

**PREVALENCE OF PSYCHIATRY AND OTHER SUBSTANCE USE DISORDERS
AMONG HEROIN USERS ON METHADONE MAINTENANCE THERAPY (MMT) AT
NGARA CLINIC, NAIROBI COUNTY.**

**A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE AWARD OF A MASTER OF SCIENCE DEGREE IN CLINICAL
PSYCHOLOGY AT THE UNIVERSITY OF NAIROBI.**

BY


JOSEPH MURITHI KATHONO

REG. NUMBER- H56/8450/2017

YEAR- 2022.

DECLARATION

I Joseph Kathono do declare that this thesis is my original work and has not been presented for the award of a degree at any other university.

Signature  _____

Date 05/05/2022


Name= Joseph Kathono.

Reg. Number- H56/8450/2017.

APPROVAL OF SUPERVISORS

This thesis has been submitted for examination with our approval as the University Supervisors;

Dr. Fredrick Owiti, MBchB (UoN), MRCPsych.(London).

Signature  _____ Date 05/05/2022 _____

Dr. Lincoln Khasakhala, MBchB, MSc. Cl. Psych., Ph.D. (UoN).

Signature  _____ Date 05/05/2022 _____

For Dr. Lincoln Khasakhala, MBchB, MSc. Cl. Psych., Ph.D. (UoN).

DEDICATION

I dedicate this research to the almighty God for protection throughout my project. A special dedication to my loving Parents, the late Sebastian Kathonu and Margaret Karia for their encouragement and inspiring words throughout my studies.

Sincere dedication to my wife and children for being a primary source of strength and motivation throughout my studies.

ACKNOWLEDGEMENT

It's a pure genuine pleasure to express my deep gratitude and thanks to my Supervisors Dr. Lincoln Khasakhala- DECEASED (RIP) and Dr. Fredrick Owiti for always being there to support me and uncountable encouragement to soldier on and finalize my thesis.

I wish also to acknowledge the mentorship offered by Dr. Manasi Kumar and Professor Muthoni Mathai.

Sincere thanks to the Ngara Methadone Clinic staff, my friends, and my classmate Simeon Kintu for helping me along the way.

TABLE OF CONTENTS

DECLARATION	i
APPROVAL OF SUPERVISORS	ii
DEDICATION	iii
ACKNOWLEDGEMENT	iv
TABLE OF CONTENTS.....	v
List of Figures.....	viii
List of Tables	ix
LIST OF ABBREVIATIONS.....	x
CHAPTER ONE:.....	1
1.0 INTRODUCTION AND BACKGROUND OF STUDY	1
1.1 Introduction.....	1
1.2 Background of the Research	1
1.3 Statement of the Problem	3
1.4 Research Questions	4
1.4.1 General Question.....	4
1.4.2 Specific Questions.....	4
1.5 Objectives of Study	4
1.5.1 Broad Objective	4
1.5.2 Specific Objectives	4
1.6 Justification of Study	5
CHAPTER TWO: LITERATURE REVIEW	6
2.1 Introduction.....	6
2.2 Theoretical Review	6
2.3 Prevalence and Patterns of Psychoactive Substance Use- Global Trends.....	7
2.4 Psychological Factors Associated with Problematic Drug Use	8
2.5 Prevalence and Patterns of Drugs and Substance Use in Kenya.....	10
2.6 Theoretical Framework	10
2.7 Conceptual Framework	11
CHAPTER THREE:	13
3.0 Methodology.....	13
3.1 Research Design	13

3.2 Study Variables.....	13
3.3 Study Area	13
3.4 Study Population.....	14
3.4.1 Inclusion Criteria.....	14
3.4.2 Exclusion Criteria	14
3.5 Sample size Determination	14
3.6 Sampling Frame.....	16
3.7 Data Collection Procedures.....	16
3.8 Flow Chart of the Data Collection Process	17
3.9 Data Collection Tools	17
3.10 Data management and Analysis	18
3.11 Dissemination of Results and Findings	18
3.11 Reliability and Validity Indices.....	19
3.12 Ethical Considerations	19
3.13 Projected Risks	20
3.14 Limitations of Study.....	20
CHAPTER FOUR: RESULTS	21
4.1 Introduction.....	21
4.1.1 Response Rate.....	21
4.2 Socio-Demographic Correlates of Psychiatric and Other Substance Use Disorders among Clients Attending Methadone Maintenance Therapy at Ngara Methadone Clinic.....	22
4.3 Prevalence of Psychiatry and Other Substance Use Disorders among Heroin Users Attending Methadone Maintenance Therapy at Ngara Methadone Clinic in Nairobi County.....	23
4.4 Prevalence of AUDs and SUDs	24
4.5 The Association between Psychiatric Disorders, Socio-Demographic Characteristics, and Other Substance Use among Individuals Attending Methadone Maintenance Therapy at Ngara Methadone Clinic.	25
CHAPTER FIVE: DISCUSSION	39
5.1 Introduction.....	39
5.2 Socio-Demographic Correlates of Psychiatric and Other Substance Use Disorders among Clients Attending Methadone Maintenance Therapy at Ngara Methadone Clinic.....	39
5.3 Prevalence of Psychiatry and Other Substance Use Disorders among Heroin Users Attending Methadone Maintenance Therapy at Ngara Methadone Clinic in Nairobi County.....	40

5.4 The Association between Psychiatric Disorders, Socio-Demographic Characteristics, and Other Substance Use among Individuals Attending Methadone Maintenance Therapy at Ngara Methadone Clinic.	41
CHAPTER 6: CONCLUSION AND RECOMMENDATIONS	43
6.1 Conclusion	43
6.2 Recommendations	43
6.3 Study limitations	43
Research Time-Table / Period.....	44
Research Expenditures / Spending	45
REFERENCES	46
APPENDICES	49
APPENDIX 1: CONSENT EXPLANATION DOCUMENT (ENGLISH VERSION)	49
APPENDIX 2: CONSENT EXPLANATION DOCUMENT (SWAHILI VERSION)	53
APPENDIX 3: ASSENT AND CONSENT DECLARATION FORM	57
APPENDIX 4: ASSENT AND CONSENT DECLARATION FORM (SWAHILI VERSION).....	59
APPENDIX 5: CONFIDENTIALITY AGREEMENT.....	61
APPENDIX 6: SOCIO-DEMOGRAPHIC QUESTIONNAIRE (DUMMY TABLE)	62
APPENDIX 7: SOCIO-DEMOGRAPHIC QUESTIONNAIRE (SWAHILI VERSION).....	63
APPENDIX 8: MINI INTERNATIONAL NEUROPSYCHIATRIC INTERVIEW	62

List of Figures

Figure 1: Conceptual framework.	12
Figure 2: Flow Chart of the Data Collection Process.	17
Figure 3: Prevalence of Psychiatric Disorders.	24
Figure 4: Prevalence of AUDs and SUDs.	25

List of Tables

Table 1: Socio-demographic Characteristics of the Respondents.....	22
Table 2: Prevalence of Psychiatric Disorders.	23
Table 3: Prevalence of AUDs and SUDs.	24
Table 4: Socio-demographic Factors associated with Major Depressive Episode (MDE).....	26
Table 5: Socio-demographic Factors associated with Suicidality.	27
Table 6: Socio-demographic Factors associated with Bipolar Disorders.	28
Table 7: Socio-demographic Factors associated with Social Anxiety Disorder.	29
Table 8: Socio-demographic Factors associated with Post-Traumatic Stress Disorders.....	30
Table 9: Socio-demographic Factors associated with Generalized Anxiety Disorders.	31
Table 10: Socio-demographic Factors associated with Antisocial Personality Disorder.	32
Table 11: Socio-demographic Factors associated with Comorbid Psychiatric Disorder.....	34
Table 12: Socio-demographic Factors associated with SUDs (Miraa).	35
Table 13: Socio-demographic Factors associated with SUDs (Cannabis).....	36
Table 14: Socio-demographic Factors associated with SUDs (Tobacco).....	37
Table 15: Socio-demographic Factors associated with the use of (SUDs) Barbiturates.	38
Table 16: Study Time Schedule/Frame.....	44
Table 17: Study Budget Estimates.....	45

LIST OF ABBREVIATIONS

AUDIT	: Alcohol Use Disorder Identification Test.
IBM SPSS	: IBM Statistical Package for the Social Sciences.
IDUs	: Injecting Drug Users.
MMSE	: Mini Mental Status Exam.
MMT	: Methadone Maintenance Treatment.
MNTRH	: Mathari National Teaching and Referral Hospital.
NACADA	: National Authority Campaign against Alcohol and Drug Abuse.
OST	: Opioid Substitution Therapy.
OST	: Opioid Substitution Therapy.
PWID	: People Who Inject Drugs.
SUD	: Substance Use Disorder.

ABSTRACT

Background: Individuals attending Methadone Maintenance Treatment (MMT) frequently present with coexisting psychiatric ailments. Heroin is considered one of the most commonly used drugs which is also dangerous to the health of injecting drug users (IDUs). Psychiatric ailments place these persons at an elevated danger of utilizing other psychotropic substances generating the growth of numerous substance use disorders. Besides, co-occurring psychiatric disorders are associated with a heaving danger of continuous heroin use which in turn leads to addiction.

Objective: The broad objective of this study was to identify the prevalence of psychiatry and other substance use disorders among heroin users attending Methadone Maintenance Therapy at Ngara Methadone Clinic in Nairobi County.

Study Utility: This study sought to fill the gap by advancing the available literature. The study identified the prevalence and patterns of drug use among clients attending Ngara Methadone Clinic. The study will be of greater importance in that it assessed the severity of the psychiatric comorbidities among individuals on Methadone Maintenance Therapy.

Study Design: A descriptive cross-sectional study design was employed in this study. This method was appropriate for this study since it helped in examining the association between psychiatric disorders and other substance use disorders.

Methods: 235 participants attending methadone maintenance therapy at Ngara Clinic were recruited. The study used a systematic sampling technique; the sampling interval was calculated by dividing the population size by the desired sample size. The clinicians at the Ngara MAT clinic helped in identifying clients who meet the eligibility criteria. After identifying the potential

study participants, the researcher administered the Mini-Mental Status Exam to assess the clients' ability to answer questions as required. Those who failed to meet the threshold were excluded from the study.

The researcher then explained the purpose and aim of the study to the study participants. The risks and benefits of the study were also explained. Those willing to participate signed the consent forms while those not willing to participate were excluded from the study.

Results: Results of the study showed that 30.6% (n=72) presented with symptoms of Major Depressive Episode-Current (C.I. 25.1; 36.6), while 29.8% (n=70) had experienced Major Depressive Episode in the past (C.I. 24.3; 36.2). Moreover, 9.8% (n=23) had contemplated suicide (C.I. 6.4; 14.0), 6.8% (n=16) presented with Suicidal ideations (C.I. 3.8; 10.2), 2.6% (n=6) with Manic Episodes (C.I. 0.9; 4.7), 2.6% (n=6) had Hypomanic Episodes (C.I. 0.9; 4.7), 2.6% (n=6) had Bipolar 1 Disorder (C.I. 0.9; 4.7), 0.4% (n=1) had experienced panic attack (C.I. 0.0; 1.3), 0.4% (n=1) had agoraphobia (C.I. 0.0; 1.3) while 7.2% (n=17) presented with Socio Anxiety Disorder (C.I. 4.3; 10.6). In addition, 0.4% (n=1) presented with Obsessive Compulsive Disorder (C.I. 0.0; 1.3), 16.2% (n=38) presented with Post-Traumatic Stress Disorder (C.I. 11.5; 20.9), 0.4% (n=1) with Psychotic Disorder (C.I. 0.0; 1.3), 3.8% (n=9) presented with Generalized Anxiety Disorder (1.3; 6.4), while 6.4% (n=15) presented with Antisocial Personality Disorder (C.I. 3.4; 9.4).

Conclusion: The study suggests that there are a high prevalence of psychiatry and other substance use disorders among heroin users. However, the study found differences in the socio-demographic characteristics among the participants. The study, therefore, guides future research, especially in a bid to examine the pattern of polysubstance use among clients on MMT.

CHAPTER ONE:

1.0 INTRODUCTION AND BACKGROUND OF STUDY

1.1 Introduction

Individuals attending Methadone Maintenance Treatment (MMT) frequently present with coexisting psychiatric ailments (Whelan & Trauer, 2001). Heroin is considered one of the most commonly used drugs which is also dangerous to the health of injecting drug users (IDUs). Psychiatric ailments place these persons at an elevated danger of utilizing other psychotropic substances generating the growth of numerous substance use disorders. Besides, co-occurring psychiatric disorders are associated with a heaving danger of continuous heroin use which in turn leads to addiction (Douglas, 2001).

The pervasiveness of co-occurring psychiatric ailments among heroin users varies from that of other psychogenic ailments and specified drug/s (Magura & Rosenblum, 2009). Moreover, there is limited information regarding the inter-connections among coexisting psychogenic ailments, and other substance use disorders among clients attending methadone maintenance treatments (MMT) in Kenya. In this study, categorical data will identify the connection between co-occurring psychiatric disorders and substance use disorders among clients attending methadone maintenance treatment, to inform policymakers regarding the appropriate interventions.

1.2 Background of the Research

Co-occurring psychological disorders are frequently pronounced every day among clients attending methadone clinics in the country. The concurrence entangles the course, severeness, and results of their diagnosis and treatment (Yang et al., 2015). Research has manifested that individuals with coexisting psychogenic ailments may require higher methadone doses and

numerous psychotropic interventions. This encourages Methadone Maintenance Therapy and lowers heroin and other illegitimate drug and substance use, thus enhancing the general welfare of the individuals.

There is a paucity of data regarding the use of narcotics and co-existing psychological disorders. Various measures have been put in place to broaden treatment effectiveness and lessen the effects of drugs and substance use among individuals. Opioid Substitution Therapy (OST) is one of the methods that have been employed by Sub-Saharan African Countries.

Research in South Africa revealed that nicotine is the most frequently used drug, while drug-induced psychosis manifests among people who inject drugs (PWIDs) (Nirvana et al., 2019). Another research in South Africa indicated that 65.5 % of the participants used heroin and smoked marijuana, 29.7% of the drug users started using drugs and substances at the age of 14.7 years, and 49.3% had suffered from a psychiatric disorder (Donnat et al. 2014).

In Nigeria, the danger of substance use among individuals with psychological disorders was higher among men (Okpataku et al., 2014). The study further indicated that 17.7% of the individuals had used more than one drug/substance, 29.3 % were already addicted to drug use and 10.1% had suffered from drug-induced psychosis (Okpataku et al., 2014).

In a study done in Tanzania among patients suffering from psychiatric disorders, the study outcomes depicted that 38.6% had used alcohol, 29.3% used tobacco, 29.3% used marijuana and 2.1% had used heroin (Hauli et al., 2011).

There is a shortage of information on the prevalence of co-occurring psychiatric disorders among drug users in Kenya. Research that was conducted at Mathari National Teaching and Referral

Hospital (MNTRH), showed a positive correlation between substance use and co-occurring psychiatric disorders (Mary Kuria et al., 2008).

1.3 Statement of the Problem

Co-existing psychological disorders illustrate the occurrence of more than one disorder at the same time. The effects of drugs on the body mainly depend on how the drug is delivered. For instance, the infusion of drugs right into the bloodstream has an immediate impact, unlike ingestion which has a delayed effect. All psychoactive substances affect the brain's "reward" circuit. Chronic use of some drugs can lead to both short and long-term changes in the brain, which can lead to mental health issues including paranoia, depression, anxiety, hallucinations, and other problems (NIDA, 2020).

The prospective outcomes of co-existing mental illness are numerous and pernicious if not properly treated (Grant et al., 2004). Moreover, drug abuse aggravates the results of mental illness treatment (Morisano et al., 2014).

The government of Kenya through the National Authority Campaign against Alcohol and Drug Abuse (NACADA) is making some progress in addressing alcohol and other drugs. However, little has been done to address emerging drugs of abuse (Ruth Kahuthia et al., 2013). In addition, no research has been done regarding the emerging drug situation in Kenya.

This study, therefore, seeks to fill the gap by advancing the available literature. The study will identify the prevalence and patterns of drug use among clients attending Ngara Methadone Clinic.

1.4 Research Questions

1.4.1 General Question

What is the prevalence of psychiatry and other substance use disorders among heroin users attending Methadone Maintenance Therapy at Ngara Clinic?

1.4.2 Specific Questions

1. What are the socio-demographic correlates of psychiatric and other substance use disorders among clients attending MMT at Ngara Methadone clinic?
2. Is there an association between psychiatric disorders, socio-demographic characteristics, and other substance use among individuals attending MMT at Ngara Methadone Clinic?

1.5 Objectives of Study

1.5.1 Broad Objective

To identify the prevalence of psychiatry and other substance use disorders among heroin users attending Methadone Maintenance Therapy at Ngara Methadone Clinic in Nairobi County.

1.5.2 Specific Objectives

1. To identify the socio-demographic correlates of psychiatric and other substance use disorders among clients attending Methadone Maintenance Therapy at Ngara Methadone clinic.
2. To determine the association between psychiatric disorders, socio-demographic characteristics, and other substance use among individuals attending Methadone Maintenance Therapy at Ngara Methadone Clinic.

1.6 Justification of Study

Studies have shown that many people who are addicted to drugs are also diagnosed with other mental disorders and vice versa. Moreover, there is an increasing number of psychiatric cases among individuals on Methadone Maintenance Therapy. In many instances, co-occurring psychiatry & substance use disorders remain undiagnosed thus having a negative impact on the general wellbeing of this population (Thomas Kelly & Dennis Daley, 2013). The study will therefore fill the gap in the available literature by identifying co-occurring psychiatric and other substance use disorders among clients on Methadone Maintenance Therapy.

This study will also be of great significance in that it will evaluate the severity of the psychiatric comorbidities among individuals on Methadone Maintenance Therapy. The study will therefore help clinicians identify participants with co-occurring psychiatric disorders and focus on an integrated patient-centered approach to their management. It will also inform the policymakers regarding the appropriate interventions.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter discusses various theories regarding the prevalence and patterns of drug and substance use. It identifies the gaps in the available literature that the study seeks to address. It also presents a conceptual framework that shows the basis of this study.

2.2 Theoretical Review

All through the old days, human beings have attempted to acknowledge the notion of substance abuse and why some individuals become reliant on or obsessive to particular drugs and why some don't. Numerous theses have been established over the years that supply's us with clarification of substance abuse. Several theses have been enlarged into frameworks which are a way of specifying a complication or circumstance so that it can be inferred much uncomplicated.

In the moral model which was widely used in the eighteenth and early nineteenth centuries, compulsion was looked at as a sin. Drug-addicted people were contemplated immoral, and dependency was perceived as the culpability of one's personality. Beneath the ascendancy of this model, consumers were disciplined with floggings and public mockery being comparatively common (Jostein Rise & Torleif Halkjelsvik, 2019). The illness model conversely, presumes that the origination of compulsion reclines within the person. This model embraces a medical point of view and recommends that compulsion is an ailment or a sickness that an individual has (Lily Frank & Saskia Nagel, 2017).

The cognitive-behavioral hypothesis derived from Sigmund Freud is applied as a way of handling people with drug difficulties. The fundamental ideology behind the cognitive-behaviorism model is that we can associate difficulties to our early years and how we survive (or

don't survive) as grown-ups. Particularly, substance use or abuse may be insensible feedback to some of the problems people may have been involved in early days. This ideology sets up the foundation of many guidance approaches which point to obtain intuition into a person's insensible incentives and attempt to magnify their self-confidence (Kathleen Holtz, 2007).

Social Learning Model states that in the 1970s, drug addiction was acknowledged entirely as a physical dependency on a drug and the encountering of abolition syndrome in its absenteeism. Russell (1976) initiated the concept that dependency is not merely chemical but also physiological and collective. It is formed further on the consumer's notions about the drug, and what it is like to be 'inebriated' of the substance itself (Giovazolias & Themeli, 2014).

2.3 Prevalence and Patterns of Psychoactive Substance Use- Global Trends

Studies have shown that alcohol consumption is the most common psychotropic drug utilized by human beings (Morisano et al., 2009). Presently, alcohol is also the most prevailing psychotropic drug. The illegal substance is utilized by only the outnumbered of the worldwide population. The United Nations Office on Drugs and Crime (UNODC) approximated that between 172 and 250 million individuals aged 15–64 years had utilized an illegal substance at least once in 2007 (UNODC, 2009). Bhang was by far the most frequently utilized illegal substance (3.3–4.4% of the population aged 15–64 years), with the elevated widespread in North America, Western Europe, and Oceania. Some 16–53 million individuals aged 15–64 years were approximated to have utilized amphetamines (0.4–1.2%), with the elevated magnitudes in South-East Asia. An approximated 16–21 million individuals utilized cocaine (0.4%–0.5%) with wide use in North America, succeeded by Western and Central Europe, and South America. The numeral of opiate consumers was approximated at 16–20 million, with the principal dope peddler passage of Afghanistan comprising the elevated magnitudes of use (UNODC, 2009).

Those who consume substances once or twice possess a very tiny expansion in prevalence and impermanence, with the consolidation of sufferings happening amidst those who consume substances commonly. The regularly applied explanation of “problematic substance abuse” could be expounded as coinciding with the WHO’s International Classification of Diseases (ICD) classification of “dangerous substance use” and “substance addiction” (WHO, 1993).

Worldwide and zonal approximates have been built of the numeral of “problematical substance consumers”. Orderly scrutiny of particulars on the pervasiveness of inoculating substance abuse approximated 10 ATLAS on drug abuse (2010) -backings for the interception and therapy of drug abuse disorderliness that, worldwide, 11–21 million individuals inoculated substance in 2007 (Mathers et al., 2008). In 2007, UNODC approximated that there were between 18 and 38 million “problem substance consumers” (i.e. inoculating substance consumers or enigma consumers of opioids, cocaine, or amphetamine) (UNODC, 2009). “Illegal substance addiction” was evaluated in the WHO’s World Mental Health Surveys, in 27 states in five WHO zones (Ferrari, 2016), with an important topographical disparity in estimates of illegal substance abuse (Degenhardt et al., 2008), and substance addiction (Demyttenaere et al., 2004), and elevated estimates of substance addiction in advanced states (Ferrari, 2016). These dissimilarities may contemplate an amalgamation of real dissimilarities, besides ethnic dissimilarities in the comprehension of, and readiness to announce, illegal substance abuse and correlated difficulties in studies.

2.4 Psychological Factors Associated with Problematic Drug Use

Research has revealed that drug abuse demeanors commonly start during adolescence whose repercussion poses significant public health difficulties (Tripodi et al., 2010).

Various psychological aspects have been connected with drug use. Particularly, peer pressure, media representation of drug abuse by famous people (Malhotra et al., 2007), profitable publications, appealing wrapping, and presuppositions of joy are repeatedly connected with dangerous drug abuse by the youth (Kangule et al., 2011). Generally, it is broadly confirmed that associates, social context, blood relatives, and personalized elements play a key part in drug use behaviors in the youth. Studies have shown that the age of beginning drug use is adolescence. There are both individual and collective components accountable for drug abuse in which squint leverage plays a key part. Multiple institutes pursue to consume of drugs regardless of being aware of the dangerous consequences of drugs. Nonetheless, much of this cognition derives from the research buckling on the drug consumers only (Gopuram & Kishore, 2014).

The flourishing anatomy of studies has revealed that the universality of troublesome substance abuse is high among individuals with mental illness (Corradi-Webster et al., 2005).

In a study done in two mental health hospitals, outcomes revealed that the most significant self-reliant interpreters of troublesome substance abuse were marital status (OR = 0.491), religious enactment (OR = 0.449), contentment with financial circumstances (OR = 0.469), possessing deteriorate prejudice (OR = 3.821) and practicing sports ventures in previous 12 months (OR = 2.25) (Corradi-Webster et al., 2005).

In Brazil, as in most countries, the psychological care system is dissected between amenities that particularize in obstacles connected to substance abuse and psychological health amenities (Staiger et al., 2010). Thus, individuals with a duplex diagnosis, in which the substance use problem is noticeable, are swiftly assigned to amenities that concentrate on therapy for substance consumers (Corradi-Webster et al., 2005).

