Malawi (MeHUCA). There are six support groups in the southern region located at each district mental outpatient clinic (Thyolo, QECH in Blantyre, Mulanje, Ntcheu, Machinga, and Nsanje). The support groups comprise patients who are stable on medication or those who suffered from mental illness previously and have fully recovered. The support group assists patients in seeking mental health consultation at the clinics. They are also responsible for



mental health talks and education. The support group also ensures good patient and provider interaction during clinic visits. Patients value the attitudes of, and personal interaction with, service providers as they assist them with their mental health problems (Afe et al., 2016). Personal interaction with the support group and health personnel at the outpatient mental health care clinic can make patients feel welcome and reduce or remove the fear of accessing treatment, hence resulting in patients being highly satisfied with services (Desjarlais-deKlerk & Wallace, 2013).

While it is plausible that recent developments in mental health services in Malawi contribute significantly to the relatively high levels of user satisfaction, it is worth considering the role that low patient expectations regarding availability and quality of mental health care services have on user satisfaction. Problems facing health services such as shortages of human resources and medication stock outs (Ministry of Health, 2010), and failed expectations among users of health care providers' interest in users' concerns and advise on how to return to quality normal life (Mugo, Dibley, Damundu, & Alam, 2018; Rao et al., 2000; Ruiz-Moral, Pérula de Torres, & Jaramillo-Martin, 2007) can result in lower patient expectations and hence higher levels of satisfaction. The large treatment gap in mental health services especially in LMIC (WHO, 2010), patients and families of mental disorders persons are challenged with lack of mental health care accessibility, travel long distances to access services, financial constraints to access the mental health services hence no available psychiatric services at primary health care level. Therefore, patients in these limited resource areas expect nothing hence low expectations, and when the basic mental health services are available they are highly satisfied with the services.

In summary, mental health gap training of evidence based psychiatric treatment for primary health workers, adoption of a task shifting model and strategies to address stigma regarding mental illness may be contributing factors to the high level of user satisfaction with outpatient mental health consultation reported in the present study.

### **5.3 Differences between urban and rural clinics in user satisfaction with outpatient psychiatric care**

The study also showed that patients presenting at the rural outpatient mental health facility were less satisfied with the mental health services provided compared to the urban site. This finding is consistent with a study that investigated user satisfaction among patients receiving psychiatric care in rural and urban health settings in Libya (Salam et al., 2010). The study reported that a majority of urban patients were more satisfied than those attending rural clinics (Salam, Alshekteria, Abd Alhadi, Ahmed, & Mohammed, 2010). That these results concur with those of the present study could be due to the studies having been conducted in LMICs with similar mental health challenges (El-Badri, 2013; WHO, 2011, 2015).

Rural outpatient mental health clinics face numerous challenges including: (a) shortages of psychotropic medications; (b) shortages of specialised mental health care providers; (c) long distances to clinics; and (d) high rates of poverty and poor socio-economic status (Abera, Tesfaye, Belachew, & Hanlon 2014; Alem, Jacobson, & Hanlon 2008; Hanlon et al., 2016; Schierenbeck, Johannson, Anderson, & van Rooyen, 2013) compared to the urban clinics. These challenges will now be discussed.

### **5.3.1 Shortage of psychotropic medications**

In urban mental health clinics, there are fewer medication stock shortages, which could be contributing to the higher levels of satisfaction with outpatient mental health services amongst users of urban clinic in comparison to the rural clinic (Hauenstein et al., 2007; Jenkins et al., 2010). In Malawi, as in other LMICs, resources for mental health care are lacking, which include essential psychotropic medications which are only supplied to referral hospitals (Becker & Kleinman, 2013; Ministry of Health, 2015). The lack of essential psychotropic medication is due to the inadequate mental health budget allocation (WHO, 2011).

In approximately two thirds of African countries less than 2% of the total health budget is allocated to mental health (WHO, 2015). Further, a majority of these funds are allocated to maintaining large psychiatric hospitals rather than community based psychiatric care, despite the potential cost savings (WHO, 2015). For some countries these stock outs are the norm. For example, a study conducted in Mozambique assessed “the availability of essential medicines for mental healthcare in Sofala” (Wagenaar et al., 2015, p. 1), and found that “essential psychotropic medicines are routinely unavailable at public health facilities” (Wagenaar et al., 2015, p. 8). To address this challenge, there is an urgent need for political will in Malawi (Kavinya, 2011) and other LMICs to adequately fund the health budget and allocate enough funds towards mental health services so that shortages in psychotropic medications can be addressed.

### **5.3.2 Shortages of specialised mental health care providers**

Rural outpatient mental health clinics are also challenged by shortages of specialised mental health care providers in LMICs (Kigozi et al., 2010). Approximately, 80% of the population

in Malawi resides in rural areas, yet there is a dearth of health personnel; only a third of health service providers offer services in rural areas (Bailey, Mandeville, Rhodes, Mipando, & Muula, 2012; McCoy, McPake, & Mwapasa, 2008). Absence of mental health services in rural communities was also reported in Nigeria (Jack-Ide & Uys, 2013). As shown in other studies, mental health resource differences exist between countries and regions, and disproportionately fewer services were evident in rural areas (Herzig, 2003; Jacob, 2017; Lund et al., 2016; Ruggeri et al., 2003; Saraceno et al., 2007; Wagenaar et al., 2015). For example, in the rural Thyolo Hospital there was only one psychiatric clinical officer, one psychiatric nurse and one counsellor at the time of this study. However, at QECH (urban), there were two visiting psychiatrists, one resident psychiatrist and three psychiatric nurses. Mental health services could be significantly limited due to a lack of personnel (Jamison et al., 2006; Bruckner et al., 2011) despite the efforts made to step up task shifting in mental health services.

The shortage of mental health service providers in rural outpatient mental health clinics contributes to longer waiting time for patients and minimal mental health information offered to patients. One study examined the time taken for patients to consult a health provider at a rural health centre in Malawi (Jafry et al., 2016). It reported that “average total time spent at the center by the patients was 123min (2–366min). Patient waiting time (PWT) was higher in the early morning hours ranging from 157 min (between 06:00 and 08:00) to 53 min (between 14:00 and 16:00). Health worker contact time (HCT ) was higher for adults (2.3 min) than children (1.7 min)” (Jafry et al., 2016, p. 1-6). Long waiting time could be due to inadequate caregivers (Jack-Ide & Uys, 2013). These two implications will be discussed in turn.

Firstly, the challenge of inadequate mental health personnel in rural mental health clinics as compared to urban mental health clinics can result in increased waiting time to consult mental health personnel in rural settings. In Malawi, one study reported that “long waiting time is one of the barriers in mental healthcare services utilization” (Mwale & Mselle, 2017, p. 57). Although the current study did not find any significant association between waiting time and user satisfaction, previous studies have shown the association (Boe et al., 2009; Gaiosio & Mishima, 2007). For example, in Lesotho, 70.6% of users were satisfied with waiting time in an outpatient psychiatric clinic (Pulane, 2014). In England, users were satisfied with waiting time on discharge at a psychiatric unit (Antonyamy, Wieck, & Wittkowski, 2009). Therefore, it is essential to increase human resources in mental health facilities in order to address issues of long waiting time at mental health clinics.

Secondly, Udedi et al. (2014) reported a “high prevalence of common mental disorders to be at 20.1% in primary care setting” (p. 4), and a dearth of mental health service providers (World Health Organization, 2011, 2015) results in patient overload in psychiatric clinics. Thus service providers may not have enough time to give adequate information to patients regarding their mental illness. In addition, there is minimal mental health knowledge among primary health workers (Kokota, 2015; World Health Organization, 2010) to enable them to give necessary information regarding mental illness to patients. Brenman, Luitel, Mall, and Jordans (2014) reported minimal mental health knowledge to be the major underlying problem to patient education. Limited knowledge about etiology, clinical syndrome, management and prognosis of mental illness has resulted in misconceptions and myths that disease is caused by paranormal activities such as evil spirit possession, or by the individual themselves (Mohit, 2001).

Apart from shortages of specialised mental health care providers, there are only two scheduled days within the week (Monday and Thursday for Thyolo, and Monday and Wednesday for QECH) in which psychiatric clinics are conducted at the study sites (QECH and Thyolo). This also contributes to patient congestion during clinic days making it difficult for mental health providers to effectively offer psycho-education support to patients. Although the current study did not find significant association between information regarding patient mental illness, a majority of study participants (n = 126, 58.3%) reported the services to be poor and fair with information regarding mental illness. In other settings patients are satisfied with information regarding their mental illness. For example, in India 97% of the respondents in a consumer satisfaction survey of hospital service were satisfied with explanations of their disease by the health worker (Prasanna, Bashith, & Sucharitha, 2009). Also, in Lesotho, 74% had high satisfaction with the amount of information given to study participants (Pulane, 2014). This may be due to contextual differences. The current study was conducted at district psychiatric outpatient services while the studies in India and Lesotho were conducted at a tertiary outpatient psychiatric clinic. Tertiary outpatient psychiatric clinics are better staffed than the rural outpatient clinics hence the difference in satisfaction (Kigozi et al., 2010).

### **5.3.3 Accessibility to mental health care facilities**

Patient use of mental health care in facilities is influenced by acceptability, affordability, availability and accessibility (O'Donnell, 2007; Penchansky & Thomas, 1981). Improved accessibility to mental health care facilities is essential as lack of accessibility leads to poor utilisation of mental health services (Asher et al., 2015). For example, a study in South Africa by Schierenbeck et al. (2013) assessed "barriers to accessing and receiving mental health care in Eastern Cape" (p. 110). One of the four barriers related to accessibility was lack of

transport to mental health clinics (Schierenbeck et al., 2013). Therefore, patients travel long distances by walking to access mental health services.

Inequalities in access to mental health services are common, and are more in evidence in rural areas due to geographical location (Ngui, Khasakhala, Ndeti, & Roberts, 2010). This inequality may be evident in differences in distances travelled to access mental health care. When travel burden increases, the accessibility of health care may decrease. Therefore, it is necessary to consider differences in distance, mode of transport and terrains patients need to cover, i.e., walking miles are different from vehicle/bicycle miles, and travelling in a mountainous terrain will take longer than travelling on flat land.

In the current study, a majority of participants travelled over 10 kilometers to the outpatient psychiatric clinic. They used different modes of transportation in order to access psychiatric care, with some cost burden to them. It is necessary to recognize that long distances impose heavy costs on patients and guardians to access psychiatric care. This is supported in a previous study, carried out in South Africa by Schierenbeck et al. (2013), that reported long distances as well as lack of transport to mental health facilities meant that participants would have difficulties in travelling to access mental health treatment at all. Another study revealed that long distances to health facilities negatively impacts health service utilisation while imposing costs on patients (Musoke, Boynton, Butler, & Musoke, 2015).

#### **5.3.4 Higher rates of poverty and poor socio-economic status**

Research has suggested that people living in rural areas have higher rates of poverty and poor socio-economic status compared to people living in urban areas. For example, Myburgh, (2005) assessed “Patient satisfaction with health care providers in South Africa: the

influences of race and socioeconomic status” (p. 473). The study reported poor socioeconomic status to be a significant predictor of lower levels of satisfaction (Myburgh, 2005) with the health services of the caregiver. In the present study, a majority of participants from the rural areas had lower levels of education, hence were less likely to be employed than those from the urban areas with a reason of no employment opportunities as well as income generating activities (Bhatta & Årethun, 2013) and poor education standards in rural areas which are hard to reach (Miles et al., 2006; UNESCO, 2014). High rates of poverty and poor socio-economic status are both risk factors and consequences, and contribute to the aetiology of mental health problems (Das, Do, Friedman, McKenzie, & Scott, 2007; Murali & Oyeboode, 2004). The likelihood of living in poverty and poor socio-economic status is increased by the presence of a mental illness, perhaps due to low levels of functioning, hence people are unable to secure stable employment and sustain it. Equally, the probability of developing mental illness is increased by high rates of poverty and poor socio-economic status (Bostock, 2004; Das et al., 2007; Murali & Oyeboode, 2004). Therefore, high rates of poverty and poor socio-economic status among rural residents contributes to lack of accessibility of outpatient mental health services that can lead to lower levels of satisfaction with outpatient mental health services. Despite lower levels of satisfaction with outpatient mental health services in rural study setting, people from the rural areas are able to use the mental health resources that are available to them (Enakshi & Pawan, 2014).

#### **5.4. Factors that predicted user satisfaction**

The study found a number of demographic variables that significantly predicted user satisfaction with outpatient mental health services in southern Malawi. In the overall sample, any admissions due to mental illness significantly predicted user satisfaction in the unadjusted model. However, this was not found in the adjusted model. When separating user



satisfaction by site, the study found that diagnosis of the participant, drug side effects and no longer attending the outpatient psychiatric clinic significantly predicted user satisfaction when looking at unadjusted association for the rural (Thyolo) study site. However, this also was not found in the adjusted model. The only variable that significantly predicted user satisfaction in the adjusted model was any admission due to mental illness at the rural (Thyolo) study site. There were no demographic variables that significantly predicted user satisfaction at the urban site. With the use of global and regional available data, any admission due to mental illness is discussed and assists to provide significant insight as a predictor of user satisfaction in this study.

The results of the present study are not consistent with a study conducted in Nigeria that assessed perceptions of service satisfaction in Lagos and the quality of life among patients diagnosed with schizophrenia are living (Afe et al., 2016). The study reports a non-significant association of frequency of admission to service satisfaction (Afe et al., 2016). The dissimilarity could be due to different methodologies used. No other research studies were readily available that reported a direct association between previous admission due to mental illness and user satisfaction with outpatient mental health consultation in LMICs such as Malawi. Patient satisfaction association with previous history of any admission due to mental illness can be a more complicated matter and may not be sufficiently explained by a number of psychiatric admissions or type of psychiatry care provided without considering the structure and psychiatry health care system of the hospitals. It is worthwhile considering that service users may have had a negative experience of being admitted to or consulting a mental health facility, hence low satisfaction. Involuntary admissions and restraint of patients experiencing acute psychotics episodes may result in less satisfaction with services. For example, a study that assessed satisfaction with services following voluntary and involuntary

admission in Ireland reports that involuntarily admitted service users, who experienced physical coercion, were less satisfied (Smith et al., 2014). Therefore, a healthier treatment relationship between users and health service providers as well as improved insight are associated with higher levels of satisfaction with mental health service provided (Smith et al., 2014).