2.5 Prevalence and Patterns of Drugs and Substance Use in Kenya

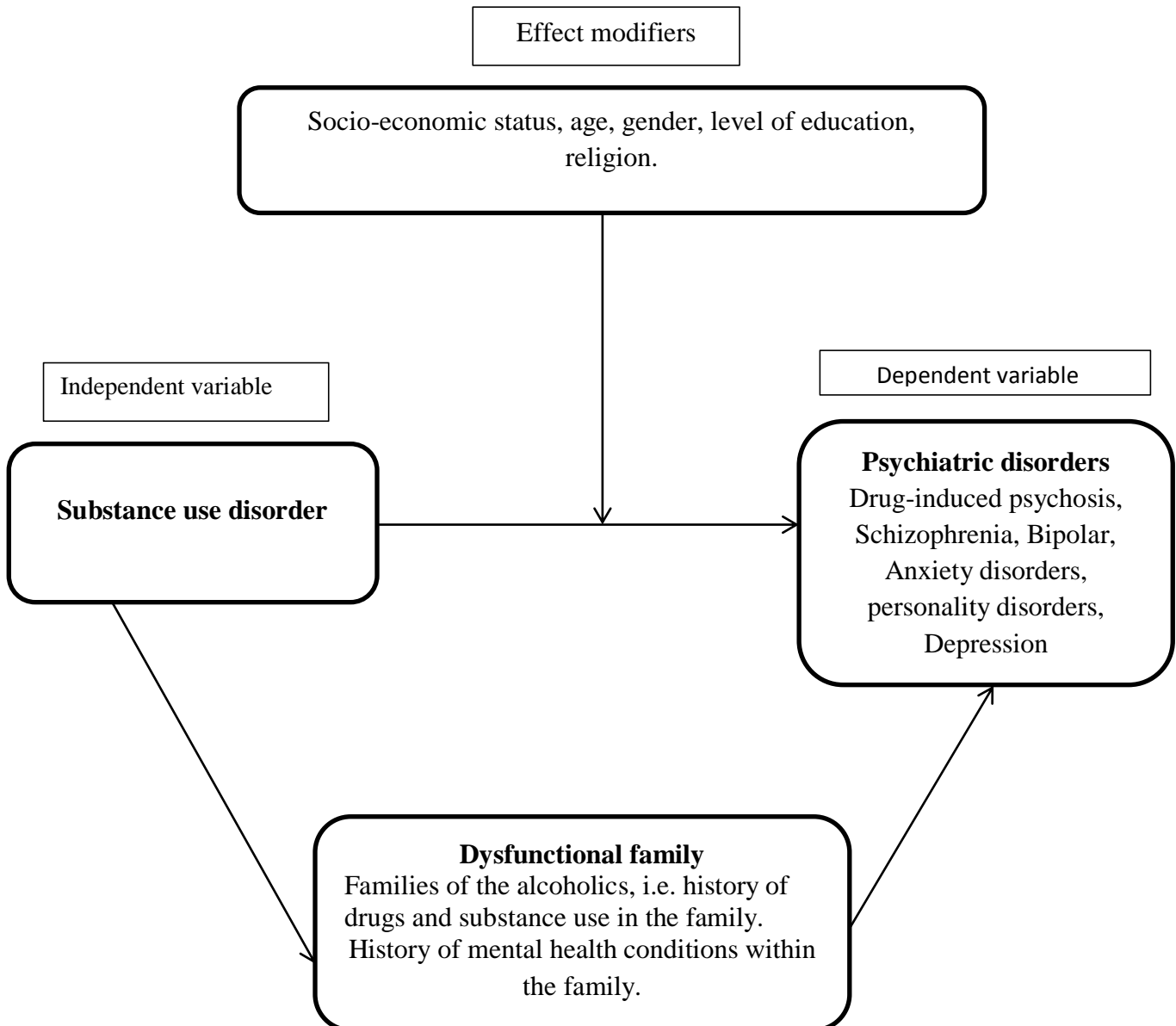
The use of drugs is a communal behavior that is ingrained in society and cultures and is continued by inventory. A report by the last survey led by NACADA in the year 2012, states stipulates that the portion of interviewees aged 15-65 years who outlined ever consuming (lifetime use) of at least one drug of abuse holds at 37.1%. Around 30% of these interviewees have ever consumed an alcoholic drink. Ever consumption of cigarettes holds at 14.9% and sniffed tobacco holds at 2.4%. Generally, 16.7% of the interviewee, aged 15-65 years, have ever consumed some tobacco at one point in life. The pervasiveness of khat holds at 8.9%, bhang holds at 1.1%, hashish holds at 0.6%, heroin holds at 0.7% while cocaine holds at 0.7% (Kathungu et al., 2013). The study also reveals that 19.8% of Kenyans aged 15-65 years are presently consuming at least one drug of abuse. Present consumption of liquor holds at 13.6%, cigarettes hold at 8.6%, sniffed tobacco holds at 0.7%, khat holds at 4.2%, bhang holds at 1.0%, hashish holds at 0.1% and heroin holds at 0.2%. Data also revealed that 5.5% of Kenyans aged 15-65 years are addicted to alcohol; 4.5% to tobacco; 1.5% to khat and 0.4% to bhang (Kathungu et al., 2013). The Government of Kenya acknowledges alcohol and substance use as a vital risk to the life of her citizens and national growth.

2.6 Theoretical Framework

A bidirectional model was used in this study which indicates that the reactions can go in either direction depending on the concentrations of the reactants. In that regard, individuals suffering from psychological disorders are at a higher risk of using drugs and substances as a coping mechanism. In the bidirectional model, the vice versa is also true in that those using drugs and substances are at an increased risk of developing co-occurring psychiatric disorders (Toftdahl et

al., 2016). This study will therefore identify the risk factors associated with drug and substance use as well as the socio-demographic correlates of co-occurring psychiatric disorders.

2.7 Conceptual Framework



Confounding variables

Figure 1: Conceptual framework.

As per the figure above, i.e. conceptual framework, the dependent variable will be influenced by the independent variable in that substance use disorder may lead to the development of psychiatric illness. This further shows the cause-and-effect relationship which results in the development of co-occurring psychiatric disorders. The effect modifiers including age, gender, level of education, religion, and employment status influence the way the individuals cope. Moreover, the confounding variables, i.e. dysfunctional family including families of the alcoholics, and a history of psychiatric disorders within the family increases the possibility of developing psychiatric illness.

CHAPTER THREE:

3.0 Methodology

3.1 Research Design

A descriptive cross-sectional study design will be employed in this study. This method is appropriate for this study since it will help in examining the association between psychiatric disorders and other substance use disorders.

3.2 Study Variables

In this study, substance use disorder will be considered the independent variable while psychiatric disorders including drug-induced psychosis, schizophrenia, bipolar, anxiety disorders, personality disorders, and depression, will be the dependent variable. This will further be expounded as a cause-and-effect relationship.

3.3 Study Area

The study will be conducted at Ngara Methadone clinic which is located in Nairobi County-Kenya. It was established in the year 2017 to promote harm reduction. It offers both outpatient and inpatient services. Ngara Methadone clinic is appropriate for this study since it has a considerable number of patients who attend the clinic for care and treatment both within and outside Nairobi. It also offers psychosocial services to promote the psychological well-being of individuals while reducing the effects of drugs and substance use.

3.4 Study Population

The study population will consist of participants attending Ngara MAT Clinic. The clinic has approximately 600 clients who are enrolled for care and treatment. Clients who meet the eligibility criteria will be recruited for the study.

3.4.1 Inclusion Criteria

- i. Attending Ngara MMT clinic.
- ii. Aged 18 years and above.
- iii. Those who speak/understand English and/or Kiswahili dialects.
- iv. Those willing to give informed consent.

3.4.2 Exclusion Criteria

- i. Those who decline to give informed consent.
- ii. Those who don't understand either English or Swahili languages.
- iii. Clients who require immediate medical attention.

3.5 Sample size Determination

The sample size for the study was determined using Cochran's formula which is:

$$n_0 = \frac{Z^2 pq}{e^2}$$

Where:

e- is the desired level of precision (i.e. the margin of error),

p- is the (estimated) proportion of the population that has the attribute in question,

q- is 1 – p.

z- z value.

Therefore:-

$$((1.96)^2 (0.5) (0.5)) / (0.05)^2 = 385.$$

Modification for the Cochran Formula for Sample Size Calculation

$$n = \frac{n_0}{1 + \frac{(n_0 - 1)}{N}}$$

Where:

n_0 - is Cochran's sample size recommendation

N- is the population size

n- is the new, adjusted sample size.

Ngara Methadone Clinic has approximately 600 patients who have been attending for Methadone Maintenance Therapy, for more than six months. Therefore; N= 600.

$$\text{Thus, } n = 385 / (1 + (384 / 600)) = 234.756$$

$$n = \underline{\underline{235}}$$

3.6 Sampling Frame

The study used a systematic sampling technique which is a type of probability sampling method in which sample members from a larger population are selected according to a random starting point but with a fixed, periodic interval. In this case, the sampling interval was calculated by dividing the population size by the desired sample size. Clinicians at the Ngara MAT Clinic assisted in identifying clients who meet the inclusion criteria. This was done during the regular clinic hours until the desired sample size was attained.

3.7 Data Collection Procedures

The researcher sought authorization from the Ngara MAT Clinic administration to be allowed to collect data at the facility. This was done after getting approval from the Kenyatta National Hospital, the University of Nairobi Ethics and Research Committee, i.e. KNH-UoN ERC. After getting approvals, the clinicians at the Ngara MAT clinic helped in identifying clients who meet the eligibility criteria. After identifying the potential study participants, the researcher administered the Mini-Mental Status Exam to assess the clients' ability to answer questions as required. Those who failed to meet the threshold were excluded from the study.

The researcher then explained the purpose and aim of the study to the study participants. The risks and benefits of the study were also explained. Those willing to participate signed the consent forms while those not willing to participate were excluded from the study. The consenting process was done in a private room and clients were assured of their confidentiality. The administration of the study tools took approximately 30 minutes after which the participants were allowed to ask questions and seek clarification if need be.

3.8 Flow Chart of the Data Collection Process

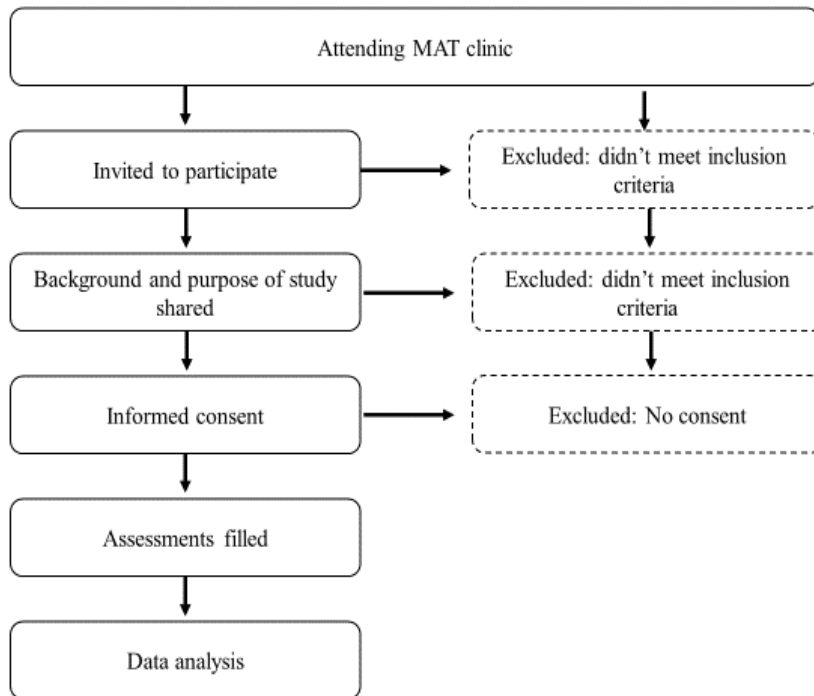


Figure 2: Flow Chart of the Data Collection Process.

3.9 Data Collection Tools

- i. Mini-International Neuropsychiatric Interview (MINI) version 7.0.0 for DSM-5.

The Mini-International Neuropsychiatric Interview (M.I.N.I.) is a short structured diagnostic interview, which was developed jointly by psychiatrists and clinicians in the United States and Europe. The administration time of the MINI tool is approximately 15 minutes. The MINI tool was designed to meet the need for a short but accurate structured psychiatric interview (Sheehan et al., 1998).

- ii. Socio-demographic questionnaire

A researcher-designed socio-demographic questionnaire was also used to collect participants' information regarding their gender, age, marital status, level of education,

socio-economic status, and religion, as well as information regarding their diagnosis and treatment. This will be obtained by the abstraction of clinical records.

3.10 Data management and Analysis

Filled questionnaires were collected and checked for errors and omissions, thereafter they were stored in a safe cabinet with a lock and key only accessible to the researchers. The questionnaires were only opened during the process of data analysis. Data was entered into a windows 10 computer database. The quantitative data was analyzed using the IBM Statistical Package for the Social Sciences (IBM SPSS Statistics-22.0). Results of the quantitative data were tabulated using percentage and frequency distributions.

Three levels of analysis, i.e. univariate analysis, bivariate and multivariate logistic regression will be conducted.

Descriptive statistics such as frequencies and graphical presentations was done using bar graph and tables. Moreover, inferential statistics, specifically multiple regression analysis was conducted to determine the association between the study variables. Soft data will be stored in a password-protected computer accessible only to the researcher and the biostatistician. Finally, data will be stored for five years as a soft copy on a hard drive that will only be accessible to the principal investigator and supervisors. After the lapse of the five years, data will be discarded by mechanical destruction of the hard drive.

3.11 Dissemination of Results and Findings

The outcomes of the study will be presented to the University Of Nairobi School Of Medicine, Ngara MAT Clinic, and at conferences. The study findings will also be published.

3.11 Reliability and Validity Indices

The questionnaires to be used in the study were piloted, assessed, and reviewed to improve the validity of the data. A pilot survey was conducted at the Ngara MAT clinic to evaluate the feasibility, cost, time, and adverse events.

3.12 Ethical Considerations

1. The researcher will obtain approval from the KNH-UoN Ethics and Research Committee before conducting the study.
2. The researcher will also seek permission from the National Commission for Science, Technology, and Innovation (NACOSTI) to be allowed to collect data from the study participants.
3. The authorization will also be sought from the Medical Superintendent at Ngara Health Center before conducting the study at the Ngara MAT Clinic.
4. COVID-19 containment measures will be observed to ensure the safety of both the study participants and the researcher.
5. Informed consent will be obtained before administering the questionnaires and the participants of the study will be informed of their expectations during the study. Ethical considerations such as the procedure of the study, and confidentiality will be provided on the consent form. Research assistants will also sign a confidentiality agreement form for convenience purposes.

3.13 Projected Risks

Although psychological and social risks may be due to the sensitive nature of the data to be collected, no physical or legal risks are anticipated. Some participants may experience psychological risks such as feelings of guilt, anxiety, and loss of self-esteem. Debriefing will be done before the commencement of the data collection process to alleviate this.

3.14 Limitations of Study

1. Data was only collected from one study site, i.e. Ngara MAT Clinic, therefore the study findings cannot be generalized to all drug addicts with psychiatric disorders.
2. The study relied solely on the information provided by the study participants and there may be no way to ascertain the accuracy of the information given. Therefore, scores may have been minimized or exaggerated on the self-report questionnaire.

CHAPTER FOUR: RESULTS

4.1 Introduction

This chapter shows the results of the study conducted at the Ngara Methadone Maintenance Therapy clinic. The findings are based on the research objectives and show the prevalence of psychiatry and other substance use disorders among heroin users on MMT with regard to the responses given by the study participants.

4.1.1 Response Rate

The total number of the study participants was 235, the majority being male, i.e. 196 (83.4%) while the number of female participants was 39 (16.6%). The majority of the study participants were between the ages of 25 and 35 years 109 (46.4%), followed by 18-24 years 66 (28.1%), then 36 years and above 60 (25.5%). Looking at the education level, 104 of the study participants had attained a secondary level of education (44.3%), followed by primary level 88 (37.4%), then certificate/diploma/degree 23 (9.8%), and vocational 20 (8.5%). Moreover, 94 (40.0%) are self-employed, 93 (39.6%) are unemployed, while 48 (20.4%) are employed. In addition, 90 (38.3%) of the study participants indicated that they receive support from their families. The living arrangements of the study participants are as follows; living alone 98 (41.7%), living with a partner 92 (39.1%), living with a parent/s 34 (14.5%), and other 11 (4.7%). Furthermore, 89 (37.9) were protestants, 61 (26.0%) were Catholics, 58 (24.7%) were muslim, while 27 (11.5%) of the participants do not subscribe to any religion.

4.2 Socio-Demographic Correlates of Psychiatric and Other Substance Use Disorders among Clients Attending Methadone Maintenance Therapy at Ngara Methadone Clinic.

Table 1 below shows the socio-demographic characteristics of the study participants.

Variable	Category	Frequency (N=235)	Percentage (%)
Gender	Male	196	83.4
	Female	39	16.6
Age	18-24 Years	66	28.1
	25-35 Years	109	46.4
	36 and above	60	25.5
Age Years	Means; Range	30.8±8.4	20-60
Religion	Catholic	61	26.0
	Protestant	89	37.9
	Muslim	58	24.7
	None	27	11.5
Living Arrangement	Living alone	98	41.7
	Living with a partner	92	39.1
	Living with a parent/s	34	14.5
	Other	11	4.7
Level of Education	Primary	88	37.4
	Secondary	104	44.3
	Vocational	20	8.5
	Certificate/Diploma/Degree	23	9.8
Employment Status	Employed	48	20.4
	Self-Employed	94	40.0
	Unemployed	93	39.6
Receive Financial Support from the Family	Yes	90	38.3
	No	145	61.7

Table 1: Socio-demographic characteristics of the Respondents.

4.3 Prevalence of Psychiatry and Other Substance Use Disorders among Heroin Users Attending Methadone Maintenance Therapy at Ngara Methadone Clinic in Nairobi County.

Diagnosis	Frequency (N=235)	Percentage (%)	95% C.I.
1. Major Depressive Episode-Current	72	30.6	(25.1; 36.6)
2. Major Depressive Episode-Past	70	29.8	(24.3; 36.2)
3. Suicidality	23	9.8	(6.4; 14.0)
4. Suicidal Behaviour Disorder	16	6.8	(3.8; 10.2)
5. Manic Episode	6	2.6	(0.9; 4.7)
6. Hypomanic Episode	6	2.6	(0.9; 4.7)
7. Bipolar1 Disorder	6	2.6	(0.9; 4.7)
8. Panic Disorder	1	0.4	(0.0; 1.3)
9. Agoraphobia	1	0.4	(0.0; 1.3)
10. Social Anxiety Disorder	17	7.2	(4.3; 10.6)
11. Obsessive-Compulsive Disorder	1	0.4	(0.0; 1.3)
12. Post-Traumatic Stress Disorder	38	16.2	(11.5; 20.9)
13. Psychotic Disorder	1	0.4	(0.0; 1.3)
14. Generalized Anxiety Disorders	9	3.8	(1.3; 6.4)
15. Antisocial Personality Disorder	15	6.4	(3.4; 9.4)
Any Comorbid Disorder	105	44.7	(38.3; 51.5)

Table 2: Prevalence of Psychiatric Disorders.

Table 2 shows the prevalence of psychiatry and other substance use disorders as presented by the study participants. About 30.6% (n=72) presented with symptoms of Major Depressive Episode-Current (C.I. 25.1; 36.6), while 29.8% (n=70) had experienced Major Depressive Episode in the past (C.I. 24.3; 36.2). Moreover, 9.8% (n=23) had contemplated suicide (C.I. 6.4; 14.0), 6.8% (n=16) presented with Suicidal ideations (C.I. 3.8; 10.2), 2.6% (n=6) with Manic Episodes (C.I. 0.9; 4.7), 2.6% (n=6) had Hypomanic Episodes (C.I. 0.9; 4.7), 2.6% (n=6) had Bipolar 1 Disorder (C.I. 0.9; 4.7), 0.4% (n=1) had experienced panic attack (C.I. 0.0; 1.3), 0.4% (n=1) had agoraphobia (C.I. 0.0; 1.3) while 7.2% (n=17) presented with Socio Anxiety Disorder (C.I. 4.3;

10.6). In addition, 0.4% (n=1) presented with Obsessive Compulsive Disorder (C.I 0.0; 1.3), 16.2% (n=38) presented with Post-Traumatic Stress Disorder (C.I 11.5; 20.9), 0.4% (n=1) with Psychotic Disorder (C.I. 0.0; 1.3), 3.8% (n=9) presented with Generalized Anxiety Disorder (1.3; 6.4), while 6.4% (n=15) presented with Antisocial Personality Disorder (C.I. 3.4; 9.4).

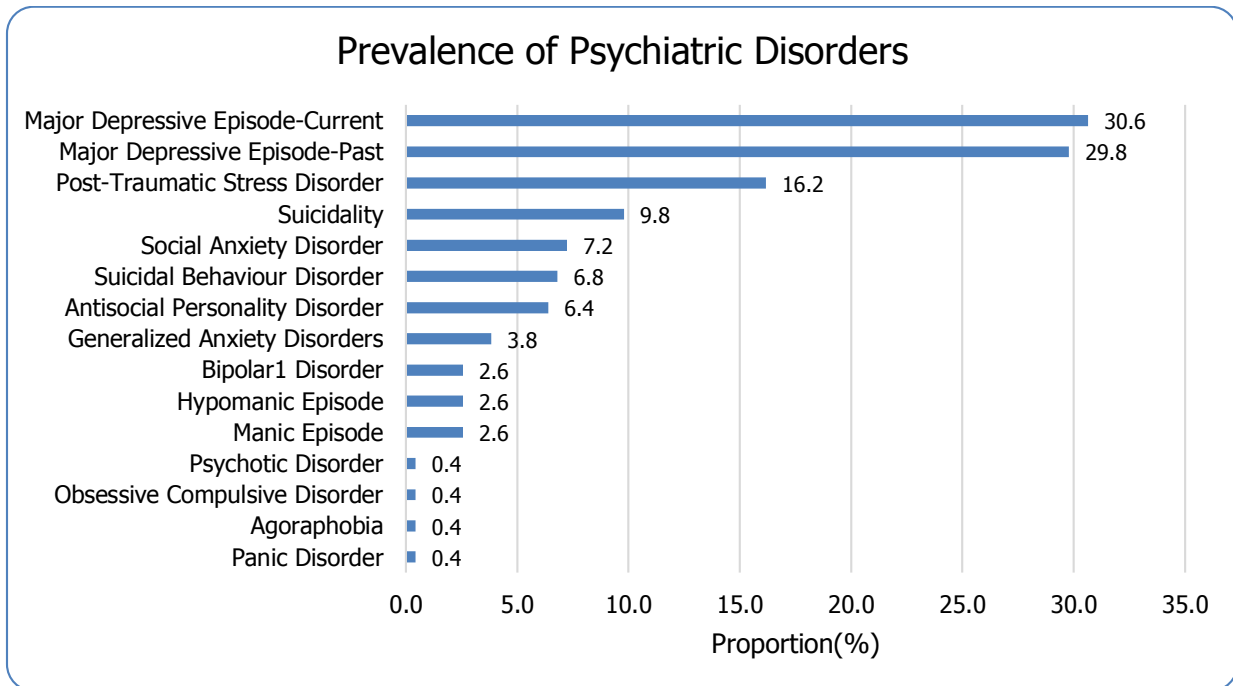


Figure 3: Prevalence of Psychiatric Disorders.

4.4 Prevalence of AUDs and SUDs

Diagnosis	Frequency (N=235)	Percentage (%)	95% C.I.
1. Alcohol Use Disorders	5	2.1	(0.4; 4.3)
2. Miraa	40	17.0	(12.8; 22.1)
3. Cannabis	155	66.0	(59.6; 71.9)
4. Tobacco	198	84.3	(79.2; 88.5)
5. Heroine	1	0.4	(0.0; 1.3)
6. Barbiturates	9	3.8	(1.7; 6.4)

Table 3: Prevalence of AUDs and SUDs.

The prevalence of Alcohol Use Disorder was found to be 2.1% (n=5) (C.I. 0.4; 4.3), Miraa 17.0% (n=40) (C.I. 12.8; 22.1), Cannabis 66.0% (n=155) (C.I. 59.6; 71.9), Tobacco 84.3% (n=198) (C.I. 79.2; 88.5), Heroin 0.4% (n=1) (C.I. 0.0; 1.3), while Barbiturates 3.8% (n=9) (C.I. 1.7; 6.4). As per the study findings, Tobacco was found to be the widely used substance (84.3%), followed by Cannabis (66.0%). The distribution is shown in the chart below.

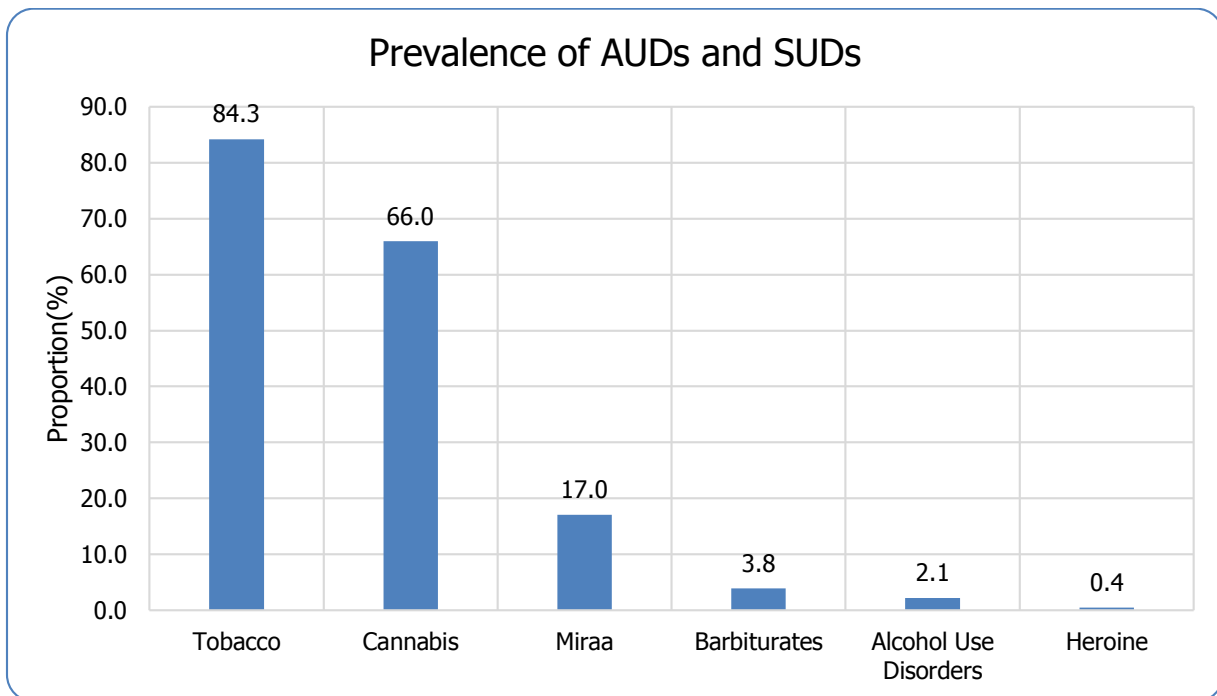


Figure 4: Prevalence of AUDs and SUDs.

4.5 The Association between Psychiatric Disorders, Socio-Demographic Characteristics, and Other Substance Use among Individuals Attending Methadone Maintenance Therapy at Ngara Methadone Clinic.

The following tables show the association between psychiatric disorders, socio-demographic characteristics, and other substance use disorders among the study participants.

Table 4: Socio-demographic Factors associated with Major Depressive Episode (MDE).

Variable	Category	Overall (%)	MDE		χ^2	Df	sig.
			No	Yes			
Gender	Male	196(83.4%)	138(70.4%)	58(29.6%)	0.61	1	0.435
	Female	39(16.6%)	25(64.1%)	14(35.9%)			
Age	18-24 Years	66(28.1%)	48(72.7%)	18(27.3%)	1.06	2	0.588
	25-35 Years	109(46.4%)	72(66.1%)	37(33.9%)			
	36 and Above	60(25.5%)	43(71.7%)	17(28.3%)			
Religion	Catholic	61(26.0%)	43(70.5%)	18(29.5%)	0.95	3	0.813
	Protestant	89(37.9%)	64(71.9%)	25(28.1%)			
	Muslim	58(24.7%)	39(67.2%)	19(32.8%)			
	None	27(11.5%)	17(63.0%)	10(37.0%)			
Living Arrangement	Living alone	98(41.7%)	63(64.3%)	35(35.7%)	2.53	3	0.469
	Living with a partner	92(39.1%)	68(73.9%)	24(26.1%)			
	Living with a parent/s	34(14.5%)	25(73.5%)	9(26.5%)			
	Other	11(4.7%)	7(63.6%)	4(36.4%)			
Level of Education	Primary	88(37.4%)	59(67.0%)	29(33.0%)	1.72	3	0.632
	Secondary	104(44.3%)	76(73.1%)	28(26.9%)			
	Vocational	20(8.5%)	12(60.0%)	8(40.0%)			
	Certificate and Above	23(9.8%)	16(69.6%)	7(30.4%)			
Employment Status	Employed	48(20.4%)	36(75.0%)	12(25.0%)	2.39	2	0.303
	Self-Employed	94(40.0%)	60(63.8%)	34(36.2%)			
	Unemployed	93(39.6%)	67(72.0%)	26(28.0%)			
Support from the Family	Yes	90(38.3%)	63(70.0%)	27(30.0%)	0.03	1	0.867
	No	145(61.7%)	100(69.0%)	45(31.0%)			

The results indicated that there is no association between Major Depressive Episodes and Socio-Demographic Characteristics among individuals attending Methadone Maintenance Therapy at

Ngara Methadone Clinic. However, females are more likely to present with Major Depressive Episodes (35.9%) as compared to males (29.6%).

Table 5: Socio-demographic Factors associated with Suicidality.

Variable	Category	Overall (%)	Suicidality		χ^2	df	sig.
			No	Yes			
Gender	Male	196(83.4%)	181(92.3%)	15(7.7%)	6.09	1	0.014
	Female	39(16.6%)	31(79.5%)	8(20.5%)			
Age	18-24 Years	66(28.1%)	57(86.4%)	9(13.6%)	1.81	2	0.403
	25-35 Years	109(46.4%)	99(90.8%)	10(9.2%)			
	36 and Above	60(25.5%)	56(93.3%)	4(6.7%)			
Religion	Catholic	61(26.0%)	57(93.4%)	4(6.6%)	1.52	3	0.677
	Protestant	89(37.9%)	80(89.9%)	9(10.1%)			
	Muslim	58(24.7%)	52(89.7%)	6(10.3%)			
	None	27(11.5%)	23(85.2%)	4(14.8%)			
Living Arrangement	Living alone	98(41.7%)	83(84.7%)	15(15.3%)	5.94	3	0.114
	Living with a partner	92(39.1%)	87(94.6%)	5(5.4%)			
	Living with a parent/s	34(14.5%)	32(94.1%)	2(5.9%)			
	Other	11(4.7%)	10(90.9%)	1(9.1%)			
Level of Education	Primary	88(37.4%)	76(86.4%)	12(13.6%)	6.21	3	0.102
	Secondary	104(44.3%)	93(89.4%)	11(10.6%)			
	Vocational	20(8.5%)	20(100.0%)	0(0.0%)			
	Certificate and Above	23(9.8%)	23(100.0%)	0(0.0%)			
Employment Status	Employed	48(20.4%)	41(85.4%)	7(14.6%)	3.81	2	0.148
	Self-Employed	94(40.0%)	89(94.7%)	5(5.3%)			
	Unemployed	93(39.6%)	82(88.2%)	11(11.8%)			

Support from the Family	Yes	90(38.3%)	87(96.7%)	3(3.3%)	6.88	1	0.009
	No	145(61.7%)	125(86.2%)	20(13.8%)			

Suicidality: There was a strong correlation as females are more likely to have suicidal ideations 8(20.5%) with a significant p -value ($p < .014$) compared to males 15(7.7%). In addition, there is also an association between suicidality and support from the family with a significant p -value ($p < .009$).

Table 6: Socio-demographic Factors associated with Bipolar Disorders.

Variable	Category	Overall (%)	Bipolar 1 Disorder		χ^2	d f	sig.
			No	Yes			
Gender	Male	196(83.4%)	192(98.0%)	4(2.0%)	1.24	1	0.264
	Female	39(16.6%)	37(94.9%)	2(5.1%)			
Age	18-24 Years	66(28.1%)	65(98.5%)	1(1.5%)	0.45	2	0.799
	25-35 Years	109(46.4%)	106(97.2%)	3(2.8%)			
	36 and Above	60(25.5%)	58(96.7%)	2(3.3%)			
Religion	Catholic	61(26.0%)	60(98.4%)	1(1.6%)	6.69	3	0.082
	Protestant	89(37.9%)	89(100.0%)	0(0.0%)			
	Muslim	58(24.7%)	55(94.8%)	3(5.2%)			
	None	27(11.5%)	25(92.6%)	2(7.4%)			
Living Arrangement	Living alone	98(41.7%)	96(98.0%)	2(2.0%)	0.60	3	0.897
	Living with a partner	92(39.1%)	89(96.7%)	3(3.3%)			
	Living with a parent/s	34(14.5%)	33(97.1%)	1(2.9%)			
	Other	11(4.7%)	11(100.0%)	0(0.0%)			
Level of Education	Primary	88(37.4%)	88(100.0%)	0(0.0%)	5.51	3	0.138
	Secondary	104(44.3%)	99(95.2%)	5(4.8%)			
	Vocational Certificate and Above	20(8.5%)	19(95.0%)	1(5.0%)			
		23(9.8%)	23(100.0%)	0(0.0%)			

Employment Status	Employed	48(20.4%)	48(100.0%)	0(0.0%)	2.41	2	0.299
	Self-Employed	94(40.0%)	90(95.7%)	4(4.3%)			
	Unemployed	93(39.6%)	91(97.8%)	2(2.2%)			
Support from the Family	Yes	90(38.3%)	87(96.7%)	3(3.3%)	0.36	1	0.550
	No	145(61.7%)	142(97.9%)	3(2.1%)			

The results indicated that there is no association between Bipolar 1 Disorder and Socio-Demographic Characteristics among individuals attending Methadone Maintenance Therapy at Ngara Methadone Clinic.

Table 7: Socio-demographic Factors associated with Social Anxiety Disorder.

Variable	Category	Overall (%)	Social Anxiety Disorder		χ^2	df	sig.
			No	Yes			
Gender	Male	196(83.4%)	183(93.4%)	13(6.6%)	0.64	1	0.425
	Female	39(16.6%)	35(89.7%)	4(10.3%)			
Age	18-24 Years	66(28.1%)	62(93.9%)	4(6.1%)	0.33	2	0.846
	25-35 Years	109(46.4%)	100(91.7%)	9(8.3%)			
	36 and Above	60(25.5%)	56(93.3%)	4(6.7%)			
Religion	Catholic	61(26.0%)	58(95.1%)	3(4.9%)	1.35	3	0.716
	Protestant	89(37.9%)	83(93.3%)	6(6.7%)			
	Muslim	58(24.7%)	52(89.7%)	6(10.3%)			
	None	27(11.5%)	25(92.6%)	2(7.4%)			
Living Arrangement	Living alone	98(41.7%)	92(93.9%)	6(6.1%)	4.70	3	0.195
	Living with a partner	92(39.1%)	82(89.1%)	10(10.9%)			
	Living with a parent/s	34(14.5%)	34(100.0%)	0(0.0%)			
	Other	11(4.7%)	10(90.9%)	1(9.1%)			
Level of	Primary	88(37.4%)	81(92.0%)	7(8.0%)	2.48	3	0.478

Education	Secondary	104(44.3%)	98(94.2%)	6(5.8%)	1.52	2	0.466
	Vocational	20(8.5%)	17(85.0%)	3(15.0%)			
	Certificate and Above	23(9.8%)	22(95.7%)	1(4.3%)			
Employment Status	Employed	48(20.4%)	46(95.8%)	2(4.2%)	0.06	1	0.800
	Self-Employed	94(40.0%)	85(90.4%)	9(9.6%)			
	Unemployed	93(39.6%)	87(93.5%)	6(6.5%)			
Support from the Family	Yes	90(38.3%)	83(92.2%)	7(7.8%)	0.06	1	0.800
	No	145(61.7%)	135(93.1%)	10(6.9%)			

The results indicated that there is no association between Social Anxiety Disorder and Socio-Demographic Characteristics among individuals attending Methadone Maintenance Therapy at Ngara Methadone Clinic.

Table 8: Socio-demographic Factors associated with Post-Traumatic Stress Disorders.

Variable	Category	Overall (%)	PTSD		χ^2	df	sig.
			No	Yes			
Gender	Male	196(83.4%)	164(83.7%)	32(16.3%)	0.02	1	0.884
	Female	39(16.6%)	33(84.6%)	6(15.4%)			
Age	18-24 Years	66(28.1%)	54(81.8%)	12(18.2%)	0.56	2	0.755
	25-35 Years	109(46.4%)	91(83.5%)	18(16.5%)			
	36 and Above	60(25.5%)	52(86.7%)	8(13.3%)			
Religion	Catholic	61(26.0%)	50(82.0%)	11(18.0%)	1.76	3	0.623
	Protestant	89(37.9%)	74(83.1%)	15(16.9%)			
	Muslim	58(24.7%)	48(82.8%)	10(17.2%)			

	None	27(11.5%)	25(92.6%)	2(7.4%)			
Living Arrangement	Living alone	98(41.7%)	81(82.7%)	17(17.3%)	11.4	3	0.010
	Living with a partner	92(39.1%)	77(83.7%)	15(16.3%)	0		
	Living with a parent/s	34(14.5%)	33(97.1%)	1(2.9%)			
	Other	11(4.7%)	6(54.5%)	5(45.5%)			
Level of Education	Primary	88(37.4%)	71(80.7%)	17(19.3%)	1.41	3	0.701
	Secondary	104(44.3%)	88(84.6%)	16(15.4%)			
	Vocational Certificate and Above	20(8.5%) 23(9.8%)	18(90.0%) 20(87.0%)	2(10.0%) 3(13.0%)			
Employment Status	Employed	48(20.4%)	38(79.2%)	10(20.8%)	1.10	2	0.576
	Self-Employed	94(40.0%)	79(84.0%)	15(16.0%)			
	Unemployed	93(39.6%)	80(86.0%)	13(14.0%)			
Support from the Family	Yes	90(38.3%)	73(81.1%)	17(18.9%)	0.80	1	0.372
	No	145(61.7%)	124(85.5%)	21(14.5%)			

There was a positive correlation between Post-Traumatic Stress Disorder and living arrangements with a significant p -value ($p < .010$).

Table 9: Socio-demographic Factors associated with Generalized Anxiety Disorders.

Variable	Category	Overall (%)	GAD		χ^2	df	sig.
			No	Yes			
Gender	Male	196(83.4%)	190(96.9%)	6(3.1%)	1.89	1	0.169
	Female	39(16.6%)	36(92.3%)	3(7.7%)			
Age	18-24 Years	66(28.1%)	64(97.0%)	2(3.0%)	0.32	2	0.850
	25-35 Years	109(46.4%)	104(95.4%)	5(4.6%)			
	36 and Above	60(25.5%)	58(96.7%)	2(3.3%)			
Religion	Catholic	61(26.0%)	57(93.4%)	4(6.6%)	1.98	3	0.576
	Protestant	89(37.9%)	86(96.6%)	3(3.4%)			
	Muslim	58(24.7%)	57(98.3%)	1(1.7%)			
	None	27(11.5%)	26(96.3%)	1(3.7%)			
Living Arrangement	Living alone	98(41.7%)	92(93.9%)	6(6.1%)	2.59	3	0.458
	Living with a partner	92(39.1%)	90(97.8%)	2(2.2%)			
	Living with a parent/s	34(14.5%)	33(97.1%)	1(2.9%)			
	Other	11(4.7%)	11(100.0%)	0(0.0%)			
Level of Education	Primary	88(37.4%)	83(94.3%)	5(5.7%)	1.93	3	0.586
	Secondary	104(44.3%)	102(98.1%)	2(1.9%)			
	Vocational	20(8.5%)	19(95.0%)	1(5.0%)			
	Certificate and Above	23(9.8%)	22(95.7%)	1(4.3%)			
Employment Status	Employed	48(20.4%)	45(93.8%)	3(6.3%)	0.96	2	0.619
	Self-Employed	94(40.0%)	91(96.8%)	3(3.2%)			
	Unemployed	93(39.6%)	90(96.8%)	3(3.2%)			
Support from the Family	Yes	90(38.3%)	86(95.6%)	4(4.4%)	0.15	1	0.699
	No	145(61.7%)	140(96.6%)	5(3.4%)			

The results indicated that there is no association between Generalized Anxiety Disorder and Socio-Demographic Characteristics among individuals attending Methadone Maintenance Therapy at Ngara Methadone Clinic.

Table 10: Socio-demographic Factors associated with Antisocial Personality Disorder.

Variable	Category	Overall (%)	Antisocial Personality Disorder		χ^2	Df	sig.
			No	Yes			
Gender	Male	196(83.4%)	184(93.9%)	12(6.1%)	0.13	1	0.714
	Female	39(16.6%)	36(92.3%)	3(7.7%)			
Age	18-24 Years	66(28.1%)	60(90.9%)	6(9.1%)	1.40	2	0.495
	25-35 Years	109(46.4%)	104(95.4%)	5(4.6%)			
	36 and Above	60(25.5%)	56(93.3%)	4(6.7%)			
Religion	Catholic	61(26.0%)	58(95.1%)	3(4.9%)	2.32	3	0.508
	Protestant	89(37.9%)	85(95.5%)	4(4.5%)			
	Muslim	58(24.7%)	52(89.7%)	6(10.3%)			
	None	27(11.5%)	25(92.6%)	2(7.4%)			
Living Arrangement	Living alone	98(41.7%)	88(89.8%)	10(10.2%)	4.70	3	0.195
	Living with a partner	92(39.1%)	89(96.7%)	3(3.3%)			
	Living with a parent/s	34(14.5%)	33(97.1%)	1(2.9%)			
	Other	11(4.7%)	10(90.9%)	1(9.1%)			
Level of Education	Primary	88(37.4%)	79(89.8%)	9(10.2%)	8.36	3	0.039
	Secondary	104(44.3%)	101(97.1%)	3(2.9%)			
	Vocational Certificate and Above	20(8.5%)	17(85.0%)	3(15.0%)			
		23(9.8%)	23(100.0%)	0(0.0%)			
Employment Status	Employed	48(20.4%)	46(95.8%)	2(4.2%)	2.79	2	0.247
	Self-Employed	94(40.0%)	90(95.7%)	4(4.3%)			
	Unemployed	93(39.6%)	84(90.3%)	9(9.7%)			
Support from the Family	Yes	90(38.3%)	89(98.9%)	1(1.1%)	6.78	1	0.009
	No	145(61.7%)	131(90.3%)	14(9.7%)			

Antisocial Personality Disorder: There was an association for the following; Level of education with a significance of p -value ($p < .039$), and Support from the family with a significant p -value ($p < .009$).

Table 11: Socio-demographic Factors associated with Comorbid Psychiatric Disorder.

Variable	Category	Overall (%)	Comorbid Disorder		χ^2	df	sig.
			No	Yes			
Gender	Male	196(83.4%)	110(56.1%)	86(43.9%)	0.31	1	0.579
	Female	39(16.6%)	20(51.3%)	19(48.7%)			
Age	18-24 Years	66(28.1%)	40(60.6%)	26(39.4%)	1.15	2	0.562
	25-35 Years	109(46.4%)	57(52.3%)	52(47.7%)			
	36 and Above	60(25.5%)	33(55.0%)	27(45.0%)			
Religion	Catholic	61(26.0%)	36(59.0%)	25(41.0%)	0.54	3	0.910
	Protestant	89(37.9%)	48(53.9%)	41(46.1%)			
	Muslim	58(24.7%)	32(55.2%)	26(44.8%)			
	None	27(11.5%)	14(51.9%)	13(48.1%)			
Living Arrangement	Living alone	98(41.7%)	51(52.0%)	47(48.0%)	4.17	3	0.244
	Living with a partner	92(39.1%)	52(56.5%)	40(43.5%)			
	Living with a parent/s	34(14.5%)	23(67.6%)	11(32.4%)			
	Other	11(4.7%)	4(36.4%)	7(63.6%)			
Level of Education	Primary	88(37.4%)	42(47.7%)	46(52.3%)	5.71	3	0.126
	Secondary	104(44.3%)	66(63.5%)	38(36.5%)			
	Vocational	20(8.5%)	9(45.0%)	11(55.0%)			
	Certificate and Above	23(9.8%)	13(56.5%)	10(43.5%)			
Employment Status	Employed	48(20.4%)	31(64.6%)	17(35.4%)	3.32	2	0.190
	Self-Employed	94(40.0%)	46(48.9%)	48(51.1%)			
	Unemployed	93(39.6%)	53(57.0%)	40(43.0%)			
Support from the Family	Yes	90(38.3%)	52(57.8%)	38(42.2%)	0.36	1	0.550
	No	145(61.7%)	78(53.8%)	67(46.2%)			

The results indicated that there is no association between Comorbid Psychiatric Disorder and Socio-Demographic Characteristics among individuals attending Methadone Maintenance Therapy at Ngara Methadone Clinic.

Table 12: Socio-demographic Factors associated with SUDs (Miraa).

Variable	Category	Overall (%)	Miraa		χ^2	df	sig.
			No	Yes			
Gender	Male	196(83.4%)	160(81.6%)	36(18.4%)	1.51	1	0.218
	Female	39(16.6%)	35(89.7%)	4(10.3%)			
Age	18-24 Years	66(28.1%)	55(83.3%)	11(16.7%)	3.38	2	0.184
	25-35 Years	109(46.4%)	86(78.9%)	23(21.1%)			
	36 and Above	60(25.5%)	54(90.0%)	6(10.0%)			
Religion	Catholic	61(26.0%)	55(90.2%)	6(9.8%)	11.30	3	0.010
	Protestant	89(37.9%)	76(85.4%)	13(14.6%)			
	Muslim	58(24.7%)	40(69.0%)	18(31.0%)			
	None	27(11.5%)	24(88.9%)	3(11.1%)			
Living Arrangement	Living alone	98(41.7%)	83(84.7%)	15(15.3%)	0.77	3	0.858
	Living with a partner	92(39.1%)	74(80.4%)	18(19.6%)			
	Living with a parent/s	34(14.5%)	29(85.3%)	5(14.7%)			
	Other	11(4.7%)	9(81.8%)	2(18.2%)			
Level of Education	Primary	88(37.4%)	77(87.5%)	11(12.5%)	5.13	3	0.162
	Secondary	104(44.3%)	87(83.7%)	17(16.3%)			
	Vocational	20(8.5%)	15(75.0%)	5(25.0%)			
	Certificate and Above	23(9.8%)	16(69.6%)	7(30.4%)			
Employment Status	Employed	48(20.4%)	41(85.4%)	7(14.6%)	1.13	2	0.567
	Self-Employed	94(40.0%)	75(79.8%)	19(20.2%)			
	Unemployed	93(39.6%)	79(84.9%)	14(15.1%)			
Support from the Family	Yes	90(38.3%)	71(78.9%)	19(21.1%)	1.72	1	0.189
	No	145(61.7%)	124(85.5%)	21(14.5%)			

There is an association between SUDs (Miraa) and religion with a significant p -value ($p < .010$).

Table 13: Socio-demographic Factors associated with SUDs (Cannabis).

Variable	Category	Overall (%)	Cannabis		χ^2	df	sig.
			No	Yes			
Gender	Male	196(83.4%)	62(31.6%)	134(68.4%)	3.05	1	0.081
	Female	39(16.6%)	18(46.2%)	21(53.8%)			
Age	18-24 Years	66(28.1%)	15(22.7%)	51(77.3%)	5.33	2	0.070
	25-35 Years	109(46.4%)	41(37.6%)	68(62.4%)			
	36 and Above	60(25.5%)	24(40.0%)	36(60.0%)			
Religion	Catholic	61(26.0%)	27(44.3%)	34(55.7%)	3.91	3	0.271
	Protestant	89(37.9%)	28(31.5%)	61(68.5%)			
	Muslim	58(24.7%)	17(29.3%)	41(70.7%)			
	None	27(11.5%)	8(29.6%)	19(70.4%)			
Living Arrangement	Living alone	98(41.7%)	30(30.6%)	68(69.4%)	1.64	3	0.649
	Living with a partner	92(39.1%)	33(35.9%)	59(64.1%)			
	Living with a parent/s	34(14.5%)	14(41.2%)	20(58.8%)			
	Other	11(4.7%)	3(27.3%)	8(72.7%)			
Level of Education	Primary	88(37.4%)	28(31.8%)	60(68.2%)	4.29	3	0.231
	Secondary	104(44.3%)	35(33.7%)	69(66.3%)			
	Vocational	20(8.5%)	5(25.0%)	15(75.0%)			
	Certificate and Above	23(9.8%)	12(52.2%)	11(47.8%)			
Employment Status	Employed	48(20.4%)	18(37.5%)	30(62.5%)	0.32	2	0.851
	Self-Employed	94(40.0%)	31(33.0%)	63(67.0%)			
	Unemployed	93(39.6%)	31(33.3%)	62(66.7%)			
Support from the Family	Yes	90(38.3%)	26(28.9%)	64(71.1%)	1.72	1	0.189
	No	145(61.7%)	54(37.2%)	91(62.8%)			

Results showed that there is no association between Cannabis use and Socio-Demographic factors among individuals attending Methadone Maintenance Therapy at Ngara Methadone Clinic.