It is not surprising that the study revealed that participants who were previously admitted to the rural (Thyolo) outpatient mental health clinic were less likely to be satisfied with outpatient mental health services. This is due to several challenges in rural areas that have been previously discussed (Abera et al., 2014; Alem et al., 2008; Hanlon et al., 2016; Strasser, 2003). Scarcity of community mental caregivers in Malawi and inadequate involvement of patients in psychiatric care (Kavinya, 2011) may be some of the reasons for patients who were previously admitted being less satisfied with outpatient mental health services.

Patients may also have the perception that inpatient care is better than outpatient mental health care. A study in Malawi by Chorwe-Sungani, Namero, Chiona and Nyirongo (2015) assessed the views of family members about the mental health nursing care of patients diagnosed with a psychiatric condition at Zomba Mental Hospital. The study found that family members were involved in nursing care of their relatives, however there were mixed views on interaction and information sharing regarding the treatment plan (Chorwe-Sungani et al., 2015). Therefore, patients with a history of previous psychiatric admissions at least have enough information about their mental illness (Chorwe-Sungani et al., 2015).

When patients are hospitalised they are close to health caregivers and several therapeutic activities. A study conducted in France by Zendjidjian et al. (2014) assessed patients satisfaction determinants with psychiatry care at hospital level and reports that patient satisfaction is associated with determinants such as the treatment relationship that exists between patient and health providers and isolation of patients as part of care in hospital (Zendjidjian et al., 2014). In Ethiopia, patient satisfaction with outpatient health services was assessed (Anteneh et al., 2014). The study reported that long waiting times, not getting the required services, lack of privacy and lack of proper conversation with outpatient service providers was negatively associated with patient satisfaction (Anteneh et al., 2014).

In outpatient mental health clinics, patients do not receive much information, as a majority of the study participants indicated. However, there are options in psychiatric care such as domiciliary mental health care that can be used in rural and urban setting to address this problem. For example, a study conducted in the northern region of Malawi assessed the feasibility of domiciliary mental health care in a community setting (Mwale, 2011). The study reported increase in mental health knowledge uptake by families, patients and communities on mental illness (Mwale, 2011). This assists to keep patients in their various homes where they are close to family members and are able to participate in socio- economic developments through home activities. If this can be adopted in primary mental health care it can improve patient satisfaction with mental health services as patients are treated in their homes and there is good therapeutic relationship.

### **5.5 Reliability of CPOSS**

The study reveals a slightly lower alpha cronbach value which is slightly lower than results of CPOSS alpha cronbach reported by Pellegrin et al. (2001) who evaluated the reliability and

validity of CPOSS and reported high cronbach alpha. However, other items of the CPOSS were deleted to increase the liability of cronbach alpha to be acceptable. The slightly lower value of alpha could be due to a low number of questions, poor interrelatedness between items or heterogeneous constructs (Tavakol & Dennick, 2011). There are five questions in the CPOSS questionnaire, of which three questions refer to administrative care, namely (a) Amount of waiting time to be seen, (b) Location of services, and (c) Office hours. The remaining two questions are: appearance of the waiting room and appearance of the office, which refers to infrastructure of the outpatient mental health facility. The possibility that the administrative care could have been affected by infrastructure of the outpatient mental health facility could explain the inconsistency.

### **5.6 Study strengths and limitations**

The strength of this study is that it adds a new element to the existing knowledge of patient satisfaction with outpatient mental health services, especially when comparing urban and rural clinics in LMICs. Specifically, the current study examines the population from a different perspective in the southern part of Malawi as no research exists on how urban and rural mentally disabled patients perceive their outpatient mental health services. Apart from examining whether participants are satisfied with the services, the major strength of the study is that findings contribute to the existing data that patients presenting at the rural outpatient mental health clinic are less highly satisfied as compared to patients presenting at the urban outpatient mental health clinic, which is a predictor of user satisfaction. Furthermore, it has examined the reliability of the data collecting instrument.

The study had some limitations. As the study design was cross sectional it was not easy to illustrate fundamental inferences from the study results (Glass, Goodman, Hernán, & Samet,

2013). The findings from this research could be generalised to all mental health care facilities that have similar characteristics to those in the southern region of Malawi. However, the study used a data collection tool that was not validated in Malawi for evaluating patient satisfaction with outpatient mental health services, therefore limiting the generalisability of the study findings. The study was also limited by the presence of the research investigator and research assistant during administration of the questionnaire. It was not possible for participants to administer the questionnaire themselves due to high rates of illiteracy. The presence of the investigator and a research assistant is believed to have resulted in socially desirable responses from the study participants, thus influencing the findings. Another limitation of the study was the sample characteristics. As the sample was drawn from a population living with mental illness and only attending the outpatient mental health clinics, it is unclear how representative they are of all the people living with mental illness in the entire community, as some do not come to the hospital for mental health services.

## **5.7 Recommendations**

### **Recommendations for mental health practices**

- There is need for health workers to provide enough information regarding the illness of the patients. This could promote better understanding of mental illness for patients themselves and their guardians.
- There is need for more clinic days in order to reduce congestion of patients in clinics.
- There is need for continuous professional development seminars so that mental health workers are able to acquire new technical skills in management of cases by adopting mhGAP protocols, thereby matching treatment plan to individual needs.

### **Recommendations on policy**

- There is need for management of hospitals to allocate enough health workers in psychiatric clinics to reduce waiting times for patients to consult a health worker.
- There is need for the Ministry of Health to train more mental health workers in order that they should be able to offer quality mental health care such as recognising drug side effects and manage them accordingly.
- To allow many volunteers that will act as peer educators for mentally affected persons as well as welcoming patient at outpatient mental health clinics.

### **Recommendations for future research**

The study may act as a gateway through which further studies may be conducted in the following areas;

- There is need to conduct research where mixed methods are employed. This will assist in the exploration of areas where patients were not able to express their views due to the nature of the study.
- There is need to conduct a qualitative study to explore patient perspectives of the quality of outpatient mental health care, in order to facilitate rich details and better understanding of patient satisfaction with psychiatric services.
- There is need to conduct a qualitative study to explore the role of health care providers' perspectives in relation to user satisfaction, in order to understand patient satisfaction from a mental health personnel perspective.
- Needs assessment for rural mental health clinics should be conducted.
- Further research to determine and compare patient satisfaction with inpatient and outpatient mental health care should be conducted.

- Replication of the current research study while using validated tools and population is needed to add to the generalisability of the study results, more especially with the younger age group that were under-represented in this study.
- There is need to evaluate reasons behind patients' stopping treatment in outpatient mental health clinics.

## **CHAPTER SIX: CONCLUSION**

This study has revealed the level of user satisfaction with outpatient mental health consultation services in urban and rural areas from the southern part of Malawi. High satisfaction levels in this study is the result of the highest scores in the CPOSS items on data collection tool. Furthermore, satisfaction could be a result of the availability of mental health services nearest to users who had no or limited mental health resources. A number of initiatives in Malawi aimed at improving access and quality psychiatric care in the country could also be a factor resulting into high satisfaction with outpatient services. The study also found that patients presenting to the rural facility were less satisfied with the outpatient mental health services provided compared to the patients presenting at the urban site. This could be due to consequences of shortage of mental health capital in rural areas. Despite the problems with mental health services in Malawi, the study has provided useful information on how people living with mental illness in the southern region of the country perceive their psychiatric care in urban and rural areas. This finding shows the need for Malawi to focus on its health systems by training more mental health workers and allocating enough funding needed in the department of mental health for operations in order to meet mental health needs that have determined user satisfaction in this study. Emphasis should be placed on equipping the rural mental health clinics with resources so that the factors causing high satisfaction reported in this study are achieved. The study has shown that any admission due to mental illness was the only significant variable that predicted user satisfaction at the rural (Thyolo) study site. It can be concluded that this is due to limited resources which present several challenges for rural primary mental health care. Although patients expect quality and better mental health services in their area, they persist with the use of available health resources with minimal complaints (Enakshi & Pawan, 2014).



**REFERENCES**

- Abera, M., Tesfaye, M., Belachew, T., Hanlon, C. (2014). Perceived challenges and opportunities arising from integration of mental health into primary care: a cross-sectional survey of primary health care workers in south-west Ethiopia. *BMC Health Services Research*, *14*, 113. <https://doi.org/10.1186/1472-6963-14-113>
- Afe, T. O., Bello-Mojeed, M., & Ogunsemi, O. (2016). Perception of service satisfaction and quality of life of patients living with schizophrenia in Lagos, Nigeria. *Journal of Neurosciences in Rural Practice*, *7*, 216–222. <https://doi.org/10.4103/0976-3147.178652>
- Agyeman-Duah, J., Theurer, A., Munthali, C., Alide, & N., Neuhann, F. (2014). Understanding the barriers to setting up a healthcare quality improvement process in resource-limited settings: a situational analysis at the Medical Department of Kamuzu Central Hospital in Lilongwe, Malawi. *BMC Health Services Research*, *14*, 1. <https://doi.org/10.1186/1472-6963-14-1>
- Al-Abri, R., Al-Balushi, A. (2014). Patient satisfaction survey as a tool towards quality improvement. *Oman Medical Journal*, *29*, 3–7. <https://doi.org/10.5001/omj.2014.02>
- Aldana, J. M., Piechulek, H., & Al-Sabir, A. (2001). Client satisfaction and quality of health care in rural Bangladesh. *Bulletin of the World Health Organization*, *79*, 512–517.
- Al-Doghaither, A. H., Abdelrhman, B. M., Saeed, A. A., Al-Kamil, A. A., & Majzoub, M. M. (2001). Patients' satisfaction with primary health care centers services in Kuwait city, Kuwait. *Journal of Family & Community Medicine*, *8*, 59–65.
- Alem, A., Jacobsson, L., & Hanlon, C. (2008). Community-based mental health care in Africa: mental health workers' views. *World Psychiatry* *7*, 54–57.
- Alkariri, N. (2010). Patients' satisfaction with the quality of services at the outpatient department of Al Shifa Hospital (Master's thesis). Al-Quads University, Palestine.

- Alkhalailah, M., Al-Hadi Hasan, A., Al-Kariri, N. S., & Abu Ibaid, A. H. (2017). Assessing patients' satisfaction with the quality of ophthalmic services at Saint John Gaza Eye Clinic. *American Journal of Public Health Research*, 5, 15–22. <https://doi.org/10.12691/ajphr-5-1-4>
- American Psychiatric Association. (2000). *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision (DSM-IV-TR)* (4th ed.). American Psychiatric Association: Arlington, VA.
- Amos, A., & Wapling, L. (2011). Epilepsy in Malawi. Report for Federation of Disability Organisation in Malawi in partnership with Sue Rider Foundation in Malawi. United Kingdom: Federation of Disability Organisation in Malawi and Leonard Cheshire Disability, Leonard Cheshire Disability.
- Andaleeb, S. S., Siddiqui, N., & Khandakar, S. (2007). Patient satisfaction with health services in Bangladesh. *Health Policy and Planning*, 22, 263–273. <https://doi.org/10.1093/heapol/czm017>
- Anderson, D. M., Dorland, W. A. N. (Eds.). (2003). *Dorland's illustrated medical dictionary*. Philadelphia, Pa: Saunders.
- Andersen, R. M. (1995). Revisiting the behavioral model and access to medical care: does it matter? *Journal of Health and Social Behavior*, 36, 1–10.
- Anteneh, A., Andargachew, K., & Muluken, D. (2014). Patient satisfaction with outpatient health services in Hawassa University Teaching Hospital, Southern Ethiopia. *Journal of Public Health and Epidemiology*, 6, 101–110. <https://doi.org/10.5897/JPHE2013.0613>
- Antonyasamy, A., Wieck, A., & Wittkowski, A. (2009). Service satisfaction on discharge from a psychiatric mother and baby unit: a representative patient survey. *Archives of Women's Mental Health*, 12, 359–362. <https://doi.org/10.1007/s00737-009-0085-2>

- Arhens, J., Chasweka, D., Kokota, D., Thom, S., & Stewart, R. C. (2016). Scotland Malawi Mental Health Project: Mental Health Users and Carers Association of Malawi. Presented at the 6th Annual Mental Health Conference, Mount Soche, Malawi.
- Asadi-Lari, M., Tamburini, M., & Gray, D. (2004). Patients' needs, satisfaction, and health related quality of life: Towards a comprehensive model. *Health and Quality of Life Outcomes*, 2. <https://doi.org/http://doi.org/10.1186/1477-7525-2-32>
- Asher, L., Fekadu, A., Hanlon, C., Mideksa, G., Eaton, J., Patel, V., & De Silva, M. J. (2015). Development of a community-based rehabilitation intervention for people with schizophrenia in Ethiopia. *PLoS ONE*, 10, e0143572. <https://doi.org/10.1371/journal.pone.0143572>
- Attkisson, C. (2013). *CSQ Scales: A bibliography of published sources. Suite 300 2000*. Hearst Avenue Berkeley, CA 94709-2176.
- Attkisson, C., & Greenfield, T. (1994). Client Satisfaction Questionnaire-8 and Service Satisfaction Scale-30. In: M. E. Maruish (ed.), *The use of psychological testing for treatment planning and outcome assessment* (pp. 402–420). Hillsdale, NJ, England: Lawrence Erlbaum Associates.
- Avis, M., Bond, M., & Arthur, A. (1995). Satisfying solutions? A review of some unresolved issues in the measurement of patient satisfaction. *Journal of Advanced Nursing*, 22, 316–322.
- Baig, B. J., Beaglehole, A., Stewart, R. C., Boeing, L., Blackwood, D. H., Leuvenink, J., & Kauye, F. (2008). Assessment of an undergraduate psychiatry course in an African setting. *BMC Medical Education*, 8. <https://doi.org/10.1186/1472-6920-8-23>
- Bailey, N., Mandeville, K. L., Rhodes, T., Mipando, M., & Muula, A. S. (2012). Postgraduate career intentions of medical students and recent graduates in Malawi: a qualitative