Table 14: Socio-demographic Factors associated with SUDs (Tobacco).

Variable	Category	Overall (%)	Tobacco		χ^2	Df	sig.
			No	Yes			
Gender	Male	196(83.4%)	28(14.3%)	168(85.7%)	1.89	1	0.169
	Female	39(16.6%)	9(23.1%)	30(76.9%)			
Age	18-24 Years	66(28.1%)	10(15.2%)	56(84.8%)	2.52	2	0.282
	25-35 Years	109(46.4%)	21(19.3%)	88(80.7%)			
	36 and Above	60(25.5%)	6(10.0%)	54(90.0%)			
Religion	Catholic	61(26.0%)	13(21.3%)	48(78.7%)	9.11	3	0.028
	Protestant	89(37.9%)	12(13.5%)	77(86.5%)			
	Muslim	58(24.7%)	4(6.9%)	54(93.1%)			
	None	27(11.5%)	8(29.6%)	19(70.4%)			
Living Arrangement	Living alone	98(41.7%)	15(15.3%)	83(84.7%)	0.11	3	0.990
	Living with a partner	92(39.1%)	15(16.3%)	77(83.7%)			
	Living with a parent/s	34(14.5%)	5(14.7%)	29(85.3%)			
	Other	11(4.7%)	2(18.2%)	9(81.8%)			
Level of Education	Primary	88(37.4%)	13(14.8%)	75(85.2%)	0.80	3	0.850
	Secondary	104(44.3%)	18(17.3%)	86(82.7%)			
	Vocational	20(8.5%)	2(10.0%)	18(90.0%)			
	Certificate and Above	23(9.8%)	4(17.4%)	19(82.6%)			
Employment Status	Employed	48(20.4%)	13(27.1%)	35(72.9%)	5.98	2	0.050
	Self-Employed	94(40.0%)	13(13.8%)	81(86.2%)			
	Unemployed	93(39.6%)	11(11.8%)	82(88.2%)			
Support from the Family	Yes	90(38.3%)	19(21.1%)	71(78.9%)	3.16	1	0.075
	No	145(61.7%)	18(12.4%)	127(87.6%)			

There is an association between the use of Tobacco and employment status with a significant p -value ($p < .050$).

Table 15: Socio-demographic Factors associated with the use of (SUDs) Barbiturates.

Variable	Category	Overall (%)	Barbiturates		χ^2	Df	sig.
			No	Yes			
Gender	Male	196(83.4%)	192(98.0%)	4(2.0%)	10.20	1	0.001
	Female	39(16.6%)	34(87.2%)	5(12.8%)			
Age	18-24 Years	66(28.1%)	62(93.9%)	4(6.1%)	1.27	2	0.528
	25-35 Years	109(46.4%)	106(97.2%)	3(2.8%)			
	36 and Above	60(25.5%)	58(96.7%)	2(3.3%)			
Religion	Catholic	61(26.0%)	57(93.4%)	4(6.6%)	1.98	3	0.576
	Protestant	89(37.9%)	86(96.6%)	3(3.4%)			
	Muslim	58(24.7%)	57(98.3%)	1(1.7%)			
	None	27(11.5%)	26(96.3%)	1(3.7%)			
Living Arrangement	Living alone	98(41.7%)	95(96.9%)	3(3.1%)	3.97	3	0.265
	Living with a partner	92(39.1%)	90(97.8%)	2(2.2%)			
	Living with a parent/s	34(14.5%)	31(91.2%)	3(8.8%)			
	Other	11(4.7%)	10(90.9%)	1(9.1%)			
Level of Education	Primary	88(37.4%)	85(96.6%)	3(3.4%)	1.12	3	0.771
	Secondary	104(44.3%)	99(95.2%)	5(4.8%)			
	Vocational	20(8.5%)	20(100.0%)	0(0.0%)			
	Certificate and Above	23(9.8%)	22(95.7%)	1(4.3%)			
Employment Status	Employed	48(20.4%)	44(91.7%)	4(8.3%)	3.47	2	0.176
	Self-Employed	94(40.0%)	92(97.9%)	2(2.1%)			
	Unemployed	93(39.6%)	90(96.8%)	3(3.2%)			
Support from the Family	Yes	90(38.3%)	84(93.3%)	6(6.7%)	3.18	1	0.074
	No	145(61.7%)	142(97.9%)	3(2.1%)			

There is a strong correlation as females are more likely to use Barbiturates (12.8%) (n=235) with a significance of p-value ($p < .001$) compared to males (2.0%).

CHAPTER FIVE: DISCUSSION

5.1 Introduction

This chapter includes consideration of all the aims of this study, suggestions, recommendations as well as the conclusion of the report.

5.2 Socio-Demographic Correlates of Psychiatric and Other Substance Use Disorders among Clients Attending Methadone Maintenance Therapy at Ngara Methadone Clinic.

The response rate of this study was very good, with a total number of 235 study participants', the majority being male, i.e. 196 (83.4%) while the number of female participants was 39 (16.6%). The majority of the study participants were between the ages of 25 and 35 years 109 (46.4%), followed by 18-24 years 66 (28.1%), then 36 years and above 60 (25.5%). Looking at the education level, 104 of the study participants had attained a secondary level of education (44.3%), followed by primary level 88 (37.4%), then certificate/diploma/degree 23 (9.8%), and vocational 20 (8.5%). Moreover, 94 (40.0%) are self-employed, 93 (39.6%) are unemployed, while 48 (20.4%) are employed. In addition, 90 (38.3%) of the study participants indicated that they receive support from their families. The living arrangements of the study participants are as follows; living alone 98 (41.7%), living with a partner 92 (39.1%), living with a parent/s 34 (14.5%), and other 11 (4.7%). Furthermore, 89 (37.9) were protestants, 61 (26.0%) were Catholics, 58 (24.7%) were Muslim, while 27 (11.5%) of the participants do not subscribe to any religion.

The sociodemographic correlates of the participants' of this study coincide to a greater extent with the findings of the study that was conducted in Taiwan whose results showed that participants had poorer family support, higher rate of unmarried, higher rate of unemployment,

earlier onset of heroin use, a longer length of heroin use, and lower daily dosage of heroin (Chen et al., 2015).

5.3 Prevalence of Psychiatry and Other Substance Use Disorders among Heroin Users Attending Methadone Maintenance Therapy at Ngara Methadone Clinic in Nairobi County.

This study sought to identify the prevalence of psychiatry and other substance use disorders among heroin users attending Methadone Maintenance Therapy at Ngara Methadone Clinic in Nairobi. Results of the study showed that 30.6% (n=72) presented with symptoms of Major Depressive Episode-Current (C.I. 25.1; 36.6), while 29.8% (n=70) had experienced Major Depressive Episode in the past (C.I. 24.3; 36.2). Moreover, 9.8% (n=23) had contemplated suicide (C.I. 6.4; 14.0), 6.8% (n=16) presented with Suicidal ideations (C.I. 3.8; 10.2), 2.6% (n=6) with Manic Episodes (C.I. 0.9; 4.7), 2.6% (n=6) had Hypomanic Episodes (C.I. 0.9; 4.7), 2.6% (n=6) had Bipolar 1 Disorder (C.I. 0.9; 4.7), 0.4% (n=1) had experienced panic attack (C.I. 0.0; 1.3), 0.4% (n=1) had agoraphobia (C.I. 0.0; 1.3) while 7.2% (n=17) presented with Socio Anxiety Disorder (C.I. 4.3; 10.6). In addition, 0.4% (n=1) presented with Obsessive Compulsive Disorder (C.I. 0.0; 1.3), 16.2% (n=38) presented with Post-Traumatic Stress Disorder (C.I. 11.5; 20.9), 0.4% (n=1) with Psychotic Disorder (C.I. 0.0; 1.3), 3.8% (n=9) presented with Generalized Anxiety Disorder (1.3; 6.4), while 6.4% (n=15) presented with Antisocial Personality Disorder (C.I. 3.4; 9.4).

The Prevalence of Psychiatry and Other Substance Use Disorders in this study was within the range of previous studies conducted in the United States, Australia, and Spain (Teesson et al., 2005). According to a study done by Chen et al., results showed that heroin users with major depressive disorder were reported to have a higher suicide rate (Chen et al., 2015).

5.4 The Association between Psychiatric Disorders, Socio-Demographic Characteristics, and Other Substance Use among Individuals Attending Methadone Maintenance Therapy at Ngara Methadone Clinic.

The study also sought to determine the association between psychiatric disorders, socio-demographic characteristics, and other substance use among individuals attending Methadone Maintenance Therapy at Ngara Methadone Clinic. Results of the study showed a strong correlation between socio-demographic factors and the following;

Suicidality as females are more likely to have suicidal ideations 8(20.5%) (n=235) with a significant p -value ($p < .014$) compared to males 15(7.7%). In addition, there is also an association between suicidality and support from the family with significance of p -value ($p < .009$).

Post-Traumatic Stress Disorder: There was also a positive correlation between Post-Traumatic Stress Disorder and living arrangements with a significant p -value ($p < .010$).

Antisocial Personality Disorder: There was an association for the following; Level of education with a significance of p -value ($p < .039$), and Support from the family with a significance of p -value ($p < .009$).

SUDs (Miraa): There is an association between the use of Miraa and religion with a significant of p -value ($p < .010$).

SUDs (Tobacco): There is an association between the use of Tobacco and employment status with a significant p -value ($p < .050$).

SUDs (Barbiturates): There is a strong correlation as females are more likely to use Barbiturates (12.8%) (n=235) with a significance of p-value ($p < .001$) compared to males (2.0%).

There was, however, a significant negative correlation between psychiatric disorders such as; Major Depressive Episode (MDE), Bipolar Disorder, Social Anxiety Disorder, Generalized Anxiety Disorder, Comorbid Psychiatric Disorder, SUDs (Cannabis), and Social Demographic Factors.

These findings are supported by the findings by Ngarachu et al, (2020) in Kenya, that Socio-demographic factors associated with reduced risk for cannabis use were; being in the older age group 48-57 years and university education, while being in the age group 18-27 years and being married were associated with increased risk for cannabis use. In addition, a pattern of polysubstance use was observed.

CHAPTER 6: CONCLUSION AND RECOMMENDATIONS

6.1 Conclusion

1. Depression and PTSD disorder were the two most prevalent psychiatric diagnoses among MMT.
2. More than one Substance use disorder were found to be prevalent among client with psychiatric disorders.
3. The most prevalent SUDs were Tobacco, Cannabis, and Khat respectively.
4. Considering all substance use, SUD, and Psychiatric disorders, patients were more likely to use two or more substances than only one substance.
5. Socio-demographic characteristics such as gender and age had a significant association with psychiatric disorders and SUDs.
6. 44 Percent of clients have at least one psychiatric disorder.

6.2 Recommendations

1. All MMT clients should be screened for psychiatric disorders.
2. SUD preventative measures should be put in place focusing mainly on young males with psychiatric disorders.
3. Treatment of co-occurring SUD and other psychiatric disorders should be integrated.
4. Further research should be carried out on this topic and other psychiatric diagnoses with a focus on intervention.

6.3 Study limitations

1. The study was amenable to recall bias as participants answered questions from memory.
2. Data was collected during COVID-19 pandemic. Therefore, the findings may not be generalized to usual MMT clients.

Research Time-Table / Period

Activity	April 2021- May 2021	May- June 2021	June -July 2021	July- Aug 2021	Aug- Sept 2021	Feb 2022	March 2022
Development of proposal							
Departmental approval							
Ethical review and Approval							
Data collection							
Data analysis							
Presentation of results							
Completion of work and binding							

Table 16: Study Time Schedule/Frame.

Research Expenditures / Spending

Category	Remarks	Units	Unit Cost	Total Cost (Ksh.)
Development of the research proposal.	Printing drafts	1000 pages	5	5000
	Proposal copies	7 copies	1000	7000
Data Collection Expenses	Stationery (Pens, paper)	400	50	25000
	Training of research assistants	2	1000	2000
	Research Assistants Remuneration	12 weeks	2000 X 2	48000
Data Entry	Data Clerk	1	7000	7000
Data Analysis	Statistician	1	35000	35000
Thesis Write up	Printing drafts	1000 pages	5	5000
	Printing Thesis	10 copies	1500	15000
Contingency fund				5000
Total				154,000

Table 17: Study Budget Estimates.

REFERENCES

- Chen et al. (2015). Comparison of socio-demographic characteristics, substance, and depression among male heroin users attending therapeutic community and methadone maintenance treatment program in Nantou, Taiwan. *Subst Abuse Treat Prev Policy* .
- Corradi-Webster et al. (2005, Nov-Dec). (Performance assessment of CAGE screening test among psychiatric outpatients). *Rev Lat Am Enfermagem*.
- Degenhardt et al. (2008). Toward a Global View of Alcohol, Tobacco, Cannabis, and Cocaine Use: Findings from the WHO World Mental Health Surveys. *PLOS Medicine*.
- Demyttenaere et al. (2004, July). Prevalence, Severity, and Unmet Need for Treatment of Mental Disorders in the World Health Organization World Mental Health Surveys Consortium JAMA. *JAMA The Journal of the American Medical Association*, 291(21), 2581-90.
- Douglas, S. (2001). Primary Care Companion. *Journal of Clinical Psychiatry*.
- Ferrari. (2016). The global distribution of mental and substance use disorders: Research gains and challenges. *Epidemiology and Psychiatric Sciences*, 25(3), 230-232.
- Giovazolias, & Themeli. (2014). Social Learning Conceptualization for Substance Abuse: Implications for Therapeutic Interventions. *The European Journal of Counselling Psychology*, 3(1).
- Gopuram, & Kishore. (2014, Jan-Mar). Psychosocial Attributes of Substance Abuse Among Adolescents and Young Adults: A Comparative Study of Users and Non-users. *Indian Journal of Psychological Medicine*, 36(1), 58-61.
- Grant et al. (2004, August). Prevalence and co-occurrence of substance use disorders and independent mood and anxiety disorders: results from the National Epidemiologic Survey on Alcohol and Related Conditions.
- Grant et al., S. R. (2016). Relationship between quality of life in young adults and impulsivity/compulsivity. *Psychiatry Research*, 271, pp. 253-258.
- Hartz et al., P. S. (2014, March). Comorbidity of severe psychotic disorders with measures of substance use. *JAMA psychiatry*.
- Hauli et al., D. M. (2011). The Prevalence of Substance Use Among Psychiatric Patients: The Case Study of Bugando Medical Centre, Mwanza (Northern Tanzania).

- Jostein Rise, & Torleif Halkjelsvik. (2019, June 28). Conceptualizations of Addiction and Moral Responsibility. *frontiers in psychology*.
- Kangule et al. (2011). A cross-sectional study of the prevalence of substance use and its determinants among male tribal youths. *International Journal of Research in Pharmaceutical and Biomedical Sciences*, 2, 61-4.
- Kathleen. (2002). Exploring the Nature of the Relationship Between Poverty and Substance Abuse. *Journal of Social Service Research*.
- Kathleen Holtz. (2007). Psychodynamic Theory. *Advances in Social Work*, 8(1), 184-195.
- Kathungu et al. (2013). *Report on Alcohol, Drugs and Substance Abuse Among Persons with Disability in Nairobi, Coast, and Central Regions Kenya*. Nairobi: NACADA.
- Lily Frank, & Saskia Nagel. (2017). Addiction and Moralization: the Role of the Underlying Model of Addiction. *Neuroethics*.
- Magura, H. M., & Rosenblum. (2009). Buprenorphine and methadone maintenance in jail and post-release: a randomized clinical trial. *Drug Alcohol Dependence*.
- Malhotra et al. (2007, April). Drug use among juveniles in conflict with the law. *Indian Journal of Pediatrics*, 74(4), 353-6.
- Mary Kuria et al., L. K. (2008). Substance Abuse and Psychiatric Co-morbidities: A Case Study of Patients at Mathari Psychiatric Hospital. *African Journal of Drug & Alcohol Studies*.
- Mathers et al. (2008, November 15). Global epidemiology of injecting drug use and HIV among people who inject drugs: a systematic review. *372(9651)*, pp. 1733-45.
- Morisano et al. (2009). Mechanisms underlying the comorbidity of tobacco use in mental health and addictive disorders. *The Canadian Journal of Psychiatry*, 54(6), 356-67.
- Morisano et al. (2014). Co-Occurrence of Substance use Disorders with other Psychiatric Disorders: Implications for Treatment Services. *Nordic Studies on Alcohol and Drugs*, 31(1).
- NIDA. (2020, June). Health Consequences of Drug Misuse-Mental Health Effects.
- Nirvana et al., W. D. (2019). Smoking heroin with cannabis versus injecting heroin: unexpected impact on treatment outcomes. *Harm Reduction Journal*.
- Okpataku et al., H. O. (2014, November). Prevalence and socio-demographic risk factors associated with psychoactive substance use in psychiatric out-patients of a tertiary hospital in Nigeria. *Nigerian Medical Journal*.

- Ruth Kahuthia et al. (2013, November). Trends and Patterns of Emerging Drugs in Kenya: A Case study in Mombasa and Nairobi Counties.
- Sheehan et al. (1998). The Mini-International Neuropsychiatric Interview (M.I.N.I.): the development and validation of a structured diagnostic psychiatric interview for DSM-IV and ICD-10. *Journal of Clinical Psychiatry*.
- Staiger et al. (2010). Health service systems and comorbidity: stepping up to the mark. *Mental Health Substance Use*, 3(2), 148-161.
- Teesson et al. (2005). Depression among entrants to treatment for heroin dependence in the Australian Treatment Outcome Study (ATOS): prevalence, correlates and treatment seeking. *Drug Alcohol Depend.*, 78(3), 309–15.
- Thomas Kelly, & Dennis Daley. (2013, August). Integrated Treatment of Substance Use and Psychiatric Disorders. *Social work in public health*.
- Toftdahl et al., N. M. (2016). Prevalence of substance use disorders in psychiatric patients: a nationwide Danish population-based study. *Social Psychiatry and Psychiatric Epidemiology*, pp. 129-140.
- Tripodi et al. (2010, January). Interventions for reducing adolescent alcohol abuse: a meta-analytic review. *Archives of Pediatrics and Adolescent Medicine*, 164(1), 85-91.
- UNODC. (2009). *WORLD DRUG REPORT*. New York: United Nations Publication.
- Whelan, C. M., & Trauer. (2001, October). Prevalence of psychiatric disorder in a methadone maintenance population. *Australian and New Zealand Journal of Psychiatry*.
- WHO. (1993). Approaches to Treatment of Substance Abuse. *Program On Substance Abuse*.
- Yang et al., G. P. (2015). A Preliminary Qualitative Study of Drug Users in a Compulsory Drug Rehabilitation Center in Changsha, China.

APPENDICES

APPENDIX 1: CONSENT EXPLANATION DOCUMENT (ENGLISH VERSION)

Title: Prevalence of Co-Occurring Psychiatry and Other Substance Use Disorders among Heroin Users on Methadone Maintenance Therapy (MMT) At Ngara Clinic, Nairobi County.

Participant Study Identification Number

Date

Dear Sir/Madam,

Introduction

My name is Joseph M Kathono, a postgraduate student in clinical psychology at the University of Nairobi. In collaboration with the University of Nairobi, we are doing a study on comorbid psychiatry and other substance use disorders among participants with heroin use disorders enrolled at Ngara MAT Clinic. To achieve this, we need about 235 participants to help us fill questionnaires about themselves which will help us meet our objective.

To this end, we kindly request your/your next of kin's participation in the study.

Requirements

For one to participate in the study you need to:

1. Be aged 18 years and above.
2. Next of kin to sign the informed consent form.

Procedure

If you agree to participate in the study, you will;

1. Be asked for assent and next of kin to sign the consent form expressing voluntary participation.
2. Be asked questions that relate to:
 - i) socio-demographic information such as age, gender, religion, level of education, and others
 - ii) use of any substance of abuse such as alcohol, cannabis, cigarettes, Khat, and others
 - iii) Illness leading to enrolment and any other illnesses

This will be in form of a questionnaire that will take about 45 minutes to complete.

Benefits:

There are no direct benefits to participating in this study.

However, results from this study can help participants and clinicians to better understand the association between psychiatric illness and substance use disorders.

This will help in improving the management of participants with both substance use disorder and psychiatric illness.

Risks:

It is possible that you might feel embarrassed or uncomfortable as you give information about substance use disorder and psychiatric illness, which are potentially sensitive topics.

In case there is a psychological disturbance, you will be offered psychological support.

Voluntary Participation:

Your participation in this research is entirely voluntary and if you decide to participate, you are free to withdraw at any time. You may also choose not to answer specific questions or withdraw from the study at any time. Your choice not to participate or choose to withdraw will not affect any treatment needs that you may have at Ngara MAT now and in the future.

Confidentiality:

Your identity will be kept confidential. Your name or any other personal identifier will not be used in any reports or publications arising from this study. Instead, you will be assigned a unique study number to protect your identity.

The questionnaires that you will complete will be stored safely, with nobody having access to them apart from the investigators. The data collected from this study will be entered into a password-protected computer and kept away from public access.

Compensation:

You will not be paid to participate in this study.

Additional Information:

If you have questions about the study that are not answered in the consent information, please ask them. In addition, if you have questions in the future you may contact the following:

1. Investigator:

a. Joseph M Kathono

Tel: 0720234616

Email: josephkathono@gmail.com

2. Supervisors:

a. Dr. Lincoln Khasakhala

Email: khaimbugwa@gmail.com

b. Dr. Fred Owiti

Email: f.owiti89@gmail.com

3. Kenyatta National Hospital/University of Nairobi Ethics & Research committee

P.O Box 19676 - 00202 Nairobi

Tel: (254 – 020) 2726300-9, Ext. 44355

Email: uonknh_erc@uonbi.ac.ke

APPENDIX 2: CONSENT EXPLANATION DOCUMENT (SWAHILI VERSION)

MAELEZO YA IDHINI

Kichwa: Kukithiri Kwa Magonjwa ya Kiakili Na Magonjwa Mengine ya Matumizi ya madawa ya kulevya miongoni mwa Watumiaji wa Heroin Wanaohudhuria Kliniki ya Methadone (MMT) katika Hospitali ya Ngara, Kaunti ya Nairobi.

Namba ya Utambulisho wa Mshiriki wa Utafiti

Tarehe.....

Mpendwa Bwana/Bi,

Utangulizi

Jina langu ni Joseph M Kathono, mwanafunzi wa shahada ya uzamili ya saikolojia ya kimatibabu katika Chuo Kikuu cha Nairobi. Kwa kushirikiana na Chuo Kikuu cha Nairobi, tunafanya utafiti juu ya kukithiri kwa magonjwa ya kiakili na magonjwa mengine ya matumizi ya madawa ya kulevya miongoni mwa watumiaji wa heroin wanaohudhuria kliniki ya methadone (MMT) katika hospitali ya Ngara. Ili kufanikisha hili, tunahitaji washiriki 235 ili kutusaidia kujaza maswali kuhusu wao wenyewe ambao utatusaidia kufikia lengo letu.

Kwa mwisho huu, tunaomba kwa ukarimu ushiriki wako au kushiriki kwa jamaa yako katika utafiti.

Mahitaji

Ili kushiriki katika utafiti unahitaji:

1. Kuwa na umri wa miaka 18 na zaidi
2. Jamaa yako kutia sahihi fomu ya idhini iliyojulishwa.

Utaratibu

Ikiwa unakubali kushiriki katika utafiti, utatakiwa;

1. Kuulizwa kupeana idhini na jamaa kutia sahihi fomu ya idhini inayoonyesha ushiriki wa hiari.
2. Kuulizwa maswali yanayohusiana na:
 - i) taarifa za kidunia kama vile umri, jinsia, dini, Kiwango cha elimu na mengine
 - ii) matumizi ya madawa yoyote ya kulevya kama vile pombe, bangi, sigara, miraa, na nyingine
 - iii) Ugonjwa unaosababisha uandikishaji na magonjwa mengine yoyote

Hii itakuwa katika mfumo wa maswali ambayo itachukua takriban dakika 45 kukamilika.

Faida:

Hakuna faida za moja kwa moja za kushiriki katika utafiti huu.

Hata hivyo, matokeo ya utafiti huu yanaweza kusaidia washiriki na wahudumu wa afya kuelewa vyema uhusiano kati ya ugonjwa wa akili na magonjwa ya matumizi ya madawa ya kulevya.

Hii itasaidia katika kuboresha usimamizi wa washiriki na shida zote mbili za matumizi ya madawa ya kulevya na shida za ugonjwa wa akili.

Hatari:

Inawezekana kwamba unaweza kuhisi aibu au wasiwasi unapotoa habari kuhusu ugonjwa wa matumizi ya madawa ya kulevya na ugonjwa wa akili, ambao ni mada nyeti.

Ikiwa kuna usumbufu wa kisaikolojia, utapewa msaada wa kisaikolojia.

Ushiriki wa Hiari:

Ushiriki wako katika utafiti huu ni wa hiari kabisa na ikiwa unaamua kushiriki, uko huru kujiondoa wakati wowote. Unaweza pia kuchagua kutojibu maswali maalum au kujiondoa kwenye utafiti wakati wowote. Chaguo lako la kutoshiriki au kuchagua kujiondoa halitaathiri mahitaji yoyote ya matibabu ambayo unaweza kuwa unapokea katika kliniki ya Ngara (MAT) sasa na katika siku zijazo.

Usiri:

Utambulisho wako utawekwa siri. Jina lako au kitambulishi kingine chochote cha kibinafsi hakitatumika katika ripoti zozote au machapisho yaliyotokana na utafiti huu. Badala yake, utapewa nambari ya kipekee ili kulinda utambulisho wako.

Maswali ambayo utakamilisha yatahifadhiwa kwa usalama, na hakuna mtu atakayefikia mbali na watafiti. Takwimu zitakazokusanywa kutoka utafiti huu zitaingizwa katika tarakilishi linalolindwa na kuwekwa mbali na ufikivu wa umma.

Fidia:

Hutalipwa kushiriki katika utafiti huu.

Maelezo ya ziada:

Ikiwa una maswali kuhusu utafiti ambao haujajibiwa katika taarifa ya idhini, tafadhali uliza.

Kwa kuongezea, ikiwa utakua na maswali katika siku zijazo unaweza kuwasiliana na wafuatao:

1. Mpelelezi:

a. Joseph M Kathono

Simu: 0720234616

Barua pepe: josephkathono@gmail.com

2. Wasimamizi:

a. Dk. Lincoln Khasakhala

Barua pepe: khaimbugwa@gmail.com

b. Dk. Fred Owiti

Barua pepe: f.owiti89@gmail.com

3. Hospitali ya Kitaifa ya Kenyatta / Chuo Kikuu cha Maadili na Utafiti cha Nairobi

S.P.O Box 19676 - 00202 Nairobi

Simu: (254 - 020) 2726300-9, Ext. 44355

Barua pepe: uonknh_erc@uonbi.ac.ke

APPENDIX 3: ASSENT AND CONSENT DECLARATION FORM

Assent clause to be completed by the participant

I declare that the study has been explained to me satisfactorily. I understand the nature, method, risks, and benefits of the study.

My questions about the study have been answered satisfactorily.

I, therefore, voluntarily agree to take part in this study while reserving my right to terminate my participation at any time.

Date ----- Signature of participant -----

Date ----- Signature of researcher -----

Informed consent clause to be completed by participants' next-of-kin or legal guardian

I declare that the study has been explained to satisfaction. I understand the nature, method, risks, and benefits of the study.

My questions about the study have been answered satisfactorily.

I, therefore, give consent for my (state relationship) ----- to participate in this study subject to their assent. I do this while reserving my right to revoke consent at any time should there be a need to.

Date -----

Signature of next-of-kin -----

Relationship to patient -----

To be completed by the researcher

I declare that I have given both a written and verbal explanation of the study. I have explained the purpose of the study, methods, risks, and benefits of the study. I have answered and will continue to answer any questions that may arise about the study. The participant will not suffer any adverse consequences in case of early termination of participation in this study.

Name of researcher -----

Signature ----- Date -----

APPENDIX 4: ASSENT AND CONSENT DECLARATION FORM (SWAHILI VERSION)

FOMU YA TAMKO LA KUKUBALI NA RIDHAA

Kifungu cha Ruhusa kukamilishwa na mshiriki

Ninatangaza kwamba utafiti umeelezwa kwangu kwa namna iliyo dhahiri kwangu. Ninaelewa asili, mbinu, hatari, na faida za utafiti.

Maswali yangu kuhusu utafiti yamejibiwa kwa kuridhisha.

Kwa hiyo, kwa hiari ninakubali kushiriki katika utafiti huu wakati nikihifadhi haki yangu ya kusitisha ushiriki wangu wakati wowote.

Tarehe ----- Saini ya mshiriki -----

Tarehe ----- Saini ya mtafiti -----

Kifungu cha idhini kukamilishwa na washiriki wafuatao wa jamaa au mlezi wa kisheria

Ninatangaza kwamba utafiti umeelezwa kwangu kwa namna iliyo dhahiri kwangu. Ninaelewa asili, mbinu, hatari na faida za utafiti.

Maswali yangu kuhusu utafiti yamejibiwa kwa kuridhisha.

Kwa hiyo ninatoa ridhaa kwa ----- kushiriki katika utafiti huu chini ya idhini yao. Ninafanya hivyo huku nikihifadhi haki yangu ya kubatili ridhaa wakati wowote kukiwa na haja.

Tarehe -----

Sahihi ya jamaa wa karibu -----

Uhusiano na wagonjwa -----

Kukamilishwa na mtafiti

Ninatangaza kwamba nimetoa maelezo ya maandishi na maneno ya utafiti. Nimeelezea madhumuni ya utafiti, mbinu, hatari, na faida za utafiti. Nimejibu na nitaendelea kujibu maswali yoyote ambayo yanaweza kutokea kuhusu utafiti. Mshiriki hatapata madhara yoyote mabaya ikiwa atasitisha mapema kushiriki kwake katika utafiti huu.

Jina la mtafiti -----

Sahihi ----- Tarehe -----

APPENDIX 5: CONFIDENTIALITY AGREEMENT

To maintain confidentiality, I commit to observe the following:

1. Keep all information about the study confidential by not discussing or sharing it in any format with anyone other than the principal investigator.
2. Ensure security of research information, including filled questionnaires and computer used for data entry and analysis, while in my possession.
3. Not make copies of any research documents or research data unless so instructed by the principal investigator.
4. Give back all research documents, data, and information to the principal investigator upon completion of my duties.

By signing this, I acknowledge that I understand and agree to observe the expectations outlined above.

Name -----

Designation -----

Sign -----

Date -----

Name of Principal Investigator -----

Sign-----

APPENDIX 6: SOCIO-DEMOGRAPHIC QUESTIONNAIRE (DUMMY TABLE)

What is your gender?	<ul style="list-style-type: none"> a. Male b. Female c. Other
How old are you?	
What is your religion?	<ul style="list-style-type: none"> a. Catholic b. Protestant c. Muslim d. None e. Other (Specify)
How often do you go to church/Mosque?	<ul style="list-style-type: none"> a. Almost every week b. Less than once a week, but more than just on holidays (eg. Christmas, Easter) c. Just on holidays d. Rarely
Which one of the statements below best describes your living arrangements?	<ul style="list-style-type: none"> a. Living alone <input type="checkbox"/> b. Living with a partner <input type="checkbox"/> c. Living with a parent/s <input type="checkbox"/> d. Other <input type="checkbox"/> e. If “other”, please specify:
What is the highest level of education you have attained?	<ul style="list-style-type: none"> a. Primary b. Lower Secondary (S1-S4) c. Upper Secondary (S5-S6) d. Some College/Certificate e. Diploma f. Vocational/Trade school g. Bachelor’s Degree h. Some Graduate or Professional School i. Completed Graduate or Professional School
What is your employment status?	<ul style="list-style-type: none"> a. Formal employment (full-time) b. Formal employment (part-time) c. Self-employed d. Student e. Retired f. Unemployed g. Other-
Do you financially support your family?	<ul style="list-style-type: none"> a. Yes b. No

Thank you for taking the time to complete this questionnaire

APPENDIX 7: SOCIO-DEMOGRAPHIC QUESTIONNAIRE (SWAHILI VERSION)

Jinsia yako ni gani?	<ul style="list-style-type: none"> a. Mwanaume b. Mwanamke c. Nyingine
Una umri gani?	
Dini yako ni gani?	<ul style="list-style-type: none"> a. Katoliki b. Kiprotestanti c. Muislamu d. Hakuna e. Nyingine (Taja)
Ni mara ngapi unakwenda kanisani/Msikiti?	<ul style="list-style-type: none"> a. Karibu kila wiki b. Chini ya mara moja kwa wiki, lakini zaidi ya likizo (kwa mfano. Krismasi, Pasaka) c. Wakati wa likizo d. Karibu kamwe
Ni ipi kati ya kauli zilizo chini zinaelezea vyema mipango yako ya kuishi?	<ul style="list-style-type: none"> a. Kuishi peke yako <input type="checkbox"/> b. Kuishi na mpenzi <input type="checkbox"/> c. Kuishi na mzazi/wazazi <input type="checkbox"/> d. Nyingine <input type="checkbox"/> e. Ikiwa "nyingine", tafadhali taja:
Je, kiwango cha juu cha elimu umefikia wapi?	<ul style="list-style-type: none"> a. Msingi b. Sekondari ya Chini (S1-S4) c. Sekondari ya Juu (S5-S6) d. Baadhi ya Chuo / Cheti e. Diploma f. Shule ya Ufundi/Biashara g. Shahada ya Kwanza h. Baada ya kuhitimu au Shule ya Kitaaluma i. Mhitimu aliyemaliza au shule ya kitaaluma
Hali yako ya ajira ni gani?	<ul style="list-style-type: none"> a. Ajira rasmi (wakati wote) b. Ajira rasmi (sehemu ya muda) c. Kujiajiri d. Mwanafunzi e. Mstaafu f. Kutokuwa na rasimu g. Nyingine-
Je, unaisaidia familia yako kifedha?	<ul style="list-style-type: none"> a. Ndiyo b. Hapana

Asante kwa kuchukua muda kukamilisha kipindi hiki

APPENDIX 8: MINI INTERNATIONAL NEUROPSYCHIATRIC INTERVIEW

MINI INTERNATIONAL NEUROPSYCHIATRIC INTERVIEW

English Version 7.0.0

FOR

DSM-5

© Copyright 1992-2015 Sheehan DV

All rights reserved. No part of this document may be reproduced or transmitted in any form, or by any means, electronic or mechanical, including photocopying, or by any information storage or retrieval system, without permission in writing from Dr. Sheehan. Individual researchers, clinicians and students working in nonprofit or publicly owned settings (including universities, nonprofit hospitals, and government institutions) may make paper copies of a M.I.N.I. instrument for their **personal** clinical and research use, but **not** for institutional use. Any use involving financial gain requires a license agreement from the copyright holder and payment of a per use license fee.

DISCLAIMER

Our aim is to assist in the assessment and tracking of patients with greater efficiency and accuracy. Before action is taken on any data collected and processed by this program, it should be reviewed and interpreted by a licensed clinician.

This program is not designed or intended to be used in the place of a full medical and psychiatric evaluation by a qualified licensed physician – psychiatrist. It is intended only as a tool to facilitate accurate data collection and processing of symptoms elicited by trained personnel. It is not a diagnostic test.

M.I.N.I. 7.0.0 (January 5, 2015) (1/5/15)

Patient Name:
Date of Birth:
Interviewer's Name:
Date of Interview:

Patient Number:
Time Interview Began:
Time Interview Ended:
Total Time:

MODULES	TIME FRAME	MEETS CRITERIA	DSM-5	ICD-10	PRIMARY DIAGNOSIS
A MAJOR DEPRESSIVE EPISODE	Current (2 weeks)	<input type="checkbox"/>			
	Past	<input type="checkbox"/>			
MAJOR DEPRESSIVE DISORDER	Current (2 weeks)	<input type="checkbox"/>	296.20-296.26	Single F32.	<input type="checkbox"/>
	Past	<input type="checkbox"/>	296.20-296.26	Single F32.	<input type="checkbox"/>
	Recurrent	<input type="checkbox"/>	296.30-	F33.	<input type="checkbox"/>
B SUICIDALITY	Current (Past)	<input type="checkbox"/>			<input type="checkbox"/>
SUICIDE BEHAVIOR DISORDER	In early remission	<input type="checkbox"/>	Lifetime attempt (In Past Year) (1-2 Years Ago)	<input type="checkbox"/>	<input type="checkbox"/>
C MANIC EPISODE	Current	<input type="checkbox"/>			
	Past	<input type="checkbox"/>			
HYPOMANIC EPISODE	Current	<input type="checkbox"/>	<input type="checkbox"/> Not Explo		
	Past	<input type="checkbox"/>			
BIPOLAR I DISORDER	Current	<input type="checkbox"/>	296.41-296.56	F31.0-	<input type="checkbox"/>
	Past	<input type="checkbox"/>	296.41-296.56	F31.0-	<input type="checkbox"/>
BIPOLAR II DISORDER	Current	<input type="checkbox"/>	296.89	F31.81	<input type="checkbox"/>
	Past	<input type="checkbox"/>	296.89	F31.81	<input type="checkbox"/>
BIPOLAR DISORDER UNSPECIFIED	Current	<input type="checkbox"/>	296.40/296.50	F31.9	<input type="checkbox"/>
	Past	<input type="checkbox"/>	296.40/296.50	F31.9	<input type="checkbox"/>
BIPOLAR I DISORDER WITH PSYCHOTIC FEATURES	Current	<input type="checkbox"/>	296.44/296.54	F31.2/31.5	<input type="checkbox"/>
	Past	<input type="checkbox"/>	296.44/296.54	F31.2/31.5	<input type="checkbox"/>
D PANIC DISORDER	Current (Past Month)	<input type="checkbox"/>	300.01	F41.0 F	<input type="checkbox"/>
	Past	<input type="checkbox"/>	300.01	F41.0	<input type="checkbox"/>
E AGORAPHOBIA	Current	<input type="checkbox"/>	300.22	F40.00	<input type="checkbox"/>
F SOCIAL ANXIETY DISORDER	Current (Past Month)	<input type="checkbox"/>	300.23	F40.10	<input type="checkbox"/>
G OBSESSIVE-COMPULSIVE DISORDER	Current (Past Month)	<input type="checkbox"/>	300.3	F42	<input type="checkbox"/>
H POSTTRAUMATIC STRESS DISORDER	Current (Past Month)	<input type="checkbox"/>	309.81	F43.10	<input type="checkbox"/>
I ALCOHOL USE DISORDER	Past 12 Months	<input type="checkbox"/>	303.9	F10.10-20	<input type="checkbox"/>
J SUBSTANCE USE DISORDER (Non-alcohol)	Past 12 Months	<input type="checkbox"/>	304.00-.90/305.20-.90	F11.1x-	
F19.288		<input type="checkbox"/>			
K PSYCHOTIC DISORDERS			Lifetime		<input type="checkbox"/>
297.3/297.9/	F20.81-F29	<input type="checkbox"/>			
293.81/298.83/298.89					
Current	297.3/297.9/	<input type="checkbox"/>	F20.81-F29		<input type="checkbox"/>
293.81/298.83/298.89					
MOOD DISORDER WITH PSYCHOTIC FEATURES			Lifetime		<input type="checkbox"/>
296.24/296.34-296.44	F31.2/F32.2/F33.3	<input type="checkbox"/>			
6.54					
296.24/296.34/296.44/296.54	F31.2/F32.2/F33.3	<input type="checkbox"/>	Current		<input type="checkbox"/>
L ANOREXIA NERVOSA	Current (Past 3 Months)	<input type="checkbox"/>	307.1	F50.01-02	<input type="checkbox"/>
M BULIMIA NERVOSA	Current (Past 3 Months)	<input type="checkbox"/>	307.51	F50.2	<input type="checkbox"/>
N BINGE EATING DISORDER	Current (Past 3 Months)	<input type="checkbox"/>	307.51	F50.8	<input type="checkbox"/>
O GENERALIZED ANXIETY DISORDER	Current (Past 6 Months)	<input type="checkbox"/>			<input type="checkbox"/>
300.02	F41.1	<input type="checkbox"/>			

O MEDICAL. ORGANIC. DRUG CA

No Yes Uncertain

P ANTISOCIAL PERSONALITY DI Lifetime

301.7 F60.2

IDENTIFY THE PRIMARY DIAGNOSIS BY CHECKING THE APPROPRIATE CHECK BOX.

(Which problem troubles you the most or dominates the others or came first in the natural history?)

GENERAL INSTRUCTIONS

The M.I.N.I. was designed as a brief structured interview for the major Axis I psychiatric disorders in DSM-5 and ICD-10. Validation and reliability studies have been done comparing the M.I.N.I. to the SCID-P for DSM-III-

R and the CIDI (a structured interview developed by the World Health Organization). The results of these studies show that the M.I.N.I. has similar reliability and validity properties, but can be administered in a much shorter period of time (mean 18.7 ± 11.6 minutes, median 15 minutes) than the above referenced instruments. Clinicians can use it, after a brief training session. Lay interviewers require more extensive training.

INTERVIEW:

In order to keep the interview as brief as possible, inform the patient that you will conduct a clinical interview that is more structured than usual, with very precise questions about psychological problems which require a yes or no answer.

GENERAL FORMAT:

The M.I.N.I. is divided into **modules** identified by letters, each corresponding to a diagnostic category.

- At the beginning of each diagnostic module (except for psychotic disorders module), screening question(s) corresponding to the main criteria of the disorder are presented in a **gray box**.

- At the end of each module, diagnostic box(es) permit the clinician to indicate whether diagnostic criteria are met.

CONVENTIONS:

Sentences written in « normal font » should be read exactly as written to the patient in order to standardize the assessment of diagnostic criteria.

Sentences written in « CAPITALS » should not be read to the patient. They are instructions for the interviewer to assist in the scoring of the diagnostic algorithms.

Sentences written in « bold » indicate the time frame being investigated. The interviewer should read them as often as necessary. Only symptoms occurring during the time frame indicated should be considered in scoring the responses.

Answers with an arrow above them (➡) indicate that one of the criteria necessary for the diagnosis is or diagnoses is not met. In this case, the interviewer should go to the end of the module, circle « **NO** » in all the diagnostic boxes and move to the next module.

When terms are separated by a *slash (/)* the interviewer should read only those symptoms known to be present in the patient (for example, questions J2b or K6b)

Phrases in (parentheses) are clinical examples of the symptom. These may be read to the patient to clarify the question.

RATING INSTRUCTIONS:

All questions must be rated. The rating is done at the right of each question by circling either Yes or No. Clinical judgment by the rater should be used in coding the responses. Interviewers need to be sensitive to the diversity of cultural beliefs in their administration of questions and rating of responses. The rater should ask for examples when necessary, to ensure accurate coding. The patient should be encouraged to ask for clarification on any question that is not absolutely clear.

The clinician should be sure that each dimension of the question is taken into account by the patient (for example, time frame, frequency, severity, and/or alternatives)

Symptoms better accounted for by an organic cause or by the use of alcohol or drugs should not be coded positive in the M.I.N.I. The M.I.N.I. has questions that investigate these issues.

For any questions, suggestions, need for a training session or information about updates of the M.I.N.I., please contact: David V Sheehan, M.D., M.B.A.
University of South Florida College of Medicine
tel : +1 813-956-8437
e-mail : dsheehan@health.usf.edu

A. MAJOR DEPRESSIVE EPISODE

(→)
MEANS: GO TO THE DIAGNOSTIC BOX, CIRCLE NO IN THE DIAGNOSTIC BOX, AND MOVE TO THE NEXT MODULE)

A1	a	Were you <u>ever</u> depressed or down, or felt sad, empty or hopeless most of the day, nearly every day, for two weeks? IF NO, CODE NO TO A1b : IF YES ASK:	NO	YES
	b	For the <u>past two weeks</u> , were you depressed or down, or felt sad, empty or hopeless most of the day, nearly every day?	NO	YES
A2	a	Were you <u>ever</u> much less interested in most things or much less able to enjoy the things you used to enjoy most of the time, for two weeks? IF NO, CODE NO TO A2b : IF YES ASK:	NO	YES
	b	In the <u>past two weeks</u> , were you much less interested in most things or much less able to enjoy the things you used to enjoy, most of the time?	NO	YES
		IS A1a OR A2a CODED YES?	→ NO	YES

A3 IF **A1b** OR **A2b** = YES: EXPLORE THE CURRENT AND THE MOST SYMPTOMATIC PAST EPISODE, OTHERWISE IF **A1b** AND **A2b** = NO: EXPLORE ONLY THE MOST SYMPTOMATIC PAST EPISODE

Over that two week period, when you felt depressed or uninterested:

		<u>Past 2 Weeks</u>	<u>Past</u>	<u>Episode</u>
a	Was your appetite decreased or increased nearly every day? Did your weight decrease or increase without trying intentionally (i.e., by $\pm 5\%$ of body weight or ± 8 lb or ± 3.5 kg, for a 160 lb/70 kg person in a month)? IF YES TO EITHER, CODE YES.	NO YES	NO	YES
b	Did you have trouble sleeping nearly every night (difficulty falling asleep, waking up in the middle of the night, early morning wakening or sleeping excessively)?	NO YES	NO	YES
c	Did you talk or move more slowly than normal or were you fidgety, restless or having trouble sitting still almost every day? Did anyone notice this?	NO YES	NO	YES
d	Did you feel tired or without energy almost every day?	NO YES	NO	YES
e	Did you feel worthless or guilty almost every day? If YES, ASK FOR EXAMPLES. LOOK FOR DELUSIONS OF FAILURE, OF INADEQUACY, OF RUIN OR OF GUILT, OR OF NEEDING PUNISHMENT OR DELUSIONS OF DISEASE OR DEATH OR NIHILISTIC OR SOMATIC DELUSIONS. THE EXAMPLES ARE CONSISTENT WITH A DELUSIONAL IDEA. Current Episode <input type="checkbox"/> No <input type="checkbox"/> Yes Past Episode <input type="checkbox"/> No <input type="checkbox"/> Yes	NO YES	NO	YES
f	Did you have difficulty concentrating, thinking or making decisions almost every day?	NO YES	NO	YES
g	Did you repeatedly think about death (FEAR OF DYING) or have any thoughts of killing yourself, or have any intent or plan to kill yourself? Did you attempt suicide? If YES TO EITHER, CODE YES.	NO YES	NO	YES

A4 Did these symptoms cause significant distress or problems at home, at work, at school, socially, in your relationships, or in some other important way, and are they a change from your previous functioning?

NO

YES

A5 In between 2 episodes of depression, did you ever have an interval of at least 2 months, without any significant depression or any significant loss of interest?
N/A NO YES

ARE 5 OR MORE ANSWERS (A1-A3) CODED YES AND IS A4 CODED YES FOR THAT TIME FRAME?

AND

IS "RULE OUT ORGANIC CAUSE (O2 SUMMARY)" CODED YES?

SPECIFY IF THE EPISODE IS CURRENT AND / OR PAST.

IF A5 IS CODED YES, CODE YES FOR RECURRENT.

NO	Y
	B
MAJOR DEPRESSIVE EPISODE	
CURRENT	<input type="checkbox"/>

PAST

RECURRENT

A6 a How many episodes of depression did you have in your lifetime? _____

Between each episode there must be at least 2 months without any significant depression.

B. SUICIDALITY

Points

In the past month did you:

- B1 Have any accident? This includes taking too much of your medication acci NO YES 0
IF NO TO B1, SKIP TO B2; IF YES, ASK B1a:
- B1a Plan or intend to hurt yourself in any accident, either by not avoiding a risk NO YES 0
by causing the accident on purpose?
IF NO TO B1a, SKIP TO B2: IF YES, ASK B1b:
- B1b Intend to die as a result of any accident? NO YES 0
- B2 Think (even momentarily) that you would be better off dead or wish you w NO YES 1
needed to be dead?
- B3 Think (even momentarily) about harming or of hurting or of injuring yours NO YES 6
- with at least some intent or awareness that you might die as a result
- or think about suicide (i.e. about killing yourself)?

IF NO TO B2 + B3, SKIP TO B4. OTHERWISE ASK:

Frequency		Intensity	
Occasionally	<input type="checkbox"/>	Mild	<input type="checkbox"/>
Often	<input type="checkbox"/>	Moderate	<input type="checkbox"/>
Very often	<input type="checkbox"/>	Severe	<input type="checkbox"/>

B4 Hear a voice or voices telling you to kill yourself or have dreams with any suicidal content?
NO YES 4 If YES, was it either or both:
was it a voice or voices? was it a dream?

- B5 Have a suicide method in mind (i.e. how) NO YES 8
?
- B6 Have a suicide means in mind (i.e. with NO YES 8
what)?
- B7 Have any place in mind to attempt suicide (i.e. where)? NO YES 8
- B8 Have any date/timeframe in mind to attempt suicide (i.e. NO YES 8

B9 Think about any task you would like to complete before trying to kill yourself?
NO YES 8
(e.g. writing a suicide note)

B10 Intend to act on thoughts of killing yourself?
NO YES 8
If YES, mark either or both: did you intend to act at the time?
 did you intend to act at some time in the future?

B11 Intend to die as a result of a suicidal act?
NO YES 8
If YES, mark either or both: did you intend to die by suicide at the time?
 did you intend to die by suicide at some time in the future?