- interview study. *BMC Medical Education*, *12*. <https://doi.org/10.1186/1472-6920-12-87>
- Barak, Y., Szor, H., Kimhi, R., Kam, E., Mester, R., & Elizur, A. (2001). Survey of patient satisfaction in adult psychiatric outpatient clinics. *European Psychiatry*, *16*, 131–133.
- Beaglehole, A. L., Baig, B. J., Stewart, R. C., Platt, J. E., Strachan, J., Kauye, F., Boeing, L., & Leuvenink, J. (2008). Training in transcultural psychiatry and delivery of education in a low-income country. *Psychiatric Bulletin*, *32*, 111–112. <https://doi.org/10.1192/pb.bp.107.016568>
- Becker, A. E., & Kleinman, A. (2013). Mental health and the global agenda. *New England Journal of Medicine*, *369*, 66–73. <https://doi.org/10.1056/NEJMr1110827>
- Bergenmar, M., Nylén, U., Lidbrink, E., Bergh, J., & Brandberg, Y. (2006). Improvements in patient satisfaction at an outpatient clinic for patients with breast cancer. *Acta Oncologica*, *45*, 550–558. <https://doi.org/10.1080/02841860500511239>
- Berhane, A., & Enquesslassie, F. (2016). Patient expectations and their satisfaction in the context of public hospitals. *Patient Preference and Adherence*, *10*, 1919–1928. <https://doi.org/10.2147/PPA.S109982>
- Bhatta, B. P., & Årethun, T. (2013). Barriers to rural households' participation in low-skilled off-farm labor markets: theory and empirical results from northern Ethiopia. *SpringerPlus*, *2*, 97. <https://doi.org/10.1186/2193-1801-2-97>
- Bjorngaard, J. (2008). Patients' satisfaction with outpatient mental health services: The influence of organizational factors (PhD dissertation). Norway, Norwegian University of Science and Technology.
- Blader, J. C. (2007). Longitudinal assessment of parental satisfaction with children's psychiatric hospitalization. *Administration and Policy in Mental Health and Mental Health Services Research*, *34*, 108–115. <https://doi.org/10.1007/s10488-006-0085-8>

- Bleich, S. (2009). How does satisfaction with the health-care system relate to patient experience? *Bulletin of the World Health Organization*, 87, 271–278.  
<https://doi.org/10.2471/BLT.07.050401>
- Boe, D. T., Riley, W., & Parsons, H. (2009). Improving service delivery in a County Health Department WIC Clinic: An application of statistical process control techniques. *American Journal of Public Health*, 99, 1619–1625.  
<https://doi.org/10.2105/AJPH.2008.138289>
- Bostock, J. (2004). The high price of poverty. Poverty and debt are major risk factors for mental ill health in deprived communities and groups. *Mental Health Today*, 27–29.
- Brenman, N. F., Luitel, N. P., Mall, S., & Jordans, M. J. D. (2014). Demand and access to mental health services: a qualitative formative study in Nepal. *BMC International Health and Human Rights*, 14, 22. <https://doi.org/10.1186/1472-698X-14-22>
- Bruckner, T. A., Scheffler, R. M., Shen, G., Yoon, J., Chisholm, D., Morris, J., ... Saxena, S. (2011). The mental health workforce gap in low- and middle-income countries: a needs-based approach. *Bulletin of the World Health Organization*, 89, 184–194.  
<https://doi.org/10.2471/BLT.10.082784>
- Burnett-Zeigler, I., Zivin, K., Ilgen, M. A., & Bohnert, A. S. B. (2011). Perceptions of quality of health care among veterans with psychiatric disorders. *Psychiatric Services*, 62.  
<https://doi.org/10.1176/appi.ps.62.9.1054>
- Calloway, M., Fried, B., Johnsen, M., & Morrissey, J. (1999). Characterization of rural mental health service systems. *The Journal of Rural Health*, 15, 296–307.  
<https://doi.org/10.1111/j.1748-0361.1999.tb00751.x>
- Chakraborty, R., & Majumdar, A. (2011). Measuring consumer satisfaction in health care sector: The applicability of SERVQUAL. *International Refereed Research Journal*, 2, 149.

- Chanza, C. (2013). *Blantyre City, Malawi. Intermediary cities learning exchange: Strategic planning, partnerships and inclusive cities: MCI Social Sector Working Paper Series No. 29/2013*. Presented at the UCLG Intermediary Cities Learning Exchange, The Earth Institute, Columbia University, KwaDukuza, South Africa.
- Chilale, H. (2010). *Client service satisfaction evaluation*. Presented at the 1st Annual Mental Health Conference, University of Malawi, College of Medicine.
- Chisholm, D., Sweeny, K., Sheehan, P., Rasmussen, B., Smit, F., Cuijpers, P., & Saxena, S. (2016). Scaling-up treatment of depression and anxiety: a global return on investment analysis. *The Lancet Psychiatry*, 3, 415–424. [https://doi.org/10.1016/S2215-0366\(16\)30024-4](https://doi.org/10.1016/S2215-0366(16)30024-4)
- Chorwe-Sungani, G., Namelo, M., Chiona, V., & Nyirongo, D. (2015). The views of family members about nursing care of psychiatric patients admitted at a mental hospital in Malawi. *Open Journal of Nursing*, 5, 181–188. <https://doi.org/10.4236/ojn.2015.53022>
- Cleary, P. D. (1999). The increasing importance of patient surveys. *BMJ International Journal of Quality Health Care*, 319, 720.
- Cowen, P., Harrison, P. J., & Burns, T. (2012). *Shorter Oxford textbook of psychiatry* (6th ed.). Oxford: Oxford University Press.
- Crabb, J., Stewart, R. C., Kokota, D., Masson, N., Chabunya, S., & Krishnadas, R. (2012). Attitudes towards mental illness in Malawi: a cross-sectional survey. *BMC Public Health*, 12, 541. <https://doi.org/10.1186/1471-2458-12-541>
- Crow, R., Gage, H., Hampson, S., Hart, J., Kimber, A., Storey, L., & Thomas, H. (2002). The measurement of satisfaction with healthcare: implications for practice from a systematic review of the literature. *Health Technology Assessment*, 6, 1–244.

- Das, J., Do, Q-T., Friedman, J., McKenzie, D., & Scott, K. (2007). Mental health and poverty in developing countries: revisiting the relationship. *Social Science & Medicine*, *65*, 467–480. <https://doi.org/10.1016/j.socscimed.2007.02.037>
- Debono, D., & Travaglia, J. (2009). *Clinical audit: Complaints and patient satisfaction: A comprehensive review of the literature*. Centre for Clinical Governance Research in Health. Faculty of Medicine, University of New South Wales, Sydney.
- Delgadillo, J. (2010). Primary care mental health service: Patient experience and satisfaction with treatment, service evaluation report.
- Desjarlais-deKlerk, K., & Wallace, J. E. (2013). Instrumental and socioemotional communications in doctor-patient interactions in urban and rural clinics. *BMC Health Services Research*, *13*. <https://doi.org/10.1186/1472-6963-13-261>
- Donabedian, A. (1988). The quality of care. How can it be assessed? *JAMA*, *260*, 1743–1748.
- Egbe, C. O., Brooke-Sumner, C., Kathree, T., Selohilwe, O., Thornicroft, G., & Petersen, I. (2014). Psychiatric stigma and discrimination in South Africa: perspectives from key stakeholders. *BMC Psychiatry*, *14*, 191. <https://doi.org/10.1186/1471-244X-14-191>
- El-Badri, S. M. (2013). Mental health services in new Libya: the way forward. *Libyan Journal of Medicine*, *8*. <https://doi.org/10.3402/ljm.v8i0.21581>
- Elisha, D., Khawaled, R., Radomislensky, I., M., & Ponizovsky, A. (2012). Validation of the Charleston psychiatric satisfaction scale—Hebrew version adapted for use in Israel. *Open Journal of Psychiatry*, *2*, 141–146. <https://doi.org/10.4236/ojpsych.2012.22019>
- Enakshi, G., & Pawan, K. S. (2014). Client satisfaction with quality of health care in a rural area in Southern India. *Journal of Public Health and Epidemiology*, *6*, 239–245. <https://doi.org/10.5897/JPHE2014.0625>
- EngenderHealth (Firm). (2003). *COPE handbook: a process for improving quality in health services*. New York, NY: EngenderHealth.

- Fazel, M., Hoagwood, K., Stephan, S., & Ford, T. (2014). Mental health interventions in schools in high-income countries. *The Lancet Psychiatry*, *1*, 377–387. [https://doi.org/10.1016/S2215-0366\(14\)70312-8](https://doi.org/10.1016/S2215-0366(14)70312-8)
- Franz, L., Carter, T., Leiner, A. S., Bergner, E., Thompson, N. J., & Compton, M. T. (2010). Stigma and treatment delay in first-episode psychosis: a grounded theory study. *Early Intervention in Psychiatry*, *4*, 47–56. <https://doi.org/10.1111/j.1751-7893.2009.00155.x>
- Freeman, M. (2016). Global mental health in low and middle income, especially African countries. *Epidemiology and Psychiatric Sciences*, *25*, 503–505. <https://doi.org/10.1017/S2045796016000482>
- Friedman, L. M., Furberg, C., & DeMets, D. L. (2010). *Fundamentals of clinical trials* (4th ed.). Springer, New York.
- Froebe, D. J., & Bain, J. R. (1977). Quality assurance programs and controls in nursing. *Nursing Administration Quarterly*, *1*, 89.
- Funk, M., & Drew, N. (2017). WHO QualityRights: transforming mental health services. *The Lancet Psychiatry*, *4*(11), 826–827. [https://doi.org/10.1016/S2215-0366\(17\)30271-7](https://doi.org/10.1016/S2215-0366(17)30271-7)
- Gaiosio, V. P., & Mishima, S. M. (2007). User satisfaction from the perspective of acceptability in the family health scenario. *Texto & Contexto - Enfermagem*, *16*, 617–625. <https://doi.org/10.1590/S0104-07072007000400005>
- Gani, N., Saeed, K., Minhas, F. A., Anjuman, N., Waleed, M., & Fatima, G. (2011). Assessment of patient satisfaction with mental health services in a tertiary care setting. *Journal of Ayub Medical College, Abbottabad*, *23*, 43–46.
- Gelder, M. G., Cowen, P., & Harrison, P. J. (2006). *Shorter Oxford textbook of psychiatry* (5th ed.). Oxford, New York: Oxford University Press.



- Glass, T. A., Goodman, S. N., Hernán, M. A., & Samet, J. M. (2013). Causal inference in public health. *Annual Review of Public Health, 34*, 61–75. <https://doi.org/10.1146/annurev-publhealth-031811-124606>
- Goossensen, A., Zijlstra, P., & Koopmanschap, M. (2007). Measuring shared decision making processes in psychiatry: Skills versus patient satisfaction. *Patient Education and Counseling, 67*, 50–56. <https://doi.org/10.1016/j.pec.2007.01.017>
- Guadagnino, C. (2003). Role of patient satisfaction. 1–11. <http://physiciansnews.com/cover/1203.html>
- Gureje, O., & Alem, A. (2000). Mental health policy development in Africa. *Bulletin of the World Health Organization, 78*, 475–482.
- Hall, J. A., & Dornan, M. C. (1990). Patient sociodemographic characteristics as predictors of satisfaction with medical care: a meta-analysis. *Social Science & Medicine, 30*, 811–818.
- Hamann, J., Leucht, S., & Kissling, W. (2003). Shared decision making in psychiatry (No. *Acta Psychiatrica Scandinavica, 107*(6), 403–409.
- Hanlon, C., Fekadu, A., Jordans, M., Kigozi, F., Petersen, I., Shidhaye, R., ... Patel, V. (2016). District mental healthcare plans for five low- and middle-income countries: commonalities, variations and evidence gaps. *The British Journal of Psychiatry, 208*, s47–s54. <https://doi.org/10.1192/bjp.bp.114.153767>
- Harris, G., & Poertner, J. (1998). *Measurement of client satisfaction: Children and family research center School of Social Work*. University of Illinois at Urbana-Champaign, University of Illinois at Urbana-Champaign, 1207 W. Oregon Urbana, IL 61801.
- Hauenstein, E. J., Petterson, S., Rovnyak, V., Merwin, E., Heise, B., & Wagner, D. (2007). Rurality and mental health treatment. *Administration and Policy in Mental Health and*

- Mental Health Services Research*, 34, 255–267. <https://doi.org/10.1007/s10488-006-0105-8>
- Havenaar, J. M., Geerlings, M. I., Vivian, L., Collinson, M., & Robertson, B. (2008). Common mental health problems in historically disadvantaged urban and rural communities in South Africa: prevalence and risk factors. *Social Psychiatry and Psychiatric Epidemiology*, 43, 209–215. <https://doi.org/10.1007/s00127-007-0294-9>
- Herzig, H. (2003). Teaching psychiatry in poor countries: priorities and needs. A description of how mental health is taught to medical students in Malawi, Central Africa. *Education for Health (Abingdon)*, 16, 32–39. <https://doi.org/10.1080/1357628031000066787>
- Holcomb, W. R., Parker, J. C., Leong, G. B., Thiele, J., & Higdon, J. (1998). Customer satisfaction and self-reported treatment outcomes among psychiatric inpatients. *Psychiatric Services*, 49, 929–934. <https://doi.org/10.1176/ps.49.7.929>
- Holikatti, P., Kar, N., Mishra, A., Shukla, R., Swain, S., & Kar, S. (2012). A study on patient satisfaction with psychiatric services. *Indian Journal of Psychiatry*, 54, 327. <https://doi.org/10.4103/0019-5545.104817>
- Iezzoni, L. I. (2002). Satisfaction with quality and access to health care among people with disabling conditions. *International Journal for Quality in Health Care*, 14, 369–381. <https://doi.org/10.1093/intqhc/14.5.369>
- Israel, D. (1992). *Determining sample size: Fact Sheet PEOD-6*. University of Florida, Florida Cooperative Extension Service.
- Jack, H., Canavan, M., Ofori-Atta, A., Taylor, L., & Bradley, E. (2013). Recruitment and retention of mental health workers in Ghana. *PLoS ONE*, 8, e57940. <https://doi.org/10.1371/journal.pone.0057940>

- Jack-Ide, I. O., & Uys, L. (2013). Barriers to mental health services utilization in the Niger Delta region of Nigeria: service users' perspectives. *Pan African Medical Journal, 14*. <https://doi.org/10.11604/pamj.2013.14.159.1970>
- Jackson, J. L., Chamberlin, J., & Kroenke, K. (2001). Predictors of patient satisfaction. *Social Science & Medicine, 52*, 609–620.
- Jacob, K. S. (2017). Mental health services in low-income and middle-income countries. *The Lancet Psychiatry, 4*, 87–89. [https://doi.org/10.1016/S2215-0366\(16\)30423-0](https://doi.org/10.1016/S2215-0366(16)30423-0)
- Jafry, M. A., Jenny, A. M., Lubinga, S. J., Larsen-Cooper, E., Crawford, J., Matemba, C., & Babigumira, J. B. (2016). Examination of patient flow in a rural health center in Malawi. *BMC Research Notes, 9*. <https://doi.org/10.1186/s13104-016-2144-x>
- James, B., Omoaregba, J., Akhigbe, S., Morakinyo, O., & Lawani, A. (2014). Prevalence and correlates of missed first appointments among outpatients at a Psychiatric Hospital in Nigeria. *Annals of Medical and Health Sciences Research, 4*, 763. <https://doi.org/10.4103/2141-9248.141550>
- Jamison, D. T., Feacham, R. G. A., Makgoba, M. W., Bos, E. R., Baingana, F. K., Hofman, K. J., Rogo, K. O. (Eds.). (2006). Disease and mortality in Sub-Saharan Africa (2nd ed.). Washington (DC): The World Bank. <https://doi.org/10.1596/978-0-8213-6397-3>
- Jenkins, R., Baingana, F., Belkin, G., Borowitz, M., Daly, A., Francis, P., ... Sadiq, S. (2010). Mental health and the development agenda in Sub-Saharan Africa. *Psychiatric Services, 61*, 229–234. <https://doi.org/10.1176/ps.2010.61.3.229>
- Kagee, A., Tsai, A. C., Lund, C., & Tomlinson, M. (2013). Screening for common mental disorders in low resource settings: reasons for caution and a way forward. *International Health, 5*, 11–14. <https://doi.org/10.1093/inthealth/ihs004>
- Kane, R. L., Maciejewski, M., & Finch, M. (1997). The relationship of patient satisfaction with care and clinical outcomes. *Medical Care, 35*, 714–730.