B12 Feel the need or impulse to kill yourself or to plan to kill yourself sooner rather than YES 8
If YES, mark either or both: was this to kill yourself?

If YES, mark either or both:

IN ASSESSING WHETHER THIS WAS LARGELY UNPROVOKED ASK: "5 minutes before this Impulse, could you have predicted it would occur at that time?"

- B13 Have difficulty resisting these impulses? NO YES 8
- B14 Take any active steps to prepare for a suicide attempt in which you expected to making a suicide attempt)? This includes times when you were going but were interrupted or stopped yourself, before harming yourself. NO YES
IF NO TO B14, SKIP TO B15.
- B14a Take active steps to prepare to kill yourself, but you **did not start** the s NO YES 9
- B14b Take active steps to prepare to kill yourself, but then **you stopped your** harming yourself (“aborted”). NO YES 10
- B14c Take active steps to prepare to kill yourself, but then **someone or some** **stopped you just before** harming yourself (“interrupted”)? NO YES 11
- B15 Injure yourself on purpose without intending to kill yourself?
NO YES 0
- B16 Attempt suicide (to kill yourself)? NO YES
IF NO TO B16, SKIP TO B17.
- B16a Start a suicide attempt (to kill yourself), but then **you decided to stop** YES 12 and did not finish the attempt? NO
- B16b Start a suicide attempt (to kill yourself), but then **you were interrupted** YES 13 and did not finish the attempt? NO
- B16c Went through with a suicide attempt (to kill yourself), **completely** as you meant to? YES 14 NO
A suicide attempt means you did something where you could possibly be injured, with at least a slight intent to die.
IF NO, SKIP TO B17:

Hope to be rescued / survive
Expected / intended to die

B17 TIME SPENT PER DAY WITH ANY SUICIDAL IMPULSES, THOUGHTS OR ACTIONS:

Usual time spent per day: _____ hours _____ minutes
s. Least amount of time spent per day: _____ hours _____ minutes.
Most amount of time spent per day: _____ hours _____ minutes.

In your lifetime:

B18 Did you ever make a suicide attempt (try to kill yourself)?
NO YES 4

If YES, how many times? _____

If YES, when was the last suicide attempt?

Current: within the past 12 months

In early remission: between 12 and 24 months ago

In remission: more than 24 months ago

“A suicide attempt is any self injurious behavior, with at least some intent (> 0) to die as a result of the act. Evidence that the individual intended to kill him- or herself, at least to some degree, can be explicit or inferred from the behavior or circumstance. For example, it is defined as a suicide attempt if it is clearly not an accident or if the individual thinks the act could be lethal, even though denying intent.” (FDA Guidance for Industry Suicidal Ideation and Behavior Document 2012 and C-CASA definition). Posner K et al. Am J Psychiatry 2007; 164 (7): 1035-

1043 &
<http://www.fda.gov/Drugs/GuidanceComplianceRegulatoryInformation/Guidances/default.htm/>

B19 How likely are you to try to kill yourself within the next 3 months on a scale of 0-100% _____%

ANY LIKELIHOOD > 0% ON B19 SHOULD BE CODED YES
NO YES 13

IS AT LEAST 1 OF THE ABOVE (EXCEPT B1) CODED YES?

IF YES, ADD THE TOTAL POINTS FOR THE ANSWERS (B1-B19) CHECKED 'YES' AND SPECIFY THE SUICIDALITY SCORE CATEGORY AS INDICATED IN THE DIAGNOSTIC BOX:

INDICATE WHETHER THE SUICIDALITY IS CURRENT (PAST MONTH) OR A LIFETIME SUICIDE ATTEMPT OR BOTH BY MARKING THE APPROPRIATE BOXES OR BY LEAVING EITHER OR BOTH OF THEM UNMARKED.

CURRENT = ANY POSITIVE RESPONSE IN B1a THROUGH B16C OR ANY TIME SPENT IN B17. LIFETIME ATTEMPT = B18 CODED YES. LIKELY IN THE NEAR FUTURE = B19 CODED YES.

MAKE ANY ADDITIONAL COMMENTS ABOUT YOUR ASSESSMENT OF THIS PATIENT'S CURRENT AND NEAR FUTURE SUICIDALITY IN THE SPACE BELOW:

IS B18 CODED YES?

AND A YES RESPONSE TO

Was the suicidal act started when the subject not in a state of confusion or delirium?

AND A YES RESPONSE TO

Was the suicidal act done without a political or religious purpose?

IF YES, SPECIFY WHETHER THE DISORDER IS CURRENT, IN EARLY REMISSION OR IN REMISSION.

NO	YES
SUICIDALITY	
1-8 points Low	<input type="checkbox"/>
9-16 points Moderate	<input type="checkbox"/>
≥ 17 points High	<input type="checkbox"/>
CURRENT	<input type="checkbox"/>

LIFETIME ATTEMPT	<input type="checkbox"/>
LIKELY IN NEAR FUTURE <input type="checkbox"/>	
NO	YES
SUICIDAL BEHAVIOR DISORDER	

CURRENT Current
In early remission
In remission

C. MANIC AND HYPOMANIC EPISODES

(→ MEANS:

GO TO THE DIAGNOSTIC BOXES, CIRCLE NO IN MANIC AND HYPOMANIC DIAGNOSTIC BOXES, AND MOVE TO NEXT MODULE)

Do you have any family history of manic-depressive illness or bipolar disorder, sodium valproate (Depakote) or lamotrigine (Lamictal)? NO YE
 THIS QUESTION IS NOT A CRITERION FOR BIPOLAR DISORDER
 IF YES, PLEASE SPECIFY WHO: _____

C1 a	Have you ever had a period of time when you were feeling 'up' or 'high' or 'hyper' and so active or full of energy or full of yourself that you got into trouble, or other people thought you were not your usual self? (Do not consider times when you were intoxicated on drugs or alcohol.)	NO	YES
IF PATIENT IS PUZZLED OR UNCLEAR ABOUT WHAT YOU MEAN BY 'UP' OR 'HIGH' OR 'HYPER', CLARIFY AS FOLLOWS: By 'up' or 'high' I mean: having elated mood; increased energy or increased activity; needing having rapid thoughts; being full of ideas; having an increase in productivity, creativity, or impulsive behavior; phoning or working excessively or spending too much money.			
IF NO, CODE NO TO C1b . IF YES ASK:			
b	Are you currently feeling 'up' or 'high' or 'hyper' or full of energy?	NO	YES
C2 a	Have you ever been persistently irritable, for several days, so that you had arguments or verbal or physical fights, or shouted at people outside your family? Have you or others noticed that you have been more irritable or over reacted, compared to other people, even in situations that you felt were justified?	NO	YES
IF NO, CODE NO TO C2b . IF YES ASK:			
b	Are you currently feeling persistently irritable?	NO	YES
IS C1a OR C2a CODED YES?		→ NO	YES

C3 IF C1b OR C2b = YES: EXPLORE THE CURRENT EPISODE FIRST AND THEN THE MOST SYMPTOMATIC PAST EPISODE, OTHERWISE

IF C1b AND C2b = NO: EXPLORE ONLY THE MOST SYMPTOMATIC PAST EPISODE

WHEN EXPLORING THE CURRENT EPISODE, PREFACE EACH QUESTION AS FOLLOWS:

Over the past few days including today, when you felt high and full of energy or irritable, did you:

WHEN EXPLORING THE PAST EPISODE, PREFACE EACH QUESTION AS FOLLOWS:

Over a period of a few days in the past, when you felt most high and most full of energy or most irritable, did you:

Episode

Past Episode

a Feel that you could do things others couldn't do, or that you were an
NO YES

NO

YES

especially important person? IF **YES**, ASK FOR EXAMPLES.

THE EXAMPLES ARE CONSISTENT WITH A DELUSIONAL IDEA.

Current Episode No

Yes

Past Episode No Yes

b Need less sleep (for example, feel rested after only a few hours sleep)?
NO YES

NO

YES

<u>ent Episode</u>	<u>Past Episode</u>				
c	Talk too much without stopping, or felt a pressure to keep talking?	NO	YES	NO	YES
d	Notice your thoughts going very fast or running together or racing or moving very quickly from one subject to another?	NO	YES	NO	YES
e	Become easily distracted so that any little interruption could distract you?	NO	YES	NO	YES
f	Have a significant increase in your activity or drive, at work, at school, socially or sexually or did you become physically or mentally restless?	NO	YES	NO	YES
g	This increase in activity may be with or without a purpose, but you want so much to engage in pleasurable activities that you ignore consequences (for example, spending sprees, reckless driving, or indiscretions)?	NO	YES	NO	YES

C3 SUMMARY: WHEN RATING CURRENT EPISODE:

NO YES NO YES
 IF C1b IS NO, ARE 4 OR MORE C3 ANSWERS INCLUDING C3f CODED YES?
 IF C1b IS YES, ARE 3 OR MORE C3 ANSWERS INCLUDING C3f CODED YES?
 D YES?

WHEN RATING PAST EPISODE:

IF C1a IS NO, ARE 4 OR MORE C3 ANSWERS INCLUDING C3f CODED YES?
 IF C1a IS YES, ARE 3 OR MORE C3 ANSWERS INCLUDING C3f CODED YES?
 D YES?

CODE YES ONLY IF THE ABOVE 3 OR 4 SYMPTOMS OCCURRED DURING THE SAME TIME PERIOD.

RULE: ELATION/EXPANSIVENESS REQUIRES ONLY THREE C3 SYMPTOMS, WHILE IRRITABLE MOOD ALONE REQUIRES 4 OF THE C3 SYMPTOMS.

C4 What is the longest time these symptoms lasted (most of the day nearly every day)?
 ASSESS THIS DURATION FROM THE VERY START TO THE VERY END OF SYMPTOMS, NOT JUST THE PEAK.

- a) 3 days or less
-
- b) 4 days or more
-
- c) 7 days or more
-

C5 Were you hospitalized for these problems? NO
 YES NO YES

I F YES, CIRCLE YES IN MANIC EPISODE FOR THAT TIME FRAME AND GO TO C7.
C6 Did these symptoms cause significant problems at home, at work, socially, NO YES
S NO YES
in your relationships, at school or in some other important way?

C7 Were these symptoms associated with a clear change in the way that you NO YES
S NO YES
previously functioned and that was different from the way that you usually are?

ARE C3 SUMMARY AND C7 AND (C4C OR C5 OR C6 OR ANY PSYCHO NO YES
TIC FEATURE IN K1 THROUGH K8) CODED YES

MANIC EPISODE

AND

CURRENT

IS "RULE OUT ORGANIC CAUSE (O2
SUMMARY)" CODED YES?

PAST

SPECIFY IF THE EPISODE IS CURRENT AND / OR PAST.

IS C3 SUMMARY CODED YES AND ARE C5 AND C6 CODED NO AND C7 CODED YES, AND IS EITHER C4b OR C4C CODED YES? AND

IS "RULE OUT ORGANIC CAUSE (O2 SUMMARY)" CODED YES?

AND ARE ALL PSYCHOTIC FEATURES IN K1 THROUGH K8 CODED NO?

SPECIFY IF THE EPISODE IS CURRENT AND / OR PAST

IF YES TO CURRENT MANIC EPISODE, THEN CODE CURRENT HYPOMANIC EPISODE AS NO.

IF YES TO PAST MANIC EPISODE, THEN CODE PAST HYPOMANIC EPISODE AS NOT EXPLORED.

ARE C3 SUMMARY AND C4a CODED YES AND IS C5 CODED NO?

SPECIFY IF THE EPISODE IS CURRENT AND / OR PAST.

IF YES TO CURRENT MANIC EPISODE OR HYPOMANIC EPISODE, THEN CODE CURRENT HYPOMANIC SYMPTOMS AS NO.

IF YES TO PAST MANIC EPISODE OR YES TO PAST HYPOMANIC EPISODE, THEN CODE PAST HYPOMANIC SYMPTOMS AS NOT EXPLORED.

C8 a) IF MANIC EPISODE IS POSITIVE FOR EITHER CURRENT OR PAST ASK: Did you have 2 or more of these (manic) episodes lasting 7 days or more (C4c) in your lifetime (including the current episode if present)? YES

b) IF MANIC OR HYPOMANIC EPISODE IS POSITIVE FOR EITHER CURRENT OR PAST ASK: Did you have 2 or more of these (hypomanic) episode

HYPOMANIC EPISODE	
CURRENT	<input type="checkbox"/> NO
	<input type="checkbox"/> YES
PAST	<input type="checkbox"/> NO
	<input type="checkbox"/> YES
	<input type="checkbox"/>
NOT EXPLORED	

HYPOMANIC SYMPTOMS

CURRENT	<input type="checkbox"/> NO
	<input type="checkbox"/> YES
PAST	<input type="checkbox"/> NO
	<input type="checkbox"/> YES
	<input type="checkbox"/> NOT EXPLORED

NO

s lasting 4 days or more (C4b)
in your lifetime (including the current episode)?
YES

NO

c) IF THE PAST "HYPOMANIC SYMPTOMS" CATEGORY IS CODED POSITIVE ASK:

Did you have these hypomanic symptoms lasting only 1 to 3 days (C4a) 2 or
in your lifetime, (including the current episode if present)? NO YES

D. PANIC DISORDER

(→)

MEANS: GO TO THE DIAGNOSTIC BOX, CIRCLE NO AND MOVE TO THE NEXT MODULE)

- D1 a Have you, on more than one occasion, had spells or attacks when you **suddenly** felt anxious, very frightened, uncomfortable or uneasy, even in situations where most people would not feel that way? →
- NO YES
- b Did the spells surge to a peak within 10 minutes of starting? → N
- O YES
-
- D2 At any time in the past, did any of those spells or attacks come on unexpectedly or occur in an unpredictable or unprovoked manner? → NO YES
- D3 Have you ever had one such attack followed by a month or more of persistent concern about having another attack, or worries about the consequences of the or did you make any significant change in your behavior because of the attacks unfamiliar situations, or avoiding leaving your house or shopping alone, or doing things → NO YES
- D4 **During the worst attack that you can remember:**
- a Did you have skipping, racing or pounding of your heart? NO YES
- b Did you have sweating or clammy hands? NO YES
- c Were you trembling or shaking? NO YES
- d Did you have shortness of breath or difficulty breathing or a smothering sensation? NO YES
- e Did you have a choking sensation or a lump in your throat? NO YES
- f Did you have chest pain, pressure or discomfort? NO YES
- g Did you have nausea, stomach problems or sudden diarrhea? NO YES
- h Did you feel dizzy, unsteady, lightheaded or feel faint? NO YES
- i Did you have hot flushes or chills? NO YES
- j Did you have tingling or numbness in parts of your body? NO YES
- k Did things around you feel strange, unreal, detached or unfamiliar, or did you feel outside of or detached from part or all of your body? NO YES
- l Did you fear that you were losing control or going crazy? NO YES
- m Did you fear that you were dying? → NO YES
- D5 ARE BOTH **D3**, AND **4** OR MORE **D4** ANSWERS, CODED YES?
NO YES

PANIC DISORDER

LIFETIME

D6 In the past month did you have persistent concern about having another attack,
NO YES
or worry about the consequences of the attacks,
PANIC DISORDER
or did you change your behavior in any way because of the attacks?
CURRENT

IS EITHER **D5** OR **D6** CODED **YES**,

AND

IS "RULE OUT ORGANIC CAUSE (**O2** SUMMARY)" CODED **YES**?

SPECIFY IF THE EPISODE IS CURRENT AND / OR LIFETIME.

NO	YES
PANIC DISORDER	
LIFETIME	<input type="checkbox"/>
CURRENT	<input type="checkbox"/>

E. AGORAPHOBIA

(→)

MEANS: GO TO THE DIAGNOSTIC BOX, CIRCLE NO AND MOVE TO THE NEXT MODULE)

E1 Do you feel anxious or uneasy in places or situations where help might not be available or escape might be difficult if you had a panic attack or panic-like or embarrassing symptoms, like:

- being in a crowd, or standing in a line (queue),
- being in an open space or when crossing a bridge,
- being in an enclosed space,

when you are alone away from home, or alone at home, or traveling in a bus, train or car or using public transportation?

→
NO YES

ARE 2 OR MORE **E1** SITUATIONS CODED **YES**?

→
NO YES

E2 Do these situations almost always bring on fear or anxiety?

→
NO YES

E3 Do you fear these situations so much that you avoid them, or suffer

→
NO YES

E4 through them, or need a companion to face them?
NO YES Is this fear or anxiety excessive or out of proportion to the real danger in the situation?

→

E5 Did this avoidance, fear or anxiety persist for at least 6 months?
NO YES

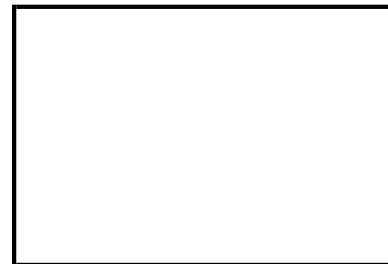
→

E6 Did these symptoms cause significant distress or problems at home, at work, socially, at school or in some other important way?
NO YES

→

IS **E6** CODED **YES**?

NO
YES
AGORAPH
OBIA CURR
ENT



F. SOCIAL ANXIETY DISORDER (Social Phobia)

(⇒ MEANS: GO TO THE DIAGNOSTIC BOX, CIRCLE NO AND MOVE TO THE NEXT MODULE)

F1
NO YES
In the past month, did you have persistent fear and significant anxiety at being watched, being the focus of attention, or of being humiliated or embarrassed or rejected? This includes things like speaking in public, eating in public or with others, writing while someone watches, performing in front of others or being in social situations.

EXAMPLES OF SUCH SOCIAL SITUATIONS TYPICALLY INCLUDE

- INITIATING OR MAINTAINING A CONVERSATION,
- PARTICIPATING IN SMALL GROUPS,
- DATING,
- SPEAKING TO AUTHORITY FIGURES,
- ATTENDING PARTIES,
- PUBLIC SPEAKING,
- EATING IN FRONT OF OTHERS,
- PERFORMING IN FRONT OF OTHERS,
- URINATING IN A PUBLIC WASHROOM, ETC.

F2
NO YES
Do these social situations almost always bring on fear or anxiety?

F3
NO YES
Do you fear these social situations so much that you avoid them, or suffer through them, or need a companion to face them?

F4
NO YES
Is this social fear or anxiety excessive or unreasonable in these social situations?

F5
NO YES
Did this social avoidance, fear or anxiety persist for at least 6 months?

F6
NO YES
Did these social fears cause significant distress or interfere with your ability to function at work, at school or socially or in your relationships or in some other important way?

NO

YES

IS ~~F6~~ CODED YES

and

SOCIAL ANXIETY DISORDER (Social Phobia) CURRENT

IS "RULE OUT ORGANIC CAUSE (O2 SUMMARY)" CODED YES?

NOTE TO INTERVIEWER: PLEASE SPECIFY IF THE SUBJECT'S FEARS ARE RESTRICTED TO SPEAKING OR PERFORMING IN PUBLIC.

RESTRICTED TO PERFORMANCE SAD ONLY

G. OBSESSIVE-COMPULSIVE DISORDER

(→ MEANS: GO TO THE DIAGNOSTIC BOX, CIRCLE NO AND MOVE TO THE NEXT MODULE)

G1a	In the past month, have you been bothered by recurrent thoughts, impulses, or (For example, the idea that you were dirty, contaminated or had germs, or fear of contaminating others, or fear of harming someone even though it disturbs you, or fear you would act on some impulse, or fear of superstitions that you be responsible for things going wrong, or obsessions with sexual thoughts, or impulses, or religious obsessions.)	NO	YES
		↓ SKIP TO G3a	
G1b	In the past month, did you try to suppress these thoughts, impulses, or images or to neutralize or to reduce them with some other thought or action?	NO	YES
		↓ SKIP TO G3a	
(DO NOT INCLUDE SIMPLY EXCESSIVE WORRIES ABOUT REAL LIFE INCLUDE OBSESSIONS DIRECTLY RELATED TO HOARDING, HAIR P BODY DYSMORPHIC DISORDER, EATING DISORDERS, SEXUAL DEV PATHOLOGICAL GAMBLING, OR ALCOHOL OR DRUG ABUSE BECA DERIVE PLEASURE FROM THE ACTIVITY AND MAY WANT TO RESI ITS NEGATIVE CONSEQUENCES.)			

G2 Did they keep coming back into your mind even when you tried to ignore or
NO YES
get rid of them?

obsessions

G3a	In the past month, did you feel driven to do something repeatedly in response to an checking things over and over, or repeating or arranging things, or other superstitious rituals?	NO	YES
G3b	Are these rituals done to prevent or reduce anxiety or distress or to prevent bad from happening and are they excessive or unreasonable?	NO	YES
compulsions			

ARE (G1a AND G1b AND G2) OR (G3a AND G3b) CODED YES?
NO YES

G4 In the past month, did these obsessive thoughts and/or compulsive behaviors cause significant distress, or interfere with your ability to function at home, at work, at school or socially or in your relationships or in some other important way or did they take more than one hour a day?

SPECIFY THE LEVEL OF INSIGHT AND IF THE EPISODE IS TIC-RELATED.

and

IS "RULE OUT ORGANIC CAUSE (O2 SUMMARY)" CODED YES?
(CHECK FOR ANY OC SYMPTOMS STARTING WITHIN 3 WEEKS OF AN INFECTION)

NO

YES

***O.C.D.
CURRENT***

POOR

ABSENT

DELUSIONAL

INSIGHT:

GOOD OR FAIR

TIC-RELATED

A large empty rectangular box with a black border, located in the bottom right corner of the page.

H. POSTTRAUMATIC STRESS DISORDER

(→ MEANS: GO TO THE DIAGNOSTIC BOX, CIRCLE NO, AND MOVE TO THE NEXT MODULE)

H1 Have you ever experienced or witnessed or had to deal with an extremely traumatic event that included actual or threatened death or serious injury or sexual violence to you or someone else? → NO YES

EXAMPLES OF TRAUMATIC EVENTS INCLUDE: SERIOUS ACCIDENT, ASSAULT, A TERRORIST ATTACK, BEING HELD HOSTAGE, KIDNAP, A BODY, WAR, OR NATURAL DISASTER, WITNESSING THE VIOLENCE TO SOMEONE CLOSE TO YOU, OR A LIFE THREATENING ILLNESS.

H2 Starting after the traumatic event, did you repeatedly re-experience the event in an unwanted mentally distressing way, (such as in recurrent dreams, related intense recollections or memories, or flashbacks or as if the event was recurring) have intense physical or psychological reactions when you were reminded about the event or exposed to a similar event? → NO YES

H3 **In the past month:**

a Did you persistently try to avoid thinking about or remembering distressing details or feelings related to the event? NO YES

b Did you persistently try to avoid people, conversations, places, situations, activities or things that bring back distressing recollections of the event? NO YES

ARE 1 OR MORE H3 ANSWERS CODED YES? → NO YES

H4 **In the past month:**

a Did you have trouble recalling some important part of the trauma? (but not because of or related to head trauma, alcohol or drugs). NO YES

b Were you constantly and unreasonably negative about yourself or others or things? NO YES

c Did you constantly blame yourself or others in unreasonable ways for the trauma? NO YES

d Were your feelings always negative (such as fear, horror, anger, guilt or shame)? NO YES

e Have you become much less interested in participating in activities that were meaningful to you before? NO YES

f Did you feel detached or estranged from others? NO YES

g Were you unable to experience any good feelings (such as happiness, satisfaction or loving feelings)? NO YES

ARE 2 OR MORE H4 ANSWERS CODED YES? → NO YES

H5 **In the past month:**

a Were you especially irritable or did you have outbursts of anger with little or no provocation? NO YES

b Were you more reckless or more self-destructive? NO YES

c Were you more nervous or constantly on your guard? NO YES

- d Were you more easily startled? NO YES
- e Did you have more difficulty concentrating? NO YES
- f Did you have more difficulty sleeping? NO YES

ARE 2 OR MORE H5 ANSWERS CODED YES? →
NO YES

H6 Did all these problems start after the traumatic event and last for more than →
NO YES

H7 During the past month, did these problems cause significant distress, or interfere with your ability to function at home, at work, at school or socially or in your relationships or in some other important way?
and

IS "RULE OUT ORGANIC CAUSE (O2 SUMMARY)" CODED YES?

SPECIFY IF THE CONDITION IS ASSOCIATED WITH DEPERSONALIZATION, DEREALIZATION OR WITH DELAYED EXPRESSION.

NO	YES
POSTTRAUMATIC	
STRESS DISORDER	
CURRENT	
WITH DEPERSONALIZATION <input type="checkbox"/>	
DEREALIZATION <input type="checkbox"/>	
DELAYED EXPRESSION <input type="checkbox"/>	

I. ALCOHOL USE DISORDER

(→ MEANS: GO TO DIAGNOSTIC BOX, CIRCLE NO AND MOVE TO THE NEXT MODULE)

I1 In the past 12 months, have you had 3 or more alcoholic drinks, within a 3 hour period, on 3 or more occasions?