- Kauye, F., Chiwandira, C., Wright, J., Common, S., Phiri, M., Mafuta, C., ... Udedi, M. (2011). Increasing the capacity of health surveillance assistants in community mental health care in a developing country, Malawi. *Malawi Medical Journal*, *23*, 85–88.
- Kauye, F., Jenkins, R., & Rahman, A. (2014). Training primary health care workers in mental health and its impact on diagnoses of common mental disorders in primary care of a developing country, Malawi: a cluster-randomized controlled trial. *Psychological Medicine*, *44*, 657–666. <https://doi.org/10.1017/S0033291713001141>
- Kavinya, T. (2011). Opinions on mental health care in Malawi: Is Malawi getting mental health care right? *Malawi Medical Journal*, *23*(3), 98.
- Kigozi, F., Ssebunnya, J., Kizza, D., Cooper, S., & Ndyabangi, S. (2010). An overview of Uganda's mental health care system: results from an assessment using the World Health Organization's Assessment Instrument for Mental Health Systems (WHO-AIMS). *International Journal of Mental Health Systems*, *4*, 1. <https://doi.org/10.1186/1752-4458-4-1>
- King, M., Nazareth, I., Levy, G., Walker, C., Morris, R., Weich, S., ... , Torres-Gonzalez, F. (2008) Prevalence of common mental disorders in general practice attendees across Europe. *The British Journal of Psychiatry*, *192*, 362–367. <https://doi:10.1192/bjp.bp.107.039966>
- Kokota, D. (2015). *An evaluation of mhGAP training for primary healthcare workers in Mulanje, Malawi*. Cape Town, South Africa: University of Cape Town.
- Kumar, A. (2011). Mental health services in rural India: challenges and prospects. *Health*, *3*, 757–761. <https://doi.org/10.4236/health.2011.312126>
- Lally, J., Byrne, F., McGuire, E., & McDonald, C. (2013). Patient satisfaction with psychiatric outpatient care in a university hospital setting. *Irish Journal of Psychological Medicine*, *30*, 271–277. <https://doi.org/10.1017/ipm.2013.54>

- Lambert, D., Gale, J., Bird, D., & Hartley, D. (2003). Medicaid managed behavioral health in rural areas. *The Journal of Rural Health, 19*, 22–32. <https://doi.org/10.1111/j.1748-0361.2003.tb00538.x>
- Lang, R. (2008). *Disability policy audit in Namibia, Swaziland, Malawi and Mozambique*. London, United Kingdom: The Leonard Cheshire Disability and Inclusive Development Centre University College London.
- Lazarus, R., & Freeman, M. (2009). Primary-level mental health care for common mental disorder in resource-poor settings: Models & practice. A literature review. Pretoria, South Africa: Medical Research Council.
- Linder-Pelz, S. (1982). “Toward a theory of patient satisfaction.” *Journal of Social Science and Medicine, 16*, 577–582.
- Liu, Y., & Wang, G. (2007). Inpatient satisfaction with nursing care and factors influencing satisfaction in a teaching hospital in China. *Journal of Nursing Care Quality, 22*, 266–271. <https://doi.org/10.1097/01.NCQ.0000277785.52428.a5>
- Lochoro, M. (2004). Measuring patient satisfaction in Uganda Catholic medical bureau. *Health Policy Development, 2*, 243–248.
- Lommerse, K., Stewart, R. C., Chilimba, Q., van den Akker, T., & Lund, C. (2013). A descriptive analysis of HIV prevalence, HIV service uptake, and HIV-related risk behaviour among patients attending a mental health clinic in rural Malawi. *PLoS ONE, 8*, e72171. <https://doi.org/10.1371/journal.pone.0072171>
- Lund, C., & Flisher, A. J. (2009). A model for community mental health services in South Africa: Community mental health services in South Africa. *Tropical Medicine & International Health, 14*, 1040–1047. <https://doi.org/10.1111/j.1365-3156.2009.02332.x>

- Lund, C., Petersen, I., Kleintjes, S., & Bhana, A. (2012). Mental health services in South Africa: Taking stock. *African Journal of Psychiatry*, 15. <https://doi.org/10.4314/ajpsy.v15i6.48>
- Lund, C., Tomlinson, M., & Patel, V. (2016). Integration of mental health into primary care in low- and middle-income countries: the PRIME mental healthcare plans. *The British Journal of Psychiatry*, 208, s1–s3. <https://doi.org/10.1192/bjp.bp.114.153668>
- MacArthur, G. (2008). *Challenges and priorities for global mental health research in low- and middle-income countries (Symposium Report: Global mental health)*. London, England: Academy of Medical Sciences.
- Malawi Human Rights Commission [MHRC]. (2012). *Report on monitoring of mental health hospital and selected outreach facilities in Malawi*. Malawi Human Rights Commission.
- Malawi Human Rights Commission [MHRC]. (2014). *Report on monitoring of mental health hospital and selected outreach facilities in Malawi (No. 14)*. Lilongwe: Malawi Human Rights Commission.
- Manafa, O., McAuliffe, E., Maseko, F., Bowie, C., MacLachlan, M., & Normand, C. (2009). Retention of health workers in Malawi: perspectives of health workers and district management. *Human Resources for Health*, 7. <https://doi.org/10.1186/1478-4491-7-65>
- Maoulidi, M. (2013). *Healthneeds assessment for Blantyre city, Malawi (MCI Social sector working paper series No. 29)*. 475 Riverside Drive, Suite 253, New York, NY, 10115, United States.
- Martin, L. R., Williams, S. L., Haskard, K. B., & Dimatteo, M. R. (2005). The challenge of patient adherence. *Therapeutics and Clinical Risk Management*, 1, 189–199.

- Mascayano, F., Armijo, J. E., & Yang, L. H. (2015). Addressing stigma relating to mental illness in low- and middle-income countries. *Frontiers in Psychiatry*, *6*. <https://doi.org/10.3389/fpsy.2015.00038>
- Mbwayo, A. W., Ndetei, D. M., Mutiso, V., & Khasakhala, L. I. (2013). Traditional healers and provision of mental health services in cosmopolitan informal settlements in Nairobi, Kenya. *African Journal of Psychiatry (Johannesburg)*, *16*, 134–140. <https://doi.org/http://dx.doi.org/10.4314/ajpsy.v16i2.17>
- McCabe, M. P., & Leas, L. (2008). A qualitative study of primary health care access, barriers and satisfaction among people with mental illness. *Psychology, Health & Medicine*, *13*, 303–312. <https://doi.org/10.1080/13548500701473952>
- McCoy, D., McPake, B., & Mwapasa, V. (2008). The double burden of human resource and HIV crises: a case study of Malawi. *Human Resources for Health*, *6*. <https://doi.org/10.1186/1478-4491-6-16>
- Medical Council of Malawi and Nurses Council of Malawi. (1990). *Malawi Health Professional Regulatory Bodies*. Malawi: Medical Council of Malawi and Nurses Council of Malawi.
- Mehta, N., Clement, S., Marcus, E., Stona, A.-C., Bezborodovs, N., Evans-Lacko, S., ... Thornicroft, G. (2015). Evidence for effective interventions to reduce mental health-related stigma and discrimination in the medium and long term: systematic review. *The British Journal of Psychiatry*, *207*, 377–384. <https://doi.org/10.1192/bjp.bp.114.151944>
- Mekonen, T., Yimer, S., Yohannis, Z., Getinet, W., Fekadu, W., Belete, H., ... Belete, A. (2016). Satisfaction and associated factors of outpatient psychiatric service consumers in Ethiopia. *Patient Preference and Adherence*, *10*, 1847–1852. <https://doi.org/10.2147/PPA.S115767>

- Miles, M. A., Holmes, K. R., O'Grady, M. A., Heritage Foundation (Washington, D.C., Wall Street Journal (Firm) (2006). *2006 index of economic freedom*. Washington, DC; New York, NY: Heritage Foundation, Wall Street Journal.
- Ministry of Health. (2010). Malawi Health Workforce Observatory "Human resources for health country profile Malawi." The Republic of Malawi, Lilongwe: Ministry of Health.
- Ministry of Health. (2013). Minimum standards of clinical services for Malawi. Lilongwe: Ministry of Health.
- Ministry of Health. (2015). *Malawi Standard Treatment Guidelines (MSTG), Incorporating Malawi Essential Medicines List (MEML) 2015* (5th ed.). Lilongwe: Ministry of Health.
- Mohit, A. (2001). Mental health and psychiatry in the Middle East: historical development. *Eastern Mediterranean Health Journal*, 7, 336–347.
- Mpinga, E. K., & Chastonay, P. (2011). Patient satisfaction studies and the monitoring of the right to health: Some thoughts based on a review of the literature. *Global Journal of Health Science*, 3. <https://doi.org/10.5539/gjhs.v3n1p64>
- Mpoola, D., & United Nations Human Settlements Programme (Eds.). (2011). *Malawi: [name of city] urban profile*. Nairobi: United Nations Human Settlements Programme, Regional and Technical Cooperation Division.
- Mugo, N. S., Dibley, M. J., Damundu, E. Y., & Alam, A. (2018). "The system here isn't on patients' side"- perspectives of women and men on the barriers to accessing and utilizing maternal healthcare services in South Sudan. *BMC Health Services Research*, 18. <https://doi.org/10.1186/s12913-017-2788-9>
- Murali, V., & Oyebode, F. (2004). Poverty, social inequality and mental health. *Advances in Psychiatry Treatment*, 10, 216–224.



- Musoke, D., Boynton, P., Butler, C., & Musoke, M. (2015). Health seeking behaviour and challenges in utilising health facilities in Wakiso district, Uganda. *African Health Sciences, 14*, 1046. <https://doi.org/10.4314/ahs.v14i4.36>
- Muula, A. S. (2006). *Shortage of health workers in the Malawian public health services system: how do parliamentarians perceive the problem?* Malawi: University of Malawi.
- Mwale, C. M. (2011). Domiciliary mental health care program in community settings: is it is feasible in Malawi? *Malawi Medical Journal, 23*, 89–90.
- Mwale, O. G., & Mselle, L. T. (2017). Exploring barriers to utilization of mental health services in Malawi: A qualitative exploratory study. *Mental Health & Prevention, 5*, 52–62. <https://doi.org/10.1016/j.mhp.2017.01.004>
- Myburgh, N. G. (2005). Patient satisfaction with health care providers in South Africa: the influences of race and socioeconomic status. *International Journal for Quality in Health Care, 17*, 473–477. <https://doi.org/10.1093/intqhc/mzi062>
- Nabbuye-Sekandi, J., Makumbi, F. E., Kasangaki, A., Kizza, I. B., Tugumisirize, J., Nshimye, E., ... Peters, D. H. (2011). Patient satisfaction with services in outpatient clinics at Mulago hospital, Uganda. *International Journal for Quality in Health Care, 23*, 516–523. <https://doi.org/10.1093/intqhc/mzr040>
- National Statistical Office [NSO]. (2008). *Population and housing census*. Zomba, Malawi: Government Print.
- National Statistical Office [NSO] & ICF Macro. (2011). *Malawi Demographic and Health Survey 2010*. Zomba, Malawi, and Calverton, Maryland, USA: National Statistical Office.
- National Statistical Office [NSO] & ORC Macro. (2005). *Malawi Demographic and Health Survey 2004*. Calverton, Maryland: National Statistical Office.

- Ndetei, D., Khasakhala, L., Mutiso, V., & Mbuyo, A. (2011). Knowledge, attitude and practice (KAP) of mental illness among staff in general medical facilities in Kenya: practice and policy implications. *African Journal of Psychiatry*, *14*. <https://doi.org/10.4314/ajpsy.v14i3.6>
- Ndetei, D. M., Szabo, C. P., Okasha, T., & Mburu, J. (2006). *The African textbook of clinical psychiatry and mental health*. Nairobi: The African Medical and Research Foundation.
- Ngui, E. M., Khasakhala, L., Ndeti, D., Roberts, L. W. (2010). Mental disorders, health inequalities and ethics: A global perspective. *International Review of Psychiatry*, *22*, 235–244. <https://doi.org/10.3109/09540261.2010.485273>
- O'Donnell, O. (2007). Access to health care in developing countries: breaking down demand side barriers. *Cadernos de Saúde Pública*, *23*, 2820–2834. <https://doi.org/10.1590/S0102-311X2007001200003>
- Patel, V. (2014). Rethinking mental health care: bridging the credibility gap. *Intervention*, *12*, 15–20. <https://doi.org/10.1097/WTF.0000000000000065>
- Patel, V., Belkin, G.S., Chockalingam, A., Cooper, J., Saxena, S., & Unützer, J. (2013). Grand challenges: Integrating mental health services into priority health care platforms. *PLoS Medicine*, *10*, e1001448. <https://doi.org/10.1371/journal.pmed.1001448>
- Patel, V., Chisholm, D., Parikh, R., Charlson, F. J., Degenhardt, L., Dua, T., ... DCP MNS Author Group (2016). Addressing the burden of mental, neurological, and substance use disorders: key messages from Disease Control Priorities (3rd ed.). *Lancet*, *387*, 1672–1685. [https://doi.org/10.1016/S0140-6736\(15\)00390-6](https://doi.org/10.1016/S0140-6736(15)00390-6)
- Paykel, E., Abbott, R., Jenkins, R., Brugha, T., & Meltzer, H. (2003). Urban-rural mental health differences in Great Britain: findings from the National Morbidity Survey.

*International Review of Psychiatry*, 15, 97–107.

<https://doi.org/10.1080/0954026021000046001>

Pellegrin, K. L., Stuart, G. W., Maree, B., Frueh, B. C., & Ballenger, J. C. (2001). A brief scale for assessing patients' satisfaction with care in outpatient psychiatric services. *Psychiatric Services*, 52, 816–819. <https://doi.org/10.1176/appi.ps.52.6.816>

Penchansky, R., & Thomas, J. W. (1981). The concept of access: definition and relationship to consumer satisfaction. *Medical Care*, 19, 127–140.

Petersen, I., Lund, C., Bhana, A., Flisher, A. J., Mental Health and Poverty Research Programme Consortium (2012). A task shifting approach to primary mental health care for adults in South Africa: human resource requirements and costs for rural settings. *Health Policy & Planning*, 27, 42–51. <https://doi.org/10.1093/heapol/czr012>

Polit, D. F., & Beck, C. T. (2010). *Essentials of nursing research: appraising evidence for nursing practice* (7th ed.). Philadelphia: Wolters Kluwer Health/Lippincott Williams & Wilkins.

Prasanna, K., Bashith, M., & Sucharitha, S. (2009). Consumer satisfaction about hospital services: A study from the outpatient department of a private medical college hospital at Mangalore. *Indian Journal of Community Medicine*, 34, 156. <https://doi.org/10.4103/0970-0218.51220>

Pulane, M. (2014). *Patient satisfaction survey on the quality of psychiatric care at Mohlomi psychiatric outpatient clinic in Lesotho*. Johannesburg, South Africa: School of Public Health, University of Witwatersrand.

Pullen, E., & Oser, C. (2014). Barriers to substance abuse treatment in rural and urban communities: Counselor perspectives. *Substance Use & Misuse*, 49, 891–901. <https://doi.org/10.3109/10826084.2014.891615>

- Qatari, G., & Haran, D. (1999). Determinants of users' satisfaction with primary health care settings and services in Saudi Arabia. *International Journal for Quality in Health Care, 11*, 523–531. <https://doi.org/10.1093/intqhc/11.6.523>
- Queen Elizabeth Central Hospital. (2012). *Mental Health Clinic Register*. Malawi: Queen Elizabeth Central Hospital.
- Raleigh, V. S., Irons, R., Hawe, E., Scobie, S., Cook, A., Reeves, R., ... Harrison, J. (2007). Ethnic variations in the experiences of mental health service users in England: Results of a national patient survey programme. *The British Journal of Psychiatry, 191*, 304–312. <https://doi.org/10.1192/bjp.bp.106.032417>
- Rao, J. K., Weinberger, M., & Kroenke, K. (2000). Visit-specific expectations and patient-centered outcomes: a literature review. *Archives of Family Medicine, 9*, 1148–1155.
- Rowan, K., McAlpine, D. D., & Blewett, L. A. (2013). Access and cost barriers to mental health care, by insurance status, 1999-2010. *Health Affairs, 32*, 1723–1730. <https://doi.org/10.1377/hlthaff.2013.0133>
- Ruggeri, M. (2000). Development, internal consistency and reliability of the Verona Service Satisfaction Scale - European Version: EPSILON Study 7. *The British Journal of Psychiatry, 177*(S39), s41–s48. <https://doi.org/10.1192/bjp.177.39.s41>
- Ruggeri, M., Lasalvia, A., Bisoffi, G., Thornicroft, G., Vázquez-Barquero, J. L., Becker, T., ... EPSILON Study Group. (2003). Satisfaction with mental health services among people with schizophrenia in five European sites: results from the EPSILON Study. *Schizophrenia Bull, 29*, 229–245.
- Ruiz-Moral, R., Pérula de Torres, L.Á., & Jaramillo-Martin, I. (2007). The effect of patients' met expectations on consultation outcomes. A study with family medicine residents. *Journal of General Internal Medicine, 22*, 86–91. <https://doi.org/10.1007/s11606-007-0113-8>

- Salam, A. A., Alshekteria, A. A., Abd Alhadi, H., Ahmed, M., & Mohammed, A. (2010). Patient satisfaction with quality of primary health care in Benghazi, Libya. *Libyan Journal of Medicine*, 5. <https://doi.org/10.3402/ljm.v5i0.4873>
- Saraceno, B., van Ommeren, M., Batniji, R., Cohen, A., Gureje, O., Mahoney, J., ... Underhill, C. (2007). Barriers to improvement of mental health services in low-income and middle-income countries. *The Lancet* 370, 1164–1174. [https://doi.org/10.1016/S0140-6736\(07\)61263-X](https://doi.org/10.1016/S0140-6736(07)61263-X)
- Schierenbeck, I., Johansson, P., Andersson, L., & van Rooyen, D. (2013). Barriers to accessing and receiving mental health care in Eastern Cape, South Africa. *Health & Human Rights*, 15, 110–123.
- Schröder, A., Ahlström, G., & Larsson, B. W. (2006). Patients' perceptions of the concept of the quality of care in the psychiatric setting: a phenomenographic study. *Journal of Clinical Nursing*, 15, 93–102. <https://doi.org/10.1111/j.1365-2702.2005.01241.x>
- Shidhaye, R., Lund, C., & Chisholm, D. (2015). Closing the treatment gap for mental, neurological and substance use disorders by strengthening existing health care platforms: strategies for delivery and integration of evidence-based interventions. *International Journal of Mental Health Systems*, 9. <https://doi.org/10.1186/s13033-015-0031-9>
- Sitzia, J., & Wood, N. (1997). Patient satisfaction: a review of issues and concepts. *Social Science & Medicine*, 45, 1829–1843.
- Smith, D., Roche, E., O'Loughlin, K., Brennan, D., Madigan, K., Lyne, J., ... O'Donoghue, B. (2014). Satisfaction with services following voluntary and involuntary admission. *Journal of Mental Health*, 23, 38–45. <https://doi.org/10.3109/09638237.2013.841864>

- Sriram, T. G., & Jabbarpour, Y. M. (2005). Are mental health professionals immune to stigmatizing beliefs? *Psychiatric Services, 56*, 610–610. <https://doi.org/10.1176/appi.ps.56.5.610>
- Strasser, R. (2003). Rural health around the world: challenges and solutions. *Family Practice, 20*, 457–463. <https://doi.org/10.1093/fampra/cmz422>
- Summers, M., & Happell, B. (2003). Patient satisfaction with psychiatric services provided by a Melbourne tertiary hospital emergency department. *Journal of Psychiatric and Mental Health Nursing, 10*, 351–357.
- Sweetland, A. C., Oquendo, M. A., Sidat, M., Santos, P. F., Vermund, S. H., Duarte, C. S., ... Wainberg, M. L. (2014). Closing the mental health gap in low-income settings by building research capacity: Perspectives from Mozambique. *Annals of Global Health, 80*, 126–133. <https://doi.org/10.1016/j.aogh.2014.04.014>
- Taheri, M., Amani, M., Zahiri, R., & Mohammadi, M. (2011). Patient satisfaction with Urban and Rural Insurance and Family Physician Program in Iran. *Journal of Family and Reproductive Health, 5*, 11–18.
- Tambuyzer, E., & Van Audenhove, C. (2015). Is perceived patient involvement in mental health care associated with satisfaction and empowerment? *Health Expectations, 18*, 516–526. <https://doi.org/10.1111/hex.12052>
- Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education, 2*, 53–55. <https://doi.org/10.5116/ijme.4dfb.8dfd>
- Thirthalli, J., Reddy, K. S., Kare, M., Das, S., & Gangadhar, B. N. (2017). Rural-urban differences in accessing mental health treatment in patients with psychosis. *International Journal of Social Psychiatry, 63*, 694–698. <https://doi.org/10.1177/0020764017730849>

- Thornicroft, G., & Tansella, M. (2003). *What are the arguments for community-based mental health care*. Copenhagen: WHO Regional Office for Europe.
- Thyolo District Hospital. (2012). *Mental health clinic register*. Malawi: Thyolo District Hospital.
- Udedi, M., Swartz, L., Stewart, R. C., & Kauye, F. (2014). Health service utilization by patients with common mental disorder identified by the Self-Reporting Questionnaire in a primary care setting in Zomba, Malawi: A descriptive study. *International Journal of Social Psychiatry*, 60, 454–461. <https://doi.org/10.1177/0020764013495527>
- Ukpong, D., Mosaku, S., Aloba, O., & Mapayi, B. (2008). Reliability and validity of a satisfaction scale in a Nigerian psychiatric out-patient clinic. *Nigerian Journal of Psychiatry*, 6. <https://doi.org/10.4314/njpsyc.v6i1.39908>
- Ul-haq, I. (2012). Patients' satisfaction with a psychiatric day hospital in the West Galway Catchments Area. *Irish Journal of Psychological Medicine*, 29, 85–90. <https://doi.org/10.1017/S0790966700017353>
- UNESCO. (2014). *Teaching and learning: Achieving quality for all. Education for All Global Monitoring Report*. Paris: UNESCO.
- Uys, L. R., & Middleton, L. (Eds.). (1997). *Mental health nursing: a South African perspective* (3rd ed.). Kenwyn, South Africa: Juta.
- van Ginneken, N., Tharyan, P., Lewin, S., Rao, G. N., Meera, S. M., Pian, J., ... Patel, V. (2013). Non-specialist health worker interventions for the care of mental, neurological and substance-abuse disorders in low- and middle-income countries. *Cochrane Database Syst Rev*, 11, CD009149. <https://doi.org/10.1002/14651858.CD009149.pub2>

- Vigo, D., Thornicroft, G., & Atun, R. (2016). Estimating the true global burden of mental illness. *The Lancet Psychiatry*, *3*, 171–178. [https://doi.org/10.1016/S2215-0366\(15\)00505-2](https://doi.org/10.1016/S2215-0366(15)00505-2)
- Wagenaar, B. H., Stergachis, A., Rao, D., Hoek, R., Cumbe, V., Napúa, M., & Sherr, K. (2015). The availability of essential medicines for mental healthcare in Sofala, Mozambique. *Global Health Action*, *8*. <https://doi.org/10.3402/gha.v8.27942>
- Wainberg, M. L., Scorza, P., Shultz, J. M., Helpman, L., Mootz, J. J., Johnson, K. A., ... Arbuckle, M. R. (2017). Challenges and opportunities in Global Mental Health: a research-to-practice perspective. *Current Psychiatry Reports*, *19*. <https://doi.org/10.1007/s11920-017-0780-z>
- Ware, J. E., Davies-Avery, A., & Stewart, A. L. (1978). The measurement and meaning of patient satisfaction. *Health & Medical Care Services Review*, *1*(1), 3–15.
- Westaway, M. S. (2003). Interpersonal and organizational dimensions of patient satisfaction: the moderating effects of health status. *International Journal for Quality in Health Care*, *15*, 337–344. <https://doi.org/10.1093/intqhc/mzg042>
- Whiteford, H. A., Ferrari, A. J., Degenhardt, L., Feigin, V., & Vos, T. (2015). The global burden of mental, neurological and substance use disorders: an analysis from the Global Burden of Disease Study 2010. *PLoS ONE*, *10*, e0116820. <https://doi.org/10.1371/journal.pone.0116820>
- Williams, B. (1994). Patient satisfaction: a valid concept? *Social Science & Medicine*, *38*, 509–516.
- World Health Organization. (2000). *Workbook 6: Client satisfaction evaluations*. Geneva: World Health Organization.
- World Health Organization. (2008). *Mental Health Gap Action Programme: scaling up care for mental, neurological, and substance use disorders*. Geneva: WHO Press.