NO YES

I2 In the past 12 months:

- | | | | |
|-----|---|--------------------------|-----|
| a. | During the times when you drank alcohol did you end up drinking more than you planned when you started? | NO | YES |
| b. | Did you repeatedly want to reduce or control your alcohol use?
Did you try to cut down or control your alcohol use, but failed?
IF YES TO EITHER, CODE YES. | NO | YES |
| c. | On the days that you drank, did you spend substantial time obtaining alcohol, drinking, or recovering from the effects of alcohol? | NO | YES |
| d. | Did you crave or have a strong desire or urge to use alcohol? | NO | YES |
| e. | Did you spend less time meeting your responsibilities at work, at school, or at home, because of your repeated drinking? | NO | YES |
| f. | If your drinking caused problems with your family or other people, did you still keep on drinking? | NO | YES |
| g. | Were you intoxicated more than once in any situation where you or others were at risk, for example, driving a car, riding a motorbike, using machinery, boat | NO | YES |
| h. | Did you continue to use alcohol, even though it was clear that the alcohol had caused or worsened psychological or physical problems? | NO | YES |
| i. | Did you reduce or give up important work, social or recreational activities because of your drinking? | NO | YES |
| j. | Did you need to drink a lot more in order to get the same effect that you got started drinking or did you get much less effect with continued use of the same amount? | NO | YES |
| k1. | When you cut down on heavy or prolonged drinking did you have any of the | NO | YES |
| | 1. increased sweating or increased heart rate, | <input type="checkbox"/> | |
| | 2. hand tremor or "the shakes" | <input type="checkbox"/> | |
| | 3. trouble sleeping | <input type="checkbox"/> | |
| | 4. nausea or vomiting | <input type="checkbox"/> | |
| | 5. hearing or seeing things other people could not see or hear or having sensations in your skin for no apparent reason | <input type="checkbox"/> | |
| | 6. agitation | | |
| | 7. anxiety | | |
| | 8. seizures | | |

IF YES TO 2 OR MORE OF THE ABOVE 8, CODE k1 AS YES.

- | | | | |
|-----|--|----|-----|
| k2. | Did you drink alcohol to reduce or avoid withdrawal symptoms or to avoid b | NO | YES |
|-----|--|----|-----|

K SUMMARY: IF YES TO k1 OR k2, CODE YES
NO YES

ARE 2 OR MORE I2 ANSWERS FROM I2a THROUGH 12J AND 12K SUMMARY CODED YES?
ES?

SUMMARY CODED Y	
NO	YES
ALCOHOL USE DISORDER	
PAST 12 MONTHS	

SPECIFIERS FOR ALCOHOL USE DISORDER:

MILD = 2-
3 OF THE I2 SYMPTOMS MODERATE = 4-
5 OF THE I2 SYMPTOMS SEVERE = 6 OR MORE OF THE I2 SYMPTOMS

IN EARLY REMISSION = CRITERIA NOT MET FOR BETWEEN 3 & 12 MONTHS IN SUSTAINED REMISSION = CRITERIA NOT MET FOR 12 MONTHS OR MORE (BOTH WITH THE EXCEPTION OF CRITERION d. - (CRAVING) ABOVE).

IN A CONTROLLED ENVIRONMENT = WHERE ALCOHOL ACCESS IS RESTRICTED

SPECIFY IF:	
	MILD <input type="checkbox"/>
<input type="checkbox"/>	MODERATE
<input type="checkbox"/>	SEVERE

IN EARLY REMISSION

IN SUSTAINED REMISSION

IN A CONTROLLED ENVIRONMENT

J. SUBSTANCE USE DISORDER (NON-ALCOHOL)

(→ MEANS: GO TO THE DIAGNOSTIC BOX, CIRCLE NO AND MOVE TO THE NEXT MODULE)

Now I am going to show you / read to you a list of street drugs or medicines. →

- J1 a In the past 12 months, did you take any of these drugs more than once,
NO YES
to get high, to feel elated, to get “a buzz” or to change your mood?

CIRCLE EACH DRUG TAKEN:

Stimulants: amphetamines, "speed", crystal meth, "crank", Dexedrine, Ritalin, diet pills.

Cocaine: snorting, IV, freebase, crack, "speedball".

Opiates: heroin, morphine, Dilaudid, opium, Demerol, methadone, Darvon, codeine, Percodan

Hallucinogens: LSD ("acid"), mescaline, peyote, psilocybin, STP, "mushrooms", "ecstasy", M

Dissociative Drugs: PCP (Phencyclidine, "Angel Dust", "Peace Pill", "Hog"), or ketamine ("

Inhalants: "glue", ethyl chloride, "rush", nitrous oxide ("laughing gas"), amyl or butyl nitrate (

Cannabis: marijuana, hashish ("hash"), THC, "pot", "grass", "weed", "reefer".

Tranquilizers: Quaalude, Seconal ("reds"), Valium, Xanax, Librium, Ativan, Dalmane, Halcio
Miltown, GHB, Roofinol, "Roofies".

Miscellaneous: steroids, nonprescription sleep or diet pills. Cough Medicine? Any others?

SPECIFY THE MOST USED DRUG(S): _

WHICH DRUG(S) CAUSE THE BIGGEST PROBLEMS?

FIRST EXPLORE THE CRITERIA BELOW FOR THE DRUG CLASS CAUSING THE BIGGEST PROBLEM FOR SUBSTANCE USE DISORDER. IF SEVERAL DRUG CLASSES HAVE BEEN MISUSED, EXP

- J2 Considering your use of (NAME OF DRUG / DRUG CLASS SELECTED), in the past 12 months:
- During the times when you used the drug, did you end up using more (NAME OF DRUG / DRUG CLASS SELECTED) than you planned when you started?
 - Did you repeatedly want to reduce or control your (NAME OF DRUG / DRUG CLASS SELECTED) use, or did you try to cut down or control your (NAME OF DRUG / DRUG CLASS SELECTED) use, but you couldn't? IF YES TO EITHER, CODE YES.
 - On the days that you used more (NAME OF DRUG / DRUG CLASS SELECTED), did you spend time obtaining (NAME OF DRUG / DRUG CLASS SELECTED), using it, or recovering from the effects?
 - Did you crave or have a strong desire or urge to use (NAME OF DRUG / DRUG CLASS SELECTED)?
 - Did you spend less time meeting your responsibilities at work, at school, or at home, because of your repeated (NAME OF DRUG / DRUG CLASS SELECTED) use?
 - If your (NAME OF DRUG / DRUG CLASS SELECTED) use caused problems with your family or other people, did you still keep on using it?
 - Did you use the drug more than once in any situation where you or others were physically at risk, for example, driving a car, riding a motorbike, using machinery, boating, etc.?
 - Did you continue to use (NAME OF DRUG / DRUG CLASS SELECTED), even though it was causing problems?

that the (NAME OF DRUG / DRUG CLASS SELECTED) had caused or worsened psychological

i. Did you reduce or give up important work, social or recreational activities because of your (NAME OF DRUG / DRUG CLASS SELECTED) use? NO YES

j. Did you need to use (NAME OF DRUG / DRUG CLASS SELECTED) a lot same effect that you got when you first started using it or did you get much with continued use of the same amount? NO YES

THIS CRITERION IS CODED NO IF THE MEDICATION IS PRESCRIBED

NO YES
k1. When you cut down on heavy or prolonged use of the drug did you have any of the following withdrawal symptoms:

IF YES TO THE REQUIRED NUMBER OF WITHDRAWAL SYMPTOMS FOR EACH CLASS, CODE J2k1 AS YES.

THIS CRITERION IS CODED NO IF THE MEDICATION IS PRESCRIBED AND USED UNDER MEDICAL SUPERVISION.

Sedative, Hypnotic or Anxiolytic (2 or more)

- 1. increased sweating or increased heart rate
- 2. hand tremor or "the shakes"
- 3. trouble sleeping
- 4. nausea or vomiting
- 5. hearing or seeing things other people could not see or hear or having sensations in your skin for no apparent reason
- 6. agitation
- 7. anxiety
- 8. seizures

Opiates (3 or more)

- 1. feeling depressed
- 2. nausea or vomiting
- 3. muscle aches
- 4. runny nose or teary eyes
- 5. dilated pupils, goose bumps or hair standing on end or sweating
- 6. diarrhea
- 7. yawning
- 8. hot flashes
- 9. trouble sleeping

Stimulants (2 or more)

- 1. fatigue
- 2. vivid or unpleasant dreams
- 3. difficulty sleeping or sleeping too much
- 4. increased appetite
- 5. feeling or looking physically or mentally slowed down

Cannabis (3 or more)

- 1. irritability, anger or aggression
- 2. nervousness or anxiety
- 3. trouble sleeping
- 4. appetite or weight loss
- 5. restlessness
- 6. feeling depressed
- 7. significant discomfort from one of the following:
"stomach pain", tremors or "shakes", sweating, hot flashes, chills, headaches.

k2. Did you use (NAME OF DRUG / DRUG CLASS SELECTED) to reduce or NO YES

J2k SUMMARY: IF YES TO J2k1 OR J2k2, CODE YES NO YES

ARE 2 OR MORE J2 ANSWERS FROM J2a THROUGH J2k SUMMARY CODED YES? (J2k1 AND J2k2 TOGETHER COUNT AS ONE AMONG THE SE CHOICES)

NO	YES
SUBSTANCE	
<i>(Drug or Drug Class Name)</i>	
USE DISORDER	
PAST 12 MONTHS	

SPECIFIERS FOR SUBSTANCE USE DISORDER:

MILD = 2-3 OF THE J2 SYMPTOMS MODERATE = 4-5 OF THE J2 SYMPTOMS SEVERE = 6 OR MORE OF THE J2 SYMPTOMS

IN EARLY REMISSION = CRITERIA NOT MET FOR BETWEEN 3 & 12 MONTHS IN SUSTAINED REMISSION = CRITERIA NOT MET FOR 12 MONTHS OR MORE (BOTH WITH THE EXCEPTION OF CRITERION d. - (CRAVING) ABOVE).

IN A CONTROLLED ENVIRONMENT = WHERE SUBSTANCE / DRUG ACCESS IS RESTRICTED

SPECIFY IF:	
MILD	<input type="checkbox"/>
MODERATE	<input type="checkbox"/>
SEVERE	<input type="checkbox"/>
IN EARLY REMISSION	<input type="checkbox"/>
IN SUSTAINED REMISSION	<input type="checkbox"/>

IN A CONTROLLED ENVIRONMENT

K. PSYCHOTIC DISORDERS AND MOOD DISORDER WITH PSYCHOTIC FEATURES

ASK FOR AN EXAMPLE OF EACH QUESTION ANSWERED POSITIVELY. CODE YES ONLY IF THE EXAMPLES CLEARLY SHOW A DISTORTION OF THOUGHT OR OF PERCEPTION OR IF THEY ARE NOT CULTURALLY APPROPRIATE. THE PURPOSE OF THIS MODULE IS TO EXCLUDE PATIENTS WITH PSYCHOTIC DISORDERS. THIS MODULE NEEDS EXPERIENCE.

Now I am going to ask you about unusual experiences that some people have.

K1 a Have you ever believed that people were spying on you, or that someone was plotting against you, or trying to hurt you? NO YES

NOTE: ASK FOR EXAMPLES TO RULE OUT ACTUAL STALKING

b **IF YES:** do you currently believe these things? NO YES

K2 a Have you ever believed that someone was reading your mind or could read your thoughts, or that you could actually read someone's mind or hear another person was thinking? NO YES

b **IF YES:** do you currently believe these things? NO YES

K3 a Have you ever believed that someone or some force outside of you put thoughts in your mind that were not your own, or made you do things that were not your usual self? Have you ever felt that you were possessed? NO YES

CLINICIAN: ASK FOR EXAMPLES AND DISCOUNT ANY THAT ARE CULTURALLY APPROPRIATE

b **IF YES:** do you currently believe these things? NO YES

K4 a Have you ever believed that you were being sent special messages from the TV, radio, internet, newspapers, books, or magazines or that someone you did not personally know was particularly interested in you? NO YES

b **IF YES:** do you currently believe these things? NO YES

K5 a Have your relatives or friends ever considered any of your beliefs strange or unusual? NO YES

INTERVIEWER: ASK FOR EXAMPLES. ONLY CODE YES IF THE BELIEFS ARE DELUSIONAL IDEAS NOT EXPLORED IN QUESTIONS K1 TO K4, OR SOMATIC DELUSIONS, DELUSIONS OF GRANDEUR, JEALOUSY OR GUILT, OR OF

b **IF YES:** do they currently consider your beliefs strange or unusual? NO YES

K6 a Have you ever heard things other people couldn't hear, such as voices? NO YES

IF YES TO VOICE HALLUCINATION: Was the voice coming from inside your head? NO YES

or behavior or did you hear two or more voices talking to each other?

b IF YES TO K6a: have you heard sounds / voices in the past month? NO YES

I n your thoughts NO YES
F or behavior or did you hear two or more voices talking to each other?

Y
E
S
T
O

V
O
I
C
E

H
A
L
L
U
C
I
N
A
T
I
O
N
:
W
a
s
t
h
e
v
o
i
c
e
c
o
m
m
e
n
t
i
n
g
o

K7 a Have you ever had visions when you were awake or have you ever seen NO YES
things
CLINICIAN: CHECK TO SEE IF THESE ARE CULTURALLY INAPPR

b IF YES: have you seen these things in the past month? NO YES

CLINICIAN'S JUDGMENT

K8 a DID THE PATIENT EVER IN THE PAST EXHIBIT DISORGANIZED, INO YES
SPEECH, OR MARKED LOOSENING OF ASSOCIATIONS?

K8 b IS THE PATIENT CURRENTLY EXHIBITING INCOHERENCE, DISO YES
SPEECH, OR MARKED LOOSENING OF ASSOCIATIONS?

K9 a DID THE PATIENT EVER IN THE PAST EXHIBIT DISORGANIZED ONO YES
BEHAVIOR?

K9 b IS THE PATIENT CURRENTLY EXHIBITING DISORGANIZED OR C NO YES
BEHAVIOR?

K10a DID THE PATIENT EVER IN THE PAST HAVE NEGATIVE SYMPTO NO YES
EMOTIONAL EXPRESSION OR AFFECTIVE FLATTENING, POVERT
AN INABILITY TO INITIATE OR PERSIST IN GOAL--

K10b ARE NEGATIVE SYMPTOMS OF SCHIZOPHRENIA, E.G. SIGNIFICA NO YES
EXPRESSION OR AFFECTIVE FLATTENING, POVERTY OF SPEECH
TO INITIATE OR PERSIST IN GOAL--
THE INTERVIEW?

K11 a ARE 1 OR MORE « a » QUESTIONS FROM K1
a TO K7a, CODED YES?

ARE AND IS EITHER:

MAJOR DEPRESSIVE EPISODE, (CURRENT, YES
RECURRENT OR PAST)
OR

MANIC OR HYPOMANIC EPISODE, (CURRENT OR PAST) CODED YES? NO
↳ K13

HOW LONG HAS THE MOOD EPISODE LASTED? _____

HOW LONG HAS THE PSYCHOTIC EPISODE LASTED? _____

IF SUCH A MOOD EPISODE IS PRESENT, IT MUST BE PRESENT FOR THE MAJORITY OF THE TOTAL DURATION
OF THE ACTIVE AND RESIDUAL PERIODS OF THE PSYCHOTIC SYMPTOMS. OTHERWISE CODE NO TO K11a.

IF NO TO K11a, CIRCLE NO IN BOTH 'MOOD DISORDER WITH PSYCHOTIC
FEATURES' DIAGNOSTIC BOXES AND MOVE TO K13.

b You told me earlier that you had period(s) when you felt (depressed/high/persistently irritable).

Were the beliefs and experiences you just described (SYMPTOMS CODED YES FROM K1a TO K7a) restricted exclusively to times when you were feeling depressed/high/irritable?

IF THE PATIENT EVER HAD A PERIOD OF AT LEAST 2 WEEKS OF HAVING THESE BELIEFS OR EXPERIENCES (PSYCHOTIC SYMPTOMS) WHEN THEY WERE NOT DEPRESSED/HIGH/IRRITABLE, CODE NO TO THIS DISORDER.

IF THE ANSWER IS NO TO THIS DISORDER GROUPING, ALSO CIRCLE NO TO K12 AND MOVE TO K13

K12 a ARE 1 OR MORE « b » QUESTIONS FROM K1b TO K7b CODED YES AND IS EITHER:

MAJOR DEPRESSIVE EPISODE (CURRENT)
OR
MANIC OR HYPOMANIC EPISODE (CURRENT) CODED YES?

IF THE ANSWER IS YES TO THIS DISORDER (LIFETIME OR CURRENT), CIRCLE NO TO K13 AND K14 AND MOVE TO THE NEXT MODULE.

K13 ARE 1 OR MORE « b » QUESTIONS FROM K1b TO K8b, CODED YES?

AND

ARE 2 OR MORE « b » QUESTIONS FROM K1b TO K10b, CODED YES?

AND DID AT LEAST TWO OF THE PSYCHOTIC SYMPTOMS OCCUR DURING THE SAME 1-MONTH PERIOD?

AND

IS "RULE OUT ORGANIC CAUSE (O2 SUMMARY)" CODED YES?

NO	YES
MOOD DISORDER WITH PSYCHOTIC FEATURES LIFETIME	

NO	YES
MOOD DISORDER WITH PSYCHOTIC FEATURES CURRENT	

NO	YES
PSYCHOTIC DISORDER CURRENT	

K14 IS **K13** CODED **YES**

OR

(ARE 1 OR MORE « a » QUESTIONS FROM K1a TO K8a, CODED **YES**?)

AND

ARE 2 OR MORE « a » QUESTIONS FROM K1a TO K10a, CODED **YES**

AND DID AT LEAST TWO OF THE PSYCHOTIC SYMPTOMS OCCUR DURING THE SAME 1-MONTH PERIOD?)

AND

IS “RULE OUT ORGANIC CAUSE (**O2** SUMMARY)” CODED **YES**?

NO

YES

***PSYCHOTIC DISORDER
LIFETIME***

L. ANOREXIA NERVOSA

(→)

MEANS: GO TO THE DIAGNOSTIC BOX, CIRCLE NO, AND MOVE TO THE NEXT MODULE)

L1 a How tall are you?
ft in.
 cm
 lb
 kg

b. What was your lowest weight in the past 3 months?

c. IS PATIENT'S WEIGHT EQUAL TO OR BELOW THE THRESHOLD CORRESPONDING TO HIS / HER HEIGHT? (SEE TABLE BELOW) NO YES

In the past 3 months:

- L2 In spite of this low weight, have you tried not to gain weight or to restrict your food intake? NO YES
- L3 Have you intensely feared gaining weight or becoming fat, even though you were underweight? NO YES
- L4 a Have you considered yourself too big / fat or that part of your body was too big? NO YES
- b Has your body weight or shape greatly influenced how you felt about yourself? NO YES
- c Have you thought that your current low body weight was normal or excessive? NO YES
- L5 ARE 1 OR MORE ITEMS FROM L4 CODED YES? NO YES

IS L5 CODED YES?

NO	YES
ANOREXIA NERVOSA	
A	
CURRENT	

HEIGHT / WEIGHT TABLE CORRESPONDING TO A BMI THRESHOLD OF 17.0 KG/M²

Height/Weight														
ft/in	4'9	4'10	4'11	5'0	5'1	5'2	5'3	5'4	5'5	5'6	5'7	5'8	5'9	5'10
lb	79	82	84	87	90	93	96	99	102	106	109	112	115	119
cm	145	147	150	152	155	158	160	163	165	168	170	173	175	178
kg	36	37	38.5	39.5	41	42.5	43.5	45.5	46.5	48	49	51	52	54

Height/Weight					
ft/in	5'11	6'0	6'1	6'2	6'3
lb	122	125	129	133	136
cm	180	183	185	188	191
kg	55	57	58.5	60	62

The weight thresholds above are calculated using a body mass index (BMI) equal to or below 17.0 kg/m² for the patient's height using the Center

of Disease Control & Prevention BMI Calculator. This is the threshold guideline below which a person is deemed underweight by the DSM-5 for Anorexia Nervosa.

M. BULIMIA NERVOSA

(→ MEANS: GO TO THE DIAGNOSTIC BOXES, CIRCLE NO IN ALL DIAGNOSTIC BOXES, AND MOVE TO THE NEXT MODULE)

M1 In the past three months, did you have eating binges or times when you ate a very large amount of food within a 2-hour period? NO YES

M3

M2 During these binges, did you feel that your eating was out of control? NO YES

M3 Did you do anything to compensate for, or to prevent a weight gain, like vomiting, fasting, exercising or taking laxatives, enemas, diuretics (fluid pills), or other medications? Did you do this as often as once a week? → NO YES

CODE YES TO M3 ONLY IF THE ANSWER TO BOTH THESE M3

M3a Number of Episodes of Inappropriate Compensatory Behaviors per Week? _____
Number of Days of Inappropriate Compensatory Behaviors per Week?

M4 In the last 3 months, did you have eating binges as often as once a week? → NO YES

M5 Does your body weight or shape greatly influence how you feel about yourself? → NO YES

M6 DO THE PATIENT'S SYMPTOMS MEET CRITERIA FOR ANOREXIA NERVOSA? NO YES

↓
Skip to M8

M7 Do these binges occur only when you are under _____ lb/kg)? NO YES

INTERVIEWER: WRITE IN THE ABOVE PARENTHESES THE THRESHOLD WEIGHT FOR THIS PATIENT'S HEIGHT FROM THE HEIGHT / WEIGHT TABLE IN THE ANOREXIA NERVOSA MODULE.

M8 IS M5 CODED YES AND IS EITHER M6 OR M7 CODED NO?

IS M7 CODED YES?

NO

YES

BULIMIA NERVOSA
CURRENT

NO

YES

ANOREXIA NERVOSA Binge Eating/Purging Type **CURRE**
NT

DO THE PATIENT'S SYMPTOMS MEET CRITERIA FOR ANOREXIA NERVOSA?

AND

ARE M2 AND M3 CODED NO?

NO	YES
ANOREXIA NERVOSA A Restricting Type CURRENT	

SPECIFIERS OF EATING DISORDER:

MILD = 1-

3 EPISODES OF INAPPROPRIATE COMPENSATORY BEHAVIORS

MODERATE = 4-

7 EPISODES OF INAPPROPRIATE COMPENSATORY BEHAVIORS

SEVERE = 8-

13 EPISODES OF INAPPROPRIATE COMPENSATORY BEHAVIORS

EXTREME

= 14 OR MORE EPISODES OF INAPPROPRIATE COMPENSATORY BEHAVIORS

SPECIFY IF:	
	MILD <input type="checkbox"/>
<input type="checkbox"/>	MODERATE
<input type="checkbox"/>	SEVERE
<input type="checkbox"/>	EXTREME

MB. BINGE EATING DISORDER

(→ MEANS: GO TO THE DIAGNOSTIC BOX, CIRCLE NO IN THE DIAGNOSTIC BOX, AND MOVE TO THE NEXT MODULE)

MB1	DO THE PATIENT'S SYMPTOMS MEET CRITERIA FOR ANOREXIA NERVOSA?		→
	NO YES		
MB2	DO THE PATIENT'S SYMPTOMS MEET CRITERIA FOR BULIMIA NERVOSA?		→
	NO YES		
MB3	M2 IS CODED YES		→
	YES		NO

MB4 M3 IS CODED YES
NO YES

MB5 M4 IS CODED YES
NO YES

In the last 3 months during the binging did you:

MB6a Eat more rapidly than normal?	NO	YES
MB6b Eat until you felt uncomfortably full?	NO	YES
MB6c Eat large amounts of food when you were not hungry?	NO	YES
MB6d Eat alone because you felt embarrassed about how much you were eat	NO	YES
MB6e Feel guilty, depressed or disgusted with yourself after binging?	NO	YES

ARE 3 OR MORE **MB6** QUESTIONS CODED YES?
 NO YES





MB7 Does your bingeing distress you a lot?
NO YES

MB8 Number of Binge Eating Episodes per Week? _____

Number of Binge Eating Days per Week? _____

IS MB7 CODED YES
?