- World Health Organization. (2010). *mhGAP intervention guide for mental, neurological and substance use disorders in non-specialized health settings: version 1.0*. Geneva: World Health Organization.
- World Health Organization. (2011). *Mental health atlas 2011, Malawi, Department of Mental Health and Substance Abuse*. Geneva: World Health Organization.
- World Health Organization. (2015). *Mental health atlas 2014*. Geneva: World Health Organization. Retrieved from [http://apps.who.int/iris/bitstream/handle/10665/178879/9789241565011\\_eng.pdf;jsessionid=BD6FD41598EC4859329DF8631AA95B36?sequence=1](http://apps.who.int/iris/bitstream/handle/10665/178879/9789241565011_eng.pdf;jsessionid=BD6FD41598EC4859329DF8631AA95B36?sequence=1)
- World Health Organization, Department of Mental Health and Substance Abuse. (2008). *Mental Health Gap Action Programme: scaling up care for mental, neurological, and substance use disorders*. WHO Press, Geneva.
- World Health Organization, International Council of Nurses (Eds.). (2007). *Atlas: nurses in mental health 2007*. Geneva, Switzerland: World Health Organization.
- World Health Organization, World Organisation of National Colleges, Academies and Academic Associations of General Practitioners/Family Physicians (Eds.). (2008). *Integrating mental health into primary care: a global perspective*. Wonca, Geneva, Switzerland and London: World Health Organization.
- Wright, J., & Chiwandira, C. (2016). Building capacity for community mental health care in rural Malawi: Findings from a district-wide task-sharing intervention with village-based health workers. *International Journal of Social Psychiatry*, 62, 589–596. <https://doi.org/10.1177/0020764016657112>
- Wright, J., Common, S., Kauye, F., & Chiwandira, C. (2014). Integrating community mental health within primary care in southern Malawi: A pilot educational intervention to

enhance the role of health surveillance assistants. *International Journal of Social Psychiatry*, 60, 155–161. <https://doi.org/10.1177/0020764012471924>

Zendjidjian, X., Auquier, P., Lancon, C., Loundou, A., Parola, N., Faugère, M., & Boyer, L. (2014). Determinants of patient satisfaction with hospital health care in psychiatry: Results based on the SATISPSY-22 questionnaire. *Patient Preference and Adherence*, 8, 1457–1464. <https://doi.org/10.2147/PPA.S67641>

**APPENDICES****Appendix A: Table 4.7 Baseline Results Across CPOSS Scale of Study Participants at Rural (Thyolo) facility**

<b>Item</b>	<b>Excellent</b>	<b>Very good</b>	<b>Good</b>	<b>Fair</b>	<b>Poor</b>
1. Helpfulness of the secretary	32 (29.6%)	63(58.3%)	12(11.1)	1(0.9%)	-
2. Amount of time waiting to be seen	7(6.5%)	31(28.7%)	15(13.9%)	30(27.8%)	25(23.1%)
3. Amount of information given to you about your problem	4(3.7%)	15(13.9%)	14(13%)	27(25%)	48(44.4%)
4. Respect shown for your opinions about treatment	24(22.2%)	36(33.3%)	34(31.5%)	7(6.5%)	7(6.5%)
5. Matching of treatment plan to your individual needs	43(39.8%)	52(48.1%)	13(12%)	-	-
6. Helpfulness of the services you have received	45(41.7%)	47(43.5%)	12(11.1%)	3(2.8%)	1(0.9%)
7. Overall quality of care provided	51(47.2%)	46(42.6%)	7(6.5%)	3(2.8)	1(0.9%)
8 Appearance of the waiting room	26(24.1%)	63(58.3%)	12(11.1%)	7(6.5%)	-
9. Appearance of the office	19(17.6%)	74(68.5%)	11(10.2%)	4(3.7%)	-
10. Office hours	15(13.9%)	70(64.8%)	19(17.6%)	3(2.8%)	1(0.9%)
11. Location of this outpatient service	64(59.3%)	32(29.6%)	11(10.2%)	1(0.9%)	-

**Appendix A: Table 4.8 Baseline Results Across CPOSS Scale of Study Participants at Rural (Thyolo) facility**

<b>Item</b>	<b>Excellent</b>	<b>Very good</b>	<b>Good</b>	<b>Fair</b>	<b>Poor</b>
1. Helpfulness of the secretary	45(41.7%)	53(49.1%)	9(8.3%)	-	1(0.9%)
2. Amount of time waiting to be seen	1(0.9%)	13(12%)	25(23.1%)	48(44.4%)	21(19.4%)
3. Amount of information given to you about your problem	9(8.3%)	32(29.6%)	16(14.8%)	19(17.6%)	32(29.6%)
4. Respect shown for your opinions about treatment	40(37%)	45(41.7%)	22(20.4%)	1(0.9%)	-
5. Matching of treatment plan to your individual needs	47(43.5%)	55(50.9%)	3(2.8%)	3(2.8%)	-
6. Helpfulness of the services you have received	70(64.8%)	29(26.9%)	7(6.5%)	2(1.9%)	-
7. Overall quality of care provided	78(72.2%)	26(24.1%)	3(2.8%)	1(0.9%)	-
8 Appearance of the waiting room	7(6.5%)	71(65.7%)	19(17.6%)	10(9.3%)	1(0.9%)
9. Appearance of the office	16(14.8%)	71(65.7%)	19(17.6%)	2(1.9%)	-
10. Office hours	31(28.7%)	56(51.9%)	14(13%)	7(6.5%)	-
11. Location of this outpatient service	77(71.3%)	18(16.7%)	7(6.5%)	4(3.7%)	2(1.9%)

**Appendix C : Table 4.9** *Unadjusted and Adjusted Associations Between Socio-demographic/Travel/Health Status and Level of Satisfaction by Site*

	Urban Site(QECH)					
	High Satisfaction	Low Satisfaction	Unadjusted		Adjusted	
Item	n (%)	n (%)	OR (95% CI)	p-value	OR (95% CI)	p-value
<b>Gender</b>						
Male	46 (42.5)	9(8.3)	0.65(0.22 - 1.98)	0.45	0.46(0.13 - 1.62)	0.23
Female	47(43.5)	6(5.6)	Ref		Ref	
<b>Age</b>						
18-28	31(28.7)	4(3.7)	1.38(0.41 - 4.67)	0.61	1.48(0.37-5.88)	0.58
29+ and above	62(57.4)	11(10.1)	Ref		Ref	
<b>Marital status</b>						
Married	31(28.7)	5(4.6)	1.00(0.31 - 3.18)	1.01	1.11(0.28 - 4.34)	0.88
Not Married	62(57.4)	10(9.3)	Ref		Ref	
<b>Type of work</b>						
Employed	76 (70.3)	13(12.)	0.69(0.14 - 3.34)	0.64	0.64(0.11-3.68)	0.61
Unemployed	17(15.7)	2(1.8)	Ref		Ref	
<b>Educational level</b>						
No high school	76(70.3)	12(11.1)	1.12(0.28 - 4.40)	0.87	1.04(0.22 - 4.77)	0.97
High school	17(15.7)	3(2.7)	Ref		Ref	
<b>Religion</b>						
Christian	86(79.6)	14(12.9)	0.88(0.10 - 7.69)	0.91	0.79(0.07 - 8.36)	0.84
Other	7(6.4)	1(0.9)	Ref		Ref	
<b>Diagnosis for the participant</b>						
Severe mental Disorder	69(63.8)	11(10.2)	1.05(0.30-3.60)	0.94	0.46(0.04-5.02)	0.52
Epilepsy and CMDs	24(22.2)	4(3.7)	Ref		Ref	
<b>Treatment for the diagnosis</b>						
Antipsychotics and Mood stabilisers	82(75.9)	12(11.1)	1.87(0.45-7.66)	0.39	3.82(0.30-49.17)	0.31
Others	11(10.1)	3(2.7)	Ref		Ref	
<b>Side Effects</b>						
Yes	29(26.8)	5(4.6)	0.91(0.28-2.89)	0.87	0.85(0.25-2.94)	0.81
No	64(59.2)	10(9.2)	Ref		Ref	
<b>Duration of illness</b>						
1 - 6 years	55(50.9)	8(7.4)	1.27(0.42-3.79)	0.67	1.26(0.31-5.14)	0.75

7 and above	38(35.2)	7(6.4)	Ref		Ref	
<b>Any admission due to mental illness</b>						
Yes	61(56.4)	9(8.3)	1.27(0.42-3.89)	0.67	1.21(0.33-4.46)	0.77
No	32(29.6)	6(5.6)	Ref		Ref	
<b>Times seen at the clinic</b>						
Zero to 10	23(21.2)	4(3.7)	0.90( 0.26-3.12)	0.87	0.86(0.14-5.40)	0.87
Over 10	70(64.8)	11(10.1)	Ref		Ref	
<b>If once stopped attending the clinic</b>						
Yes	25(23.1)	3(2.7)	1.47(0.38-5.65)	0.57	1.36(0.31-5.93)	0.69
No	68(62.9)	12(11.1)	Ref		Ref	
<b>Traditional/Spiritual healer consultation</b>						
No	90(83.3)	15(13.8)	-	-	-	-
Yes	3(2.7)	-	-	-	-	-
<b>Distance between home and Clinic</b>						
0-10	31(28.7)	6(5.5)	0.75(0.25-2.30)	0.61	0.85(0.26-2.80)	0.79
>10	62(57.4)	9(8.3)	Ref		Ref	
<b>Mode of transportation to clinic</b>						
Walking	22(20.3)	4(3.7)	0.85(0.25-2.95)	0.81	0.68(0.08-5.55)	0.72
Bicycle/Bus & Vehicle	71(65.7)	11(10.1)	Ref		Ref	
<b>Estimated travel expenditure for clinic visits</b>						
Free	18(16.6)	3(2.7)	0.96(0.25-3.76)	0.95	1.36(0.13-14.50)	0.79
Not free	75(69.4)	12(11.1)	Ref		Ref	

**p < 0.05\*, OR = odds ratio, CI = confidence interval Ref = reference for category**

## Appendix D: Participant Information and Informed Consent



UNIVERSITEIT • STELLENBOSCH • UNIVERSITY  
jou kennisvenoot • your knowledge partner

**Research title** : **An Assessment of user satisfaction with outpatient mental health consultation services from rural and urban areas in southern Malawi**

**Researcher** : **Blessings Chikasema**

**School** : **Stellenbosch University**

**Student Number** : **18918581**

**Contact number** : **(265) 888 533 460 / 888 403 775**

Dear Participant,

You are invited to take part in this mental health research study. I ask you to take time and listen carefully about the information presented here. This explains the details of this study. Where you are not clear, please do not hesitate to ask the person assisting you to clarify the part you do not understand. It is necessary that you fully understand and you are satisfied with what this research study is all about and how you are involved. Remember that your participation is by being systematically selected and you are free to withdraw from the study without being affected in any of the way.

This study was approved by the Research Ethics Committee (REC): Human Research (Humanities) at Stellenbosch University in South Africa and will be conducted according to the ethical guidelines and principles of the South African Guidelines for Good Clinical Practice and the Medical Research Council (MRC) Ethical Guidelines for Research

### **Details about this research**

**Study areas:** Queen Elizabeth Central Hospital and Thyolo District Hospital.

**Aim:** The aim of this study is to evaluate user satisfaction with out-patient mental health consultation services in Blantyre and Thyolo district. The results from this study may be used to improve mental health services of your clinic.

**Selection:** All patients receiving outpatient mental health care from Queen Elizabeth Central Hospital and Thyolo District Hospital are eligible within the desirable age of 18 and above and capable of giving consent to participate in the study. You are asked to enroll in the study because you are one of the patients receiving care from this clinic and you have been systematically sampled from the population. The required sample size is 108 for each facility.

**Responsibility:** You have the responsibility to provide information by answering questions.

**Risks:** There are no foreseeable risks to you since the study only involves interviews and no invasive procedures are involved. However, there may be negative labeling post data collection when the findings of the study are presented to various stakeholders, if the results should indicate large scale dissatisfaction with mental health services. As a user in the clinic you will be assisted through group counselling sessions within the clinic during your clinic appointment days. You will also be educated on patient's rights in health care system according to patient's charter for Malawi.

Health workers and various stakeholders will be psychologically prepared before dissemination of results in order to assist the positive uptake of this research results. Clinic health workers will also be involved in separate counselling sessions to avoid negative labeling of service user's post data collection. The counsellor will assist the clinic health workers to absorb the results in a positive manner and address the needs of service users depending on the feedback given. The health workers will also be reminded about their rights and patients rights according to patient charter for Malawi through training sessions.

**Benefits:** There are no special benefits to you. However, the management of the facilities will get the final report and be able to identify which areas they need to improve in response to your views in this study. The findings could be beneficial to future patients.

**Confidentiality:** Anonymity and confidentiality will be maintained at all times. No names will be required at any stage during the research. The study number will not be linked back to the participant. Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission



or as required by law. You will be interviewed separately from other users in a private room. You are required to give your personal details. You will be given a code so that information cannot be traced by anybody except the researcher. Raw data will only be accessible to the researcher and the research supervisors which will be kept in the researchers office locker that will be locked at all times.

Raw data entered into SPSS version 22 will only be accessible to the researcher and the supervisor in a password protected computer and file that will not be left open when the researcher/supervisor moves away from the computer.

In addition, the findings will be reported as group results, in order to protect any identifying information. After a period of 6 months post data collection the questionnaires will be destroyed while data in the computer will be destroyed at 36 months.

**Compensation:** No compensation is available for your time and any inconvenience but we are very grateful to you for taking part in this study.

**Participation:** Participants in this study are systematically sampled from the population. However, you have the right to refuse to take part and withdraw at any point without any penalty.

**Costs :** There are no costs that you you will encounter while participating in this study.

**Procedure:** If you consent for this study, you are required to attend the interview that has two sections. You are asked questions pertaining to your personal details then your feelings and experiences about the outpatient mental health services for the clinic you are receiving care

### **Is there anything to do or know?**

If you have any questions now please feel free to ask me. In case you have any later on, you can contact the researcher, **Blessings Chikasema**, on the mobile number - **+265 888 533 460**. If you have any concerns that the researcher has not fully addressed in the study, you may not hesitate to contact the following;

- Professor Mark Tomlinson ([markt@sun.ac.za](mailto:markt@sun.ac.za)) of Stellenbosch University.
- Dr Jen Ahrens (College of Medicine, Malawi) Email: [jen.ahrens@me.com](mailto:jen.ahrens@me.com) Cell: (+265) 994 495 253

- Ms Clarissa Graham ([cgraham@sun.ac.za](mailto:cgraham@sun.ac.za); 021 808 9183) of Stellenbosch University.
- Ms Clarissa Graham, The Administrative Officer, [cgraham@sun.ac.za](mailto:cgraham@sun.ac.za) **Tel: 021 808 9183**, Research and Ethics committee, Division for Research Development.
- The Chairperson, National Research Council of Malawi ([nrcm@sdp.org.mw](http://nrcm@sdp.org.mw)) (+265) 01 771550 / 01 774869.

**Declaration by participant**

I ..... have read the information and agree to involve myself in this research study entitled (An Assessment of users’ satisfaction with out-patient mental health consultation services).

**I declare that:**

- I have read or the researcher has read to me this information and consent form and I fully understand the information.
- I have a chance to ask questions pertaining to my involvement and the research study and I have been adequately answered.
- I fully realise that I am voluntarily taking part in this study without any pressure after being systematically sampled.
- I know I have the freedom to withdraw from the study at any time and I will not receive any penalty or prejudiced in any way.
- I understand that the researcher may ask me to leave the study before it has finished, if the researcher feels it is in my best interests, or if I do not follow the study procedure , as agreed to.

Signed at (*place*) ..... On (*date*) ..... 2015.

.....  
Signature of participant or Thumb print (if illiterate)

.....  
Signature of witness

**Declaration by investigator**

I ..... declare that:

- I have explained the research study information in this document to.....
- I encourage the participant to ask questions and take adequate time to answer them.
- I am satisfied that the participant adequately understands all aspects of the research, as discussed above.
- I did/did not use an interpreter /witness. (If an interpreter/witness is used then the interpreter must sign the declaration below.)

Signed at (*place*) ..... On (*date*) .....  
2015.