NO	YES
<i>BINGE- EATING DISORDER</i>	
CURRENT	

SPECIFIERS OF EATING DISORDER:

MILD = 1-
3 EPISODES OF BINGE EATING PER WEEK
MODERATE = 4-
7 EPISODES OF BINGE EATING PER WEEK
SEVERE = 8-
13 EPISODES OF BINGE EATING PER WEEK
EXTREME = 14 OR MORE EPISODES OF BINGE EATING PER WEEK

SPECIFY IF:	
MILD	<input type="checkbox"/>
MODERATE	<input type="checkbox"/>
SEVERE	<input type="checkbox"/>
EXTREME	<input type="checkbox"/>

N. GENERALIZED ANXIETY DISORDER

(→)

N1 a Were you excessively anxious or worried about several routine things, over the past 6 months? NO YES
 IN ENGLISH, IF THE PATIENT IS UNCLEAR ABOUT WHAT YOU (Do others think that you are a worrier or a “worry wart”?) AND GET EX

b Are these anxieties and worries present most days? NO YES

ARE THE PATIENT’S ANXIETY AND WORRIES RESTRICTED EXCLUSIVELY TO, OR BETTER EXPLAINED BY, ANY DISORDER PRIOR TO THIS POINT? NO YES

N2 Do you find it difficult to control the worries? NO YES

N3 FOR THE FOLLOWING, CODE NO IF THE SYMPTOMS ARE CONFINED TO FEATURES OF ANY DISORDER EXPLORED PRIOR TO THIS POINT.

When you were anxious over the past 6 months, did you, most of the time

- a Feel restless, keyed up or on edge? NO YES
- b Have muscle tension? NO YES
- c Feel tired, weak or exhausted easily? NO YES
- d Have difficulty concentrating or find your mind going blank? NO YES
- e Feel irritable? NO YES
- f Have difficulty sleeping (difficulty falling asleep, waking up in the middle of the night, early morning wakening or sleeping excessively)? NO YES

ARE 3 OR MORE N3 ANSWERS CODED YES?

NO YES

N4 Do these anxieties and worries significantly disrupt your ability to work,
 to function socially or in your relationships or in other important areas of your life or cause you significant distress?

NO	YES
GENERALIZED ANXIETY DISORDER CURRENT	

AND IS “RULE OUT ORGANIC CAUSE (O2 SUMMARY)” CODED YES?

O. RULE OUT MEDICAL, ORGANIC OR DRUG CAUSES FOR ALL DISORDERS

IF THE PATIENT CODES POSITIVE FOR ANY CURRENT DISORDER ASK:

Just before these symptoms began:

O1a Were you taking any drugs or medicines or in withdrawal from any of these? No
 Yes Uncertain

O1b Did you have any medical illness? No
 Yes Uncertain

O2

IF O1a OR O1b IS CODED YES, IN THE CLINICIAN'S JUDGMENT IS EITHER LIKELY TO BE A DIRECT

CAUSE OF THE PATIENT'S DISORDER? IF NECESSARY, ASK ADDITIONAL OPEN-ENDED QUESTIONS. No Yes Uncertain

O2 SUMMARY: AN "ORGANIC" / MEDICAL / DRUG RELATED CAUSE BEEN RULED OUT
 No Yes Uncertain

IF **O2** IS YES, THEN **O2 SUMMARY** IS NO. IF **O2** IS NO, THEN **O2 SUMMARY** IS YES. OTHERWISE IT IS UNCERTAIN.

P. ANTISOCIAL PERSONALITY DISORDER

(→ MEANS: GO TO THE DIAGNOSTIC BOX AND CIRCLE NO)

P1 Before you were 15 years old, did you:

- NO YES
a repeatedly skip school or run away from home overnight or stayed out
at night against your parent's rules?
- O YES
b repeatedly lie, cheat, "con" others, or steal or break into someone's house or car?
- NO YES
c start fights or bully, threaten, or intimidate others?
- NO YES
d deliberately destroy things or start fires?
- NO YES
e deliberately hurt animals or people?
- NO YES
f force someone into sexual activity?

ARE 2 OR MORE P1 ANSWERS CODED YES?

NO YES

DO NOT CODE YES TO THE BEHAVIORS BELOW IF THEY ARE EXCLUSIVELY POLITICALLY OR RELIGIOUSLY MOTIVATED.

P2 Since you were 15 years old, have you:

- O YES
a done things that are illegal or would be grounds to get arrested, even if you didn't
get caught (for example destroying property, shoplifting, stealing, selling drugs,
or committing a felony)?
- O YES
b often lied or "conned" other people to get money or pleasure, or lied just
for fun?
- NO YES
c been impulsive and didn't care about planning ahead?
- NO YES
d been in physical fights repeatedly or assaulted others (including physical fights
with your spouse or children)?
- NO YES
e exposed others or yourself to danger without caring?

NO f repeatedly behaved in a way that others would consider irresponsible, like
YES
failing to pay for things you owed, deliberately being impulsive or deliberately
not working to support yourself?

NO g felt no guilt after hurting, mistreating, lying to, or stealing from others, or
YES
after damaging property?

ARE 3 OR MORE P2 QUESTIONS CODED YES?

NO

YES

***ANTISOCIAL PERSONA
LITY DISORDER LIFET
IME***

THIS CONCLUDES THE INTERVIEW



**MOOD DISORDERS: DIAGNOSTIC ALGORITHM
M**

Consult Modules: A Major Depressive Episode
 C (Hypo)manic Episode
 K Psychotic Disorders

MODULE K:

1a	IS K11b CODED YES?	NO	YES
<hr/>			
1b	IS K12a CODED YES?	NO	YES

MODULES A and C:

		Current	Past
2	a CIRCLE YES IF A DELUSIONAL IDEA IS IDENTIFIED IN A3e OR ANY PSYCHOTIC FEATURE IN K1 THROUGH K7	YES	YES

b CIRCLE YES IF A DELUSIONAL IDEA IS IDENTIFIED IN
C3a YES YES
OR ANY PSYCHOTIC FEATURE IN **K1** THROUGH **K7**

c Is Major Depressive Episode coded YES (current or past)?
and
is Manic Episode coded NO (current and past)?
and
is Hypomanic Episode coded NO (current and past)?
and
is “Rule out Organic Cause (O2 Summary)” coded YES?

Specify:

- If the depressive episode is **current** or **past** or both
-

With Psychotic Features Current: If 1b or 2a (current) = YE
S With Psychotic Features Past: If 1a or 2a (past) = YES

MAJOR DEPRESSIVE DISORDER

	current		
	past		
MDD		<input type="checkbox"/>	
<input type="checkbox"/>			<input type="checkbox"/>
	With Psychotic Features		
			<input type="checkbox"/>
Current			<input type="checkbox"/>
Past			<input type="checkbox"/>

d Is a Manic Episode coded YES (current or past)?

Specify:

- If the Bipolar I Disorder is **current** or **past** or both
- With **Single Manic Episode**: If Manic episode (current or past) = YES and MDE (current and past) = NO

With Psychotic Features Current: If 1b or 2a (current) or 2b (current) = YES With Psychotic Features Past: If 1a or 2a (past) or 2b (past) = YES

- If the **most recent episode** is manic, depressed, or hypomanic or unspecified (all mutually exclusive)

Most Recent Episode Unspecified if the Past Manic Episode is coded YES AND

(If any current C3 symptoms are coded YES and current C3 Summary is coded NO)

OR

(If current C3 Summary is coded YES AND

If current Manic Episode diagnostic box is coded NO (current)

e Is Major Depressive Episode coded YES (current or past)

and

Is Hypomanic Episode coded YES (current or past)

and

Is Manic Episode coded NO (current and past)?

Specify:

- If the Bipolar Disorder is **current** or **past** or both
- If the most recent mood episode is **hypomanic** or **depressed** (mutually exclusive)

Most Recent Episode Unspecified if the Past Manic / Hypomanic Episode is coded YES

BIPOLAR I DISORDER	
SORDE R	
	current past
Bipolar I Disorder	<input type="checkbox"/> <input type="checkbox"/>
Single Manic Episode	<input type="checkbox"/> <input type="checkbox"/>
With Psychotic Features	
Current	<input type="checkbox"/>
Past	<input type="checkbox"/>
Most Recent Episode Manic	
<input type="checkbox"/> Depressed	
<input type="checkbox"/> Hypomanic	
<input type="checkbox"/> Unspecified	
<input type="checkbox"/>	
Most Recent Episode Mild	
<input type="checkbox"/> Moderate	
<input type="checkbox"/> Severe	
<input type="checkbox"/>	

BIPOLAR II DISORDER

	current past
Bipolar II Disorder	<input type="checkbox"/> <input type="checkbox"/>

Most Recent Episode

Hypomanic	<input type="checkbox"/>
Depressed	
<input type="checkbox"/> Hypomanic	
<input type="checkbox"/> Unspecified	
<input type="checkbox"/>	

AND

(If any current C3 symptoms are coded YES and current C3 Summary is coded NO)

Most Recent Episode

Mild

Moderate

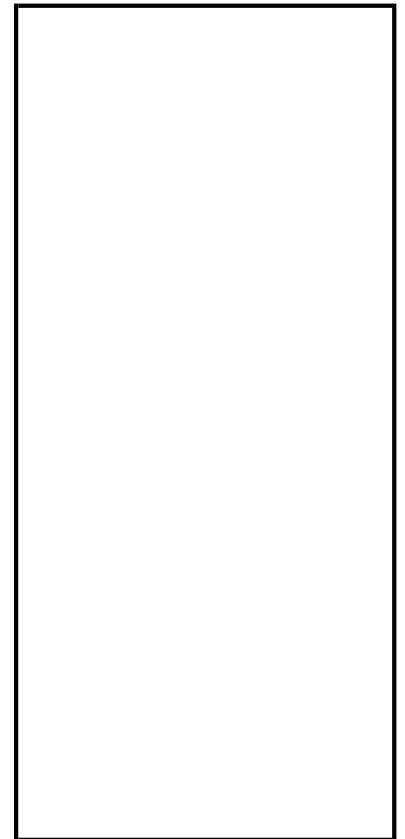
Severe

OR

(If current C3 Summary is coded YES A

ND

If current Hypomanic Episode diagnostic box is coded NO current)



f Is MDE coded NO (current and past)
and
 Is Manic Episode coded NO (current
 and past)
and
 Is C4b coded YES for the appropriate
 time frame

and
 Is C8b coded YES?

—

or

—

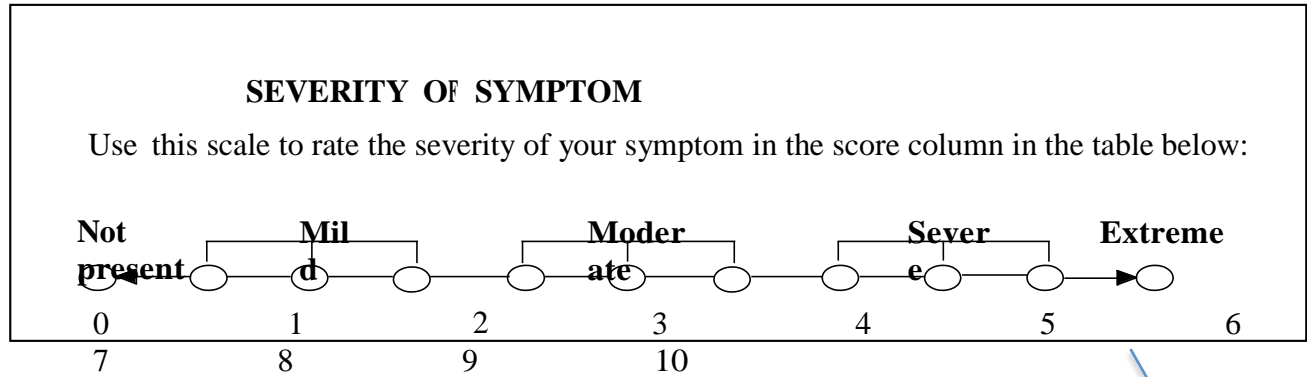
Is Manic Episode coded NO (current and past)
and
 Is Hypomanic Episode coded NO (current and past)
and
 Is C4a coded YES for the appropriate time frame
and
 Is C8c coded YES?

Specify if the Bipolar Disorder Unspecified is **current** or **past** or both.

BIPOLAR DISORDER UNSPECIFIED	
	current past
Bipolar Disorder	<input type="checkbox"/>
Unspecified	<input type="checkbox"/>

OPTIONAL ASSESSMENT MEASURES TO TRACK CHANGES OVER TIME
E

A: CROSS CUTTING MEASURES



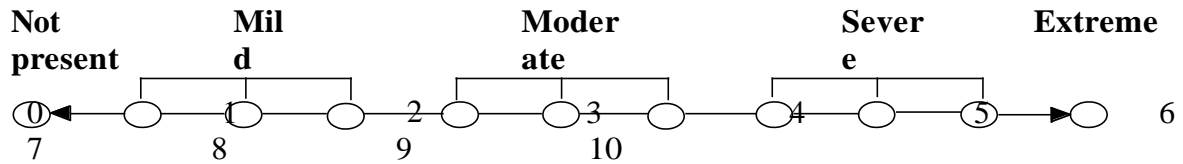
Assessment of Symptoms That Cut Across Disorders

	Symptom Name	Score
1	Depression	
2	Anger	
3	Mania (feeling up or high or hyper or full of energy with racing thoughts)	
4	Anxiety	
5	Physical (somatic) symptoms	
6	Suicidal thoughts (having ANY thoughts of killing yourself)	
7	Hearing sounds or voices others can't hear or fearing someone can hear or read your thoughts or believing things others don't accept as true e.g. that people are spying on you or plotting against you or talking about you (Psychosis)	
8	Sleep problems	
9	Memory problems	
10	Repetitive thoughts or behaviors	
11	Feeling things around you are strange, unreal, detached or unfamiliar, or feeling outside or detached from part or all of your body (Dissociation)	
12	Ability to function at work, at home, in your life, or in your relationships (Personality functioning)	
13	Overusing alcohol or drugs	

B: DISABILITY / FUNCTIONAL IMPAIRMENT

SEVERITY OF DISABILITY / IMPAIRMENT

Use this scale to rate in the score column of the table below, how much your symptoms have disrupted your ability to function in the following areas of your life:



Assessment of Impairment of Functioning /Disability

	Domain Name	Score
1	Work or school work	
2	Social life or leisure activities (like hobbies or things you do for enjoyment)	
3	Family life and / or home responsibilities	
4	Ability to get along with people	
5	Personal and social relationships	
6	Ability to understand and to communicate with others	
7	Ability to take care of yourself (washing, showering, bathing, dressing properly, brushing teeth, laundry, combing / brushing hair, eating regularly)	
8	Made you disruptive or aggressive towards others	
9	Financially (ability to manage your money)	
10	Ability to get around physically	
11	Spiritual or religious life	
12	How much did your condition have an impact on other people in your family?	

REFERENCES

1. Sheehan DV, Lecrubier Y, Harnett-Sheehan K, Amorim P, Janavs J, Weiller E, Hergueta T, Baker R, Dunbar G: The Mini International Neuropsychiatric Interview (M.I.N.I.): The Development and Validation of a Structured Diagnostic Psychiatric Interview. *J. Clin Psychiatry*, 1998;59(suppl 20): 22-33.
2. Sheehan DV, Lecrubier Y, Harnett-Sheehan K, Janavs J, Weiller E, Bonara LI, Keskiner A, Schinka J, Knapp E, Sheehan MF, Dunbar GC. Reliability and Validity of the MINI International Neuropsychiatric Interview (M.I.N.I.): According to the SCID-P. *European Psychiatry*. 1997; 12:232-241.
3. Lecrubier Y, Sheehan D, Weiller E, Amorim P, Bonara I, Sheehan K, Janavs J, Dunbar G. The MINI International Neuropsychiatric Interview (M.I.N.I.) A Short Diagnostic Structured Interview: Reliability and Validity According to the CIDI. *European Psychiatry*. 1997; 12: 224-231.
4. Amorim P, Lecrubier Y, Weiller E, Hergueta T, Sheehan D: DSM-III-R Psychotic Disorders: procedural validity of the Mini International Neuropsychiatric Interview (M.I.N.I.). Concordance and causes for discordance with the CIDI. *European Psychiatry*. 1998; 13:26-34.

ACKNOWLEDGEMENTS

The author wishes to acknowledge the valuable contributions made to the earlier versions of the MINI for DSM III-R and DSM IV by:

1. Yves Lecrubier, my close collaborator (now deceased) on the initial development of the MINI for DSM III-R, the DSM IV and ICD-10.
2. Juris Janavs, Emanuelle Weiller, Christer Allgulander, Kathy Harnett-Sheehan, Roxy Baker, Michael Sheehan, Chris Gray, Thierry Hergueta, N. Kadri, David Baldwin, Christian Even, Rosario Hidalgo, Marelli Soto-Colon, Ossama Osman.
3. Patricia Amorim for her extensive work on the development of the expanded version of the Psychotic Disorders Module and algorithms for DSM III-R. We have evolved her model further in the MINI for Psychotic Disorders 7 and in the MINI Plus 7 for DSM-5.
4. Executive Scientific committee for the MINI 6.0.0: Christer Allgulander, Stockholm, Sweden
A. Carlo Altamura, Milano, Italy
Cyril Hoschl, Praha, Czech Republic
George Papadimitriou, Athens, Greece
Hans Ågren, Göteborg, Sweden
Hans-Jürgen Möller, München, Germany
Hans-Martin

Ulrich Wittchen, Dresden, Germany

István Bitter, Budapest, Hungary

Jean-

Pierre Lépine, Paris, France

Julius Angst, Zurich, Switzerland

and Julio Bobes, Oviedo, Spain

and Luciano Conti, Pisa, Italy

Marelli Colonna

Soto MD, Puerto Rico, United States

Michael Van Ameringen MD, Toronto, Canada

Rosario Hidalgo MD, Tampa, United States

Sebastian Egfried Kasper, Vienna, Austria

Thomas Schlaepfer, Bonn, Germany

5. Mapi and the many academic translation teams internationally who collaborated in ensuring that quality translations became available in over 70 languages or language variants. Mapi (<http://www.mapigroup.com>) is now the official translation and linguistic validation service for all variants of the MINI.

6. Individual clinicians and patients who over the years made countless suggestions to help improve the accuracy and clinical value to the MINI: JM Giddens for her advice on the MINI 7 version of the Suicidality Module, Dr. Michael Van Ameringen for assistance with the ADHD module, and Dr P Powers for her advice on the modules on Anorexia Nervosa and Bulimia.

7. A validation study of this instrument was made possible, in part, by grants from SmithKlineBeecham and the European Commission.

M.I.N.I. PLUS

The shaded modules below are additional modules available in the MINI PLUS beyond what is available in the standard MINI. The un-shaded modules below are in the standard MINI.

These MINI PLUS modules can be inserted into or used in place of the standard MINI modules, as dictated by the specific needs of any study.

MODULES	TIME FRAME		
A MAJOR DEPRESSIVE EPISODE	Current (2 weeks) Past Recurrent		
MAJOR DEPRESSIVE DISORDER	Current (2 weeks) Past Recurrent		
MDE WITH MELANCHOLIC FEATURES	Current (2 weeks)		
MDE WITH CATATONIC FEATURES	Current (2 weeks)		
MDE WITH ATYPICAL FEATURES	Current (2 weeks)		
MAJOR DEPRESSIVE DISORDER WITH PSYCHOTIC FEATURES	Current Past		
MINOR DEPRESSIVE DISORDER (DEPRESSIVE DISORDER UNSPECIFIED)	Current (2 weeks) Past Recurrent		
MOOD DISORDER DUE TO A GENERAL MEDICAL CONDITION	Current (2 weeks) Past		
SUBSTANCE INDUCED MOOD DISORDER	Current (2 weeks) Past		
AY DYSTHYMIA	Current		
B SUICIDALITY	Current (Past Month)	<input type="checkbox"/>	
SUICIDE BEHAVIOR DISORDER	Lifetime attempt	<input type="checkbox"/>	<input type="checkbox"/> Low <input type="checkbox"/> Moderate <input type="checkbox"/> High
	Current	<input type="checkbox"/>	(In Past Year)
	In early remission	<input type="checkbox"/>	(1 - 2 Years Ago)
C MANIC EPISODE	Current Past		
HYPOMANIC EPISODE	Current Past		
BIPOLAR I DISORDER	Current Past		
BIPOLAR II DISORDER	Current Past		
BIPOLAR DISORDER UNSPECIFIED	Current Past		
BIPOLAR I DISORDER WITH PSYCHOTIC FEATURES	Current Past		
MANIC EPISODE DUE TO A GENERAL MEDICAL CONDITION	Current (2 weeks) Past		
HYPOMANIC EPISODE DUE TO A GENERAL MEDICAL CONDITION	Current (2 weeks) Past		
SUBSTANCE INDUCED MANIC EPISODE	Current (2 weeks)		

	Past
SUBSTANCE INDUCED HYPOMANIC EPISODE	Current (2 weeks) Past
MOOD DISORDER UNSPECIFIED	Lifetime

D PANIC DISORDER Current (Past Month)
Lifetime

ANXIETY DISORDER WITH PANIC ATTACKS DUE TO	
A GENERAL MEDICAL CONDITION	Current
SUBSTANCE INDUCED ANXIETY DISORDER WITH PANIC ATTACKS	Current
E AGORAPHOBIA	Current
F SOCIAL ANXIETY DISORDER (Social Phobia)	Current (Past Month) Generalized Non-Generalized
FA SPECIFIC PHOBIA	Current
G OBSESSIVE-COMPULSIVE DISORDER (OCD)	Current (Past Month)
OCD DUE TO A GENERAL MEDICAL CONDITION	Current
SUBSTANCE INDUCED OCD	Current
H POSTTRAUMATIC STRESS DISORDER	Current (Past Month)
HL POSTTRAUMATIC STRESS DISORDER	Lifetime
I ALCOHOL USE DISORDER	Past 12 Months
IL ALCOHOL USE DISORDER	Lifetime
J SUBSTANCE DEPENDENCE (Non-alcohol) SUBSTANCE ABUSE (Non-alcohol)	Past 12 Months Past 12 Months
JL SUBSTANCE USE DISORDER (Non-alcohol)	Lifetime
K PSYCHOTIC DISORDERS	Lifetime Current
MOOD DISORDER WITH PSYCHOTIC FEATURES	Lifetime
MOOD DISORDER WITH PSYCHOTIC FEATURES	Current
SCHIZOPHRENIA	Current Lifetime
SCHIZOAFFECTIVE DISORDER	Current Lifetime
SCHIZOPHRENIFORM DISORDER	Current Lifetime
BRIEF PSYCHOTIC DISORDER	Current Lifetime
DELUSIONAL DISORDER	Current Lifetime
PSYCHOTIC DISORDER DUE TO A GENERAL MEDICAL CONDITION	Current Lifetime
SUBSTANCE INDUCED PSYCHOTIC DISORDER	Current Lifetime

	PSYCHOTIC DISORDER UNSPECIFIED	Current Lifetime
L	ANOREXIA NERVOSA	Current (Past 3 Months)
	ANOREXIA NERVOSA, BINGE EATING	Current
	ANOREXIA NERVOSA, RESTRICTED	Current
M	BULIMIA NERVOSA	Current (Past 3 Months)
	BULIMIA NERVOSA, PURGING TYPE	Current
	BULIMIA NERVOSA, NON-PURGING TYPE	Current
MB	BINGE-EATING DISORDER	Current (Past 3 Months)
N	GENERALIZED ANXIETY DISORDER	Current (Past 6 Months)
	GAD DUE TO A GENERAL MEDICAL SUBSTANCE INDUCED GAD	Current Current
O	SOMATIZATION DISORDER	Current Lifetime
P	HYPOCHONDRIASIS	Current
Q	BODY DYSMORPHIC DISORDER	Current
R	PAIN DISORDER	Current
S	CONDUCT DISORDER	Current (past 12 months)
T	ATTENTION DEFICIT/ HYPERACTIVE DISORDER COMBINED	Current (Past 6 months) (Children / Adolescents)
	ADHD INATTENTIVE	
	ADHD HYPERACTIVE / IMPULSIVE	
TA	ATTENTION DEFICIT/ HYPERACTIVE DISORDER COMBINED	Current (Past 6 months) (Adults)
	ADHD INATTENTIVE	
	ADHD HYPERACTIVE / IMPULSIVE	
U	PREMENSTRUAL DYSPHORIC DISORDER	Current
V	MIXED ANXIETY DEPRESSIVE DISORDER	Current
W	ADJUSTMENT DISORDERS	Current
X	MEDICAL. ORGANIC. DRUG CAUSED	
Y	ANTISOCIAL PERSONALITY DISORDER	Lifetime

For Schizophrenia and psychotic disorder studies and for psychotic disorder subtyping in clinical settings, use the MINI for Psychotic Disorders instead of the standard MINI. For many clinical settings this level of psychotic disorder subtyping detail is not necessary.

For children and adolescents, use the MINI Kid or the MINI Kid Parent of the MINI Kid for Psychotic Disorders. A computerized version of the MINI is available from Medical Outcomes Systems <https://www.medical-outcomes.com>