.....  
Signature of investigator

.....  
Signature of Interpreter / witness

**Appendix E: Questionnaires (Socio–demographic details and CPOSS)****English and Chichewa version****PART I : SOCIO–DEMOGRAPHIC DETAILS****CODE NUMBER: TDH/QECH : \_\_\_\_\_**

1. How old are you?  18 – 28  29 and above
2. Gender  Male  Female
3. Marital Status?  Married  Not married
4. Work?  Employed  Unemployed
5. Level of education?  Completed high school  Did not complete high school
6. Religion?  Christianity  Others
7. Distance between home and clinic you normally attend?  0 – 10  Above 10
8. Method of transport to clinic?  Walk  Bicycle  Bus  Own Motorcycle/ Motor vehicle.
9. Estimated expenditure at the clinic visit (MWK)  Free  Not free
10. Apart from psychotropic medications you are taking, are you consulting any traditional healers or spiritual advisors concerning your illness?  Yes  No
11. Is there a time you stopped coming to your clinic?  Yes  No

**PHYSICAL HEALTH FROM HEALTH PASSPORT/CLINIC BOOK**

12. How many times has the participant seen at the clinic?  0 – 10  Above 10
13. Duration of illness?  1- 6  7 and above

What is the diagnosis for the participant?

- Severe mental disorder  Epilepsy and other CMD's

14. Treatment for the diagnosis?  Antipsychotics and Mood Stabilizers  Others

15. Any side effects with the treatment?    Yes            No

16. Has the participant being admitted before due to mental illness?     Yes   No

**PART II : CHARLESTON PSYCHIATRIC OUTPATIENT SATISFACTION SCALE  
(CPOSS)**

Your opinions about the clinic services are very important. Please give your honest opinions on each question, but do not give your name. Please rate each item on the following scale: **EXCELLENT, VERY GOOD, GOOD, FAIR, & POOR**. If an item does not apply to you, circle **DOES NOT APPLY (N/A)**.

	<b>EXCELLENT</b>	<b>VERY GOOD</b>	<b>GOOD</b>	<b>FAIR</b>	<b>POOR</b>	<b>(N/A)</b>
1. Helpfulness of the secretary	5	4	3	2	1	N/A
2. Amount of time waiting to be seen	5	4	3	2	1	N/A
3. Amount of information given to you about your problem	5	4	3	2	1	N/A
4. Respect shown for your opinions about treatment	5	4	3	2	1	N/A
5. Matching of treatment plan to your individual needs	5	4	3	2	1	N/A
6. Helpfulness of the services you have received	5	4	3	2	1	N/A
7. Overall quality of care provided	5	4	3	2	1	N/A
8. Appearance of the waiting room	5	4	3	2	1	N/A
9. Appearance of the office	5	4	3	2	1	N/A
10. Office hours	5	4	3	2	1	N/A

11. Location of this outpatient service	5	4	3	2	1	N/A
---	---	---	---	---	---	-----

12. Would you recommend this program to a friend or family member? (**Circle one**).

- a) Yes definitely.
- b) Yes probably.
- c) No, probably not.
- d) No, definitely not.

Scoring the Charleston Psychiatric Outpatient Satisfaction Scale (CPOSS).

- Items 1 through 14 are scored using the following 5-point scale:  
5 = Excellent      4 = Very good      3 = Good      2 = Fair      1 = Poor
- Item 15 is scored using the following 4-point scale: 4 = Yes, definitely 3 = Yes, probably 2 = No, probably not 1 = No, definitely not. The scale is scored by summing the scores of all individual items except the anchor items (items 8 and 15). The possible range is 13 to 65.



UNIVERSITEIT•STELLENBOSCH•UNIVERSITY  
jou kennisvenoot • your knowledge partner

---

**Mutu wa kafukufuku: Kauniuni wa kakhutitsidwe ka chithandizo chomwe anthu odwala matenda a okhudza bongo ochokera ku mudzi ndi ku tawuni amalandira m’chigawo cha kummwera kwa Malawi.**

**Wochita kafukufuku : Blessings Chikasema**

**Sukulu : Stellenbosch University**

**Nambala ya wophunzira : 18918581**

**Manambala a lamyā : +265 (0) 888 533 460 / 888 403 775**

Wokondedwa Wotengambali,

Mukupemphedwa kutenga nawo mbali m’kafukufuku uyu yemwe ndi wokhudza matenda okhudza bongo.Ndikukupemphani kupereka nthawi yanu komanso kukhala tcheru pakumvetsera uthenga womwe uperekedwe m’kafukufukuyu. Uthengawu ukufotokozera tsatanetsatane wa kafukufukuyu. Pamene simukumvetsetsa, funsani amene akukuthandizani kuti afotokozere gawo lomwe simukumvetsalo.Nkofunika kuti mumvetsetse kwathunthu komanso mukhutire ndi zimene kafukufukuyu akufuna kupeza ndi mmene mukukhudzidwira.Kumbukirani kuti kutenga nawo gawo m’kafukufukuyu mwachita kusankhidwa ndipo muli ndi ufulu wolekera panjira popanda vuto lililonse.

Kafukufukuyu ndi wovomerezedwa ndi komiti yowona za kafukufuku ya Research Ethics (REC) m’nthambi ya kafukufuku (Human Research – Humanities) pa sukulu ya ukachenjede

ya Stellenbosch ndipo kafukufukuyu achitika motsatira malamulo ndi ndondomeko za International Declaration of Helsinki (2013), ndondomeko za umoyo wabwino za ku South Africa komanso ndondomeko za kafukufuku za Medical Research Council (MRC).

### **Tsatanetsatane wa kafukufuku**

**Malo ochitikira kafukufuku:** Kafukufukuyu achitidwa pa chipatala chachikulu cha Queen Elizabeth ndi chipatala cha pa boma cha Thyolo.

**Cholinga:** Cholinga cha kafukufukuyu ndi kuzukuta kakhutitsidwe ka anthu ka mmene amalandirira chithandizo chokhudza matenda okhudza bongo mosagonetsedwa kuchipatala m'maboma a Blantyre ndi Thyolo. Zotsatira za kafukufukuyu zikhoza kugwiritsidwa ntchito kuthandiza kupititsa patsogolo chithandizo cha matenda a misala m'chipatala cha kwanu.

**Kasankhidwe:** Odwala onse amene akulandira chithandizo cha matenda a misala m'zipatala za Queen Elizabeth ndi Thyolo amene ali ndi zaka zosachepera 18 komanso amene ndi okwanitsa kupereka maganizo awo m'kafukufukuyu. Mwafunsidwa kutenga nawo gawo m'kafukufukuyu chifukwa ndinu mmodzi mwa odwala amene mukulandira chithandizochi m'zipatalazi ndipo mwasankhidwa mwa ukadaulo kuchokera m'gulu la anthu ambiri. Kuchuluka kwa anthu amene akufunika ndi 108 kuchokera pa chipatala chilichonse mwa zipatala ziwirizi.

**Udindo:**Muli ndi udindo wopereka mayankho ofunika poyankha mafunso amene mufunsidwe.

**Chiopsyezo:** Palibe chiopsyezo china chilichonse popeza kafukufukuyu akungokufunsa mafunso komanso palibe njira zoopsya zachipatala zomwe zikugwilitsidwa ntchito. Komabe patha kudzakhala kusalidwa ndi akuluakulu a zipatala ngati zotsatira za kafukufukuyu adzaonetse kusakhutira kwambiri ndi chithandizo cha matenda okhudza bongo chomwe



chikupelekedwa. Inu ngati othandizidwa pa chipatalachi mudzalandira uphungu woyenera panthawi zimene mukubwera kuchipatala kudzaonana ndi madokotala. Mudzaphunzitsidwanso za ufulu wakuchipatala womwe muli nao molingana ndi ufulu wa odwala mu ndondomeko zoyendetsera ntchito za umoyo dziko la Malawi.

akuluakulu a zipatala komanso othandiza ntchito zachipatala adzalandira uphungu woyenera kuti alandire zotsatira za kafukufukuyu munjira mwaubwino. Madokotala othandiza anthu pa matenda okhudza bongo adzalandira uphungu mwa padera pofuna kuchepetsa chotonzo chomwe odwala angalandire kamba zotsatira za kafukufukuyi ngati odwala angadzakhale osakhutitsidwa ndi chithandizo. Aphungu adzathandinza madokotala kuti avomeleze zotsatirazi mwa ubwino komanso kuyesa kukonza zina zosowa za odwala pachitalapa malinga ndi kafukufukuyi. Madokotala apa chipatalachi adzaphunzidwa za ufulu wawo ngati ogwira ntchito za umoyo komanso ufulu wa odwala malinga ndi ndondomeko zoyendetsera ntchito za umoyo za dziko la Malawi.

**Phindu:** Sipakhala phindu lolozeka kwa inu. Komabe, akuluakulu a zipatala adzalandira lipoti la kafukufukuyu ndipo adzatha kudziwa madera ofunika kuwakonza malinga ndi maganizo omwe mupereke. Zotsatitazi zidzakhala za phindu kwa odwala ena mtsogolomu.

**Chinsinsi:** Chinsinsi pofunsiidwa mafunso komanso popereka mayankho chidzasungidwa. Dzina lanu silidzafunika penapaliponse mukafukufukuyu. Uthenga uliwonse umene udzapezedwa mogwirizana ndi kafukufukuyu umene udzakhale wolumikizana ndi inu udzasungidwa mwachinsinsi ndipo udzaululidwa pokhapokha mutapereka chilolezo kapena mogwirizana ndi malamulo. Mudzafunsiidwa mafunso panokha m'chikachipinda komata. Mukufunsiidwa kunena mbiri yanu komanso mupatsidwa nambala ya chinsinsi ndi cholinga choti uthenga womwe mupereke usadziwike ndi ena kuti ndi wanu kupatula wofunsa mafunso. Uthenga womwe upezedwe udzapekedwa kwa ochita kafukufuku okha ndipo

mayina sadzaululidwa kwa aliyense. Kuonjezera apo, zotsatira zidzaperekedwa m'magulu, ndi cholinga choteteza mayankho omwe mupereke. Pakutha pa miyezi isanu ndi umodzi mayakho anu apa pepala adzaonongedwa komanso mayakho anu amene adzasungidwe mu makina a kompyuta adzafufutidwa pakutha pa zaka zitatu.

**Chipepeso:** Sipakhala kupepesedwa kwina kuli konse chifukwa cha nthawi yanu komanso chifukwa chokusononezani koma tikukuthokozani chifukwa chotenga nawo gawo m'kafukufukuyu.

**Kutenga gawo:** Kutenga gawo m'kafukufukuyu nkochita kusankhidwa mwa ukadaulo kuchokera m'chigulu cha anthu ambiri. Komabe, muli ndi ufulu wokana kutenga nawo gawo kapena kusiyira panjira kutenga nawo gawo popanda mlandu uliwonse.

**Malipiro:** Palibe malipiro aliwonse mupereke ngati muvomere kutenga gawo m'kafukufukuyu.

**Ndondomeko:** Ngati muvomera kuchita nawo kafukufukuyu, mukufunsidwa kukhala nawo pa gawo la mafunso lomwe lili m'zigawo ziwiri. Mufunsidwa mafunso okhudza mbiri yanu kenako maganizo anu komanso zomwe mwakhala mukukumana nazo zokhudza chithandizo cha matenda a misala chomwe mukulandira.

### **Kodi pali zina zoti muchite kapena zoti mudziwe?**

Ngati muli ndi funso chonde khalani womasuka kundifunsa. Ngati mungakhale ndi funso m'tsogolomu mukhoza kulumikizana ndi wochita kafukufuku, **Blessings Chikasema**, pa nambala ya lamyayi: **+265 888 533 460**.

Ngati mungakhale ndi chidandaulo chomwe wochita kafukufuku walephera kukuthandizani, musakayike kulumikizana ndi awa:

- Prof Mark Tomlinson, ([markt@sun.ac.za](mailto:markt@sun.ac.za)) ; ku sukulu ya ukachenjede ya Stellenbosch.
- Dr Jen Ahrens (College of Medicine, Malawi) Email: [jen.ahrens@me.com](mailto:jen.ahrens@me.com) Cell: (+265) 994 495 253.
- Ms Clarissa Granham ([cgranham@sun.ac.za](mailto:cgranham@sun.ac.za); 021 808 9183) ku sukulu ya ukachenjede ya Stellenbosch.
- Ms Malene Fouche ([mfouche@sun.ac.za](mailto:mfouche@sun.ac.za); 021 808 4622) ku nthambi yowona za kafukufuku.
- Wapampando wa bungwe la National Research Council of Malawi ([nrcm@sdp.org.mw](mailto:nrcm@sdp.org.mw)) (+265) 01 771550 / 01 774 869

### **Chivomerezo cha wotenga mbali**

Ine ..... ndawerenga uthenga wonse ndipo ndikuvomera kutenga gawo m’kafukufuku yemwe mutu wake ndi (Kauniuni wa kakhutitsidwe ndi chithandizo cha matenda okhudza bongo chomwe anthu amalandira ku chipatala mosagonetsedwa).

### **Ndikuvomereza kuti:**

- Ndawerenga kapena wochita kafukufuku wandiwerengera uthenga wonse ndipo ndaumvetsa bwino.
- Ndili ndi mwayi wofunsa mafunso okhudza kutenga gawo kwanga ndipo ndayankhidwa mokwanira.
- Ndikudziwa kwathunthu kuti ndikutenga gawo m’kafukufukuyu mwakufuna kwanga popanda kukakamizidwa kulikonse posankhidwa.

- Ndikudziwa kuti ndili ndi ufulu wolekera panjira kutenga nawo gawo m'kafukufukuyu nthawi ina iliyonse ndipo sindidzalandira chilango kapena kuopsezedwa m'njira iliyonse.
- Ndikudziwa kuti wochita kafukufuku akhoza kundiuza kuti ndisiye mafunso asanathe, ngati wochita kafukufuku awona kuti ndi zothandithandiza, kapena ngati sindikutsatira ndondomeko ya kafukufuku, monga tagwirizirana.

Kusainidwa pa (malo) ..... Pa (tsiku) ..... 2015.

.....

Saini ya wofunsidwa mafunso kapena kudinda ndi chala (ngati satha kulemba)

..... Saini ya mboni

### **Kuvomereza kwa wochita kafukufuku**

Ine ..... ndikuvomereza kuti:

- Ndafotokoza uthenga wa m'kafukufuku uyu kwa .....
- Ndalimbikitsa wotenga gawo m'kafukufuku kufunsa mafunso ndipo ndatenga nthawi yokwanira kuwayankha.
- Ndakhutitsidwa kuti wotenga gawo womvetsetsa bwino magawo onse a kafukufukuyu, monga zafotokozedwa pamwambapa.
- Ndagwiritsa/sindinagwiritse ntchito wothanthauzira/mboni. (Ngati wothanthauzira/mboni yagwiritsidwa ntchito akuyenera kusainira pansipa.)

Kusainira pa (malo) ..... Pa (tsiku) ..... 2015.

.....

.....

Saini ya wochita kafukufuku

Saini ya wothanthauzira/mboni

**Mafunso (Tsatanetsane wokhudza kaonetsedwe ka matenda komanso CPOSS)**

**GAWO I: TSATANETSATANE WOKHUDZA KAONETSEDWE KA MATENDA**

NAMBALA YA CHINSINSI: **TDH/QECH** \_\_\_\_\_

1. Zaka?  18 – 28  29 –komanso kuposera apo.
2. Kudziwika kwanu?  Mwamuna  Mkazi
3. Wapabanja?  Wokwatira/wokwatiwa  Wosakwatiwa/Wosakwatira
4. Ntchito?  Wapantchito  Wosakhala pantchito
5. Mudaphunzira?  Ndidafika ku sekondale  Sindidafike kusekondale
6. Chipembezo?  Mkhirisitu  Zina
7. Kutalika kwa ulendo wochokera kunyumba kwanu kupita kuchipatala?  
 Pakati pa 1 ndi 10 km  Kupitirira 10 km
8. Njira yomwe mumagwiritsa ntchito popita kuchipatala?  Kuyenda  Njinga  Basi   
Njinga yanga yamoto/ galimoto yanga
9. Chiyerekezo cha ndalama zomwe zimagwiritsidwa ntchito kupita kuchipatala (MWK)  
 Ndimalipira  Sindimalipira
10. Kupatula kulandira chithandizo cha matenda okhudza bongo cha kuchipatala,  
mukulandiranso chithandizo chokhudza matenda anu kuchokera kwa asing'anga  
kapena a mizimu?  Inde  Ayi

**NTHANZI LA MUNTHU KUCHOKERA M'BUKU LA KUCHIPATALA**

11. Kodi wodwala wakhala akubwera kuchipatala nthawi yaitali bwanji?  
 1 – 10  kupitirira ka 10.
12. Nthawi yomwe munthu wakhala akudwala?  Zaka za pakati pa 1 ndi 6  Kupitirira  
zaka 7

13. Kodi chidayambitsa matenda n'chiyani?  Mpatuko m'maganizo ndi Zilubwelubwe  
 Khunyu komanso mpatuko pa maganizo
14. Chithandizo cha nthenda?  Chithandizo cholimbana ndi kusokonekera kwa bongo   
 Chithandizo chokhazikitsa pansi makhalidwe  Chithandizo cholimbana ndi  
 kusokonekera kwa bongo pamodzi ndi kukhazikitsa pansi makhalidwe  Chithandizo  
 choletsa kukhumudwa  Chithandizo china.
15. Kodi padali mavuto ena chifukwa cha chithandizochi?  Inde  Ayi
16. Kodi wotenga gawo adagonetsedwapo chifukwa cha nthenda ya kusokonezeka  
 bongo?  Inde  Ayi.

**GAWO II: SIKELO YOYETSERA ANTHU OZUNGUZIKA BONGO  
 (CHARLESTON PSYCHIATRIC OUTPATIENT SATISFACTION SCALE – CPOSS)**

Maganizo anu okhudza ife ndi ofunikira kwambiri. Chonde perekani maganizo owona pa funso lililonse, koma musapereke dzina lanu. Chonde ikani yankho lililonse pa sikelo iyi:

**KOPOSA, BWINO KWAMBIRI, BWINO, BWINO PANG'ONO, LEPHERA.** Ngati pali yankho loti silukukhudzani, zunguzani **SIZIKUNDIKHUDZA (N/A)**.

	<b>KOPOSA</b>	<b>BWINO KWAMBIRI</b>	<b>BWINO</b>	<b>BWINO PANG'ONO</b>	<b>LEPHERA</b>	<b>SIZIKUNDIKHUDZA(N/A)</b>
1. Kuthandiza kwa mlembi	5	4	3	2	1	N/A
2. Kuchuluka kwa nthawi yodikirira kuwonedwa	5	4	3	2	1	N/A
3. Kuchuluka kwa mfundo zomwe mumapatsidwe zokhudza	5	4	3	2	1	N/A

vuto lanu						
4. Kulemekezedwa kwa maganizo anu pa chithandizo	5	4	3	2	1	N/A
5. Kugwirizana kwa ndondomeko ya chithandizo ndi zokhumba zanu	5	4	3	2	1	N/A
6. Kuthandiza kwa chithandizo chomwe mudalandira	5	4	3	2	1	N/A
7. Kuchuluka kwa ubwino wa chisamaliro chomwe mudalandira	5	4	3	2	1	N/A
8. Maonekedwe a chipinda chodikiriramo	5	4	3	2	1	N/A
9. Maonekedwe a ofesi	5	4	3	2	1	N/A
10. Nthawi yotsekula ofesi	5	4	3	2	1	N/A
11. Malo opezeka chithandizo cha anthu osagonetsedwa	5	4	3	2	1	N/A

12. Kodi mukhoza kuuza mnzanu kapena mnansi mutsatira ndondomeko imeneyi?  
(Zunguzani chimodzi)

- a) Inde mosachotsera
- b) Inde
- c) Ayi
- d) Ayi, mosachotsera


Kuchonga sikelo ya Charleston Psychiatric Outpatient Satisfaction Scale (CPOSS)

- Mafunso 1 mpaka 14 achongedwa potsatira sikelo ya ngodya zisanu iyi:  
5 = Koposa    4 = Bwino Kwambiri    3 = Bwino    2 = Pang'ono    1 = Kulephera

- Funso nambala 15 lachongedwa potsatira sikelo ya ngodya zinayi izi: 4 = Inde, mosachotsera 3 = Inde 2 = Ayi 1 = Ayi, mosachotsera. Sikeloyi ikuchongedwa powonkhetsa pamodzi mafunso onse kupatula mafunso apawokha ( mafunso 8 ndi 15). Mndandanda woyembekezeka ndi wapakati pa 13 ndi 65.



## Appendix F: Research Assistant Confidentiality Agreement Form



UNIVERSITEIT • STELLENBOSCH • UNIVERSITY  
jou kennisvennoot • your knowledge partner

**RESEARCH ASSISTANT CONFIDENTIALITY AGREEMENT**

**PROJECT TITLE: An Assessment of users' satisfaction with outpatient mental health consultation services from rural and urban areas in southern Malawi.**

I, \_\_\_\_\_ (Name of research assistant), agree to assist the primary investigator (**Blessings Chikasema, Student ID# 18918581**) in this study. I agree to maintain full confidentiality and anonymity during data and post data collection for the above project.

Specifically, I agree to the following statements by checking them;

- ( ) I will keep all research information shared with me confidential by not discussing or sharing the information in any form or format (e.g. photocopied questionnaires) with anyone other than the primary investigator;
- ( ) I will hold in strictest confidence the identification of any individual that may be mistakenly revealed during the course of data collection;
- ( ) I will permanently delete any communication made (e.g. SMS, Email) containing raw data after my tasks are completed;
- ( ) I will submit all completed and uncompleted questionnaires to the primary investigator soon after data is collected from the subjects.

Research Assistant (**full name in bold**) \_\_\_\_\_

Contact number : \_\_\_\_\_

Signature : \_\_\_\_\_ Date: \_\_\_\_\_


Primary Investigator : **Blessings Chikasema: Student ID# 18918581**

**Contact number** : +265 (0) 888 403 775 / 888 533 460

**Signature** :  **Date:** 14<sup>TH</sup> JUNE, 2015.

**Note:** The Research Assistant will be given a copy of this form to retain for her/his records.

## Appendix G: Stellenbosch University Research Ethics Committee Human Research (Humanities) Approval Notice

  
UNIVERSITEIT-STELLENBOSCH-UNIVERSITY  
jou kennisvenoot • your knowledge partner

**Approval Notice**  
Stipulated documents/requirements

30-Aug-2015  
Chikasema, Blessings B

**Proposal #:** HS1179/2015

**Title:** An assessment of users' satisfaction with out-patient mental health consultation services from rural and urban areas in Southern Malawi.

Dear Mr Blessings Chikasema,

Your Stipulated documents/requirements received on 08-Jul-2015, was reviewed by members of the Research Ethics Committee: Human Research (Humanities) via Expedited review procedures on 30-Aug-2015 and was approved.

Sincerely,

Clarissa Graham  
REC Coordinator  
Research Ethics Committee: Human Research (Humanities)

I will hold in strictest confidence the identification of any individual that may be mentioned revealed during the course of data collection.

I will permanently delete any communication made (e.g. SMS, Email) containing raw data after my tasks are completed.

I will submit all completed and uncompleted questionnaires to the primary investigator soon after data is collected from the subjects.

Research Assistant (Full name in bold)

Contact number

Signature

Date

Primary Investigator: Blessings Chikasema: Student ID# 18918581


Contact number: +265 (0) 888 401 775 / 898 533 460

Signature

Date: 14<sup>th</sup> JUNE 2015

Note: The Research Assistant will be given a copy of this form to retain for his/her records.

## Appendix H: Queen Elizabeth Central Hospital Approval Letter

Telephone: (265) 01 874 333 /877 333 Facsimile: (265) 01 876928 Email: <a href="mailto:queenshosp@qchcmw.net">queenshosp@qchcmw.net</a>		To reply please quote <b>No. QECH/GEN/2</b>
All communications should be addressed to: The Hospital Director		QUEEN ELIZABETH CENTRAL HOSPITAL P.O. BOX 95 BLANTYRE MALAWI

8<sup>th</sup> April, 2015

Mr Blessings Chikasema  
Malamulo College of Health Sciences  
P.O. Box 55  
Makwasa  
**THYOLO**

Dear Sir/Madam


**PERMISSION TO CONDUCT RESEARCH STUDY AT QECH - BLESSINGS CHIKASEMA**

I refer to your letter dated 31<sup>st</sup> March 2015 in which you are requesting to conduct a research study titled "**An Assessment of Users' satisfaction with outpatient mental health consultation services from rural and urban areas in Southern Malawi**".

I wish to inform you that permission has been granted for you to carry out a research study at Psychiatric Unit.

I wish you all the best in your endeavors.

Yours faithfully

  
T.N. Soko  
**FOR :HOSPITAL DIRECTOR**

## Appendix I: Thyolo District Hospital Endorsement Letter

Telephone: + 265 1 473 411  
Facsimile: + 265 1 473 409

All Communications should be addressed to:  
The District Health Officer.



In reply please quote No.TDH/  
Ministry of Health,  
Thyolo District Hospital,  
P.O. Box 21,  
Thyolo.

7<sup>th</sup> April, 2015

The Chair person,  
National Health Sciences Research and Ethics Committee  
Lilongwe.

**RE: INSTITUTIONAL ENDORSEMENT**

Thyolo District Health Office do certify that we have reviewed the research proposal titled "An assessment of users' satisfaction with outpatient mental health consultation services from rural and urban areas in southern Malawi" submitted by Blessings Chikasama. We attest to the practical merit of the study and the competency of the investigator to conduct the project and do hereby recommend the proposal to the NISRC for scientific and ethical review and approval.

K. K. Kanyimbo

**Institutional Representative**



**District Medical Officer**



## Appendix J: National Health Science Research Committee Approval Letter

Telephone: + 265 789 400  
Facsimile: + 265 789 431  
e-mail [mohdoccentre@gmail.com](mailto:mohdoccentre@gmail.com)  
**All Communications should be addressed to:  
The Secretary for Health**



*In reply please quote No. MED/4/36c*

MINISTRY OF HEALTH

P.O. BOX 30377

LILONGWE 3

MALAWI

28th September 2015

Blessings Chikasema  
Stellenbosch University

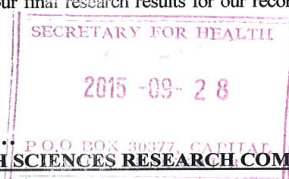
Dear Sir/Madam,

**Re: Protocol # 15/9/1489: An assessment of users' satisfaction with outpatient mental health consultation services from rural and urban area in southern Malawi**

Thank you for the above titled proposal that you submitted to the National Health Sciences Research Committee (NHSRC) for review. Please be advised that the NHSRC has reviewed and **approved** your application to conduct the above titled study.

- **APPROVAL NUMBER** : NHSRC # 15/9/1489  
The above details should be used on all correspondence, consent forms and documents as appropriate.
- **APPROVAL DATE** : 28/9/2015
- **EXPIRATION DATE** : This approval expires on 28/09/2016  
After this date, this project may only continue upon renewal. For purposes of renewal, a progress report on a standard form obtainable from the NHSRC secretariat should be submitted one month before the expiration date for continuing review.
- **SERIOUS ADVERSE EVENT REPORTING** : All serious problems having to do with subject safety must be reported to the National Health Sciences Research Committee within 10 working days using standard forms obtainable from the NHSRC Secretariat.
- **MODIFICATIONS**: Prior NHSRC approval using standard forms obtainable from the NHSRC Secretariat is required before implementing any changes in the Protocol (including changes in the consent documents). You may not use any other consent documents besides those approved by the NHSRC.
- **TERMINATION OF STUDY**: On termination of a study, a report has to be submitted to the NHSRC using standard forms obtainable from the NHSRC Secretariat.
- **QUESTIONS**: Please contact the NHSRC on Telephone No. (01) 789314, 0888344443 or by e-mail on [mohdoccentre@gmail.com](mailto:mohdoccentre@gmail.com)
- **Other**:  
Please be reminded to send in copies of your final research results for our records as well as for the Health Research Database.

Kind regards from the NHSRC Secretariat.



**PROMOTING THE ETHICAL CONDUCT OF RESEARCH**  
Executive Committee: *Dr. B. Chilima (Chairman), Prof. E. Molyneux (Vice Chairperson)*  
Registered with the USA Office for Human Research Protections (OHRP) as an International IRB  
(IRB Number IRB00063905 FWA00005976)