UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

A CROSS-SECTIONAL DESCRIPTIVE STUDY OF CLINICAL FEATURES AND COURSE OF ILLNESS IN A SOUTH AFRICAN POPULATION WITH BIPOLAR DISORDER

By

Christoffel Grobler

Thesis submitted in fulfilment of the requirements for the degree of

MEDICINAE DOCTOR

at the Faculty of Health Sciences, University of Pretoria

Promotor: **Prof JL Roos**

October 2012

© University of Pretoria

Declaration

I, the undersigned, hereby declare that the work contained in this thesis is my own original work and that I have not previously in its entirety or in part submitted it at any university for a degree.

_____

Dr. Christoffel Grobler

_____

Date

Dedication

For my mother Celine,
who encouraged my passion for reading

Acknowledgements

I wish to thank the following people who in some way or another supported, contributed or helped shape my thoughts on the subject of Bipolar Disorder:

Professor Louw Roos, my promoter, for his unwavering support throughout this journey.

Dr Elisabeth Weiss, my mentor and friend.

Magriet Lee.

The Medical Officers and Nursing staff of the three hospitals where I conducted my study for their help recruiting and interviewing study subjects.

Professor Lizette van Rensburg.

Dr David Browne, Dr Tom McBride, Professor Colm McDonald and Ms Virginia Reid, my Irish connection.

Professor Gary Sachs.

Jacques Nell.

Professor Pieter Becker and Mr Lwando Kondlo.

Barbara English.

My children, in particular my two daughters, Stephanie and Elizabeth.

My wife, Noekie, for her support and taking of the photographs.

Lastly my Father in heaven.

Abstract

There is generally a lack of studies examining prevalence and phenomenology of bipolar disorder in Africa. In literature, a unipolar manic course of illness in particular is reported to be rare.

The purpose of this study was to investigate and describe the course of illness and clinical features in a cross-section of patients diagnosed with bipolar disorder attending public hospitals in Limpopo Province, South Africa and to determine the rate of a unipolar manic course in this sample of patients.

This was a descriptive, cross-sectional study of patients presenting with a history of mania between October 2009 and April 2010, to three hospitals in Limpopo Province. A purposeful sample of 103 patients was recruited and interviewed using the Affective Disorders Evaluation.

This study confirms that a unipolar manic course is indeed much more common than rates suggested in present day literature with 57% of the study sample only ever experiencing manic episodes.

The study also confirms the debilitating nature of bipolar disorder with more than two-thirds being unemployed in spite of a quarter of the study

subjects having a tertiary education. The high rates of attempted suicide, history of violence and history of drug abuse all furthermore points to the devastating effects bipolar disorder has on individuals and their families.

Treatment choice appeared to be a combination of a mood-stabilising agent in combination with an anti-psychotic. It was found that two-thirds of study subjects had consulted with faith- or traditional healers.

Significant gender differences appeared in that females were more likely to suffer from comorbid anxiety disorders, have a history of sexual trauma, and be HIV positive whilst men were more likely to have a forensic- and substance-abuse history, experience hallucinations and receive clozapine.

Patients presenting with a unipolar manic course of illness, as described in this thesis, may contribute to the search for an etiologically homogeneous sub-group which presents unique phenotype for genetic research and the search for genetic markers in mental illness. A unipolar manic course therefore needs to be considered as a specifier in diagnostic systems in order to heighten the awareness of such a course of illness in bipolar disorder, with a view to future research.

Key phrases: “affective disorders”, “bipolar disorder”, “recurrent”, “mania”, “unipolar mania”.

Content

Chapter 1
Introduction....6
Chapter 2
The History of Bipolar Disorder....13
Chapter 3
Unipolar Mania....59
Chapter 4
Purpose and Methodology....71
Chapter 5
Results....85
Chapter 6
Discussion....114
Chapter 7
Conclusion....166
Chapter 8
References....173
Appendix A
Thesis Photographs....193
Appendix B
Affective Disorder Evaluation....209
Appendix C
Informed Consent Documents....224
Appendix D
Letter from Faculty of Health Sciences Research Ethics Committee, University of Pretoria....227
Appendix E
Letters of Approval from Chief Executive Officers at the Mankweng-, Mokopane- and George Masebe Hospitals....229
Appendix F
Letter from Limpopo Department of Health and Social Development....233

List of Tables

Table 3.1 Studies from Western countries

Table 3.2 Studies from non-Western countries

Table 5.1 Hospitals subjects were recruited from

Table 5.2 Inpatient / outpatient status of subjects

Table 5.3 Mean age

Table 5.4 Marital status

Table 5.5 Religious affiliation

Table 5.6 Education

Table 5.7 Employment

Table 5.8 Financial support

Table 5.9 Family history of mental illness

Table 5.10 History of trauma

Table 5.11 History of suicide attempts

Table 5.12 Type of suicide attempt

Table 5.13 History of violence/forensic history

Table 5.14 Medical history

Table 5.15 HIV status

Table 5.16 Age of onset of illness

Table 5.17 Age of onset bracket: mania

Table 5.18 Age of onset bracket: depression

Table 5.19 Pattern of mood symptoms – Depressive and manic episodes versus manic only episodes

Table 5.20 Pattern of mood symptoms; manic only episodes – 2 or less phases versus 3 or more phases

Table 5.21 Pattern of mood symptoms – True unipolar mania versus bipolar mood disorder

Table 5.22 Seasonal pattern

Table 5.23 Lifetime number of phases

Table 5.24 Number of manic episodes

Table 5.25 Number of depressive episodes

Table 5.26 Depressive episodes features

Table 5.27 Mood elevation features

Table 5.28 Attended traditional healers for treatment

Table 5.29 Current medication

Table 5.30 Anti-psychotics

Table 5.31 Mood stabilizers

Table 5.32 Anti-depressants

Table 5.33 Extra-piramidal side-effects and Tardive Dyskinesia

Table 5.34 Age of onset of alcohol use

Table 5.35 Age of onset of cannabis use

Table 5.36 Age of onset of nicotine use

Table 5.37 Alcohol current versus past use or abuse

Table 5.38 Cannabis current versus past use or abuse

Table 5.39 Nicotine current use

Table 5.40 Axis 1 diagnosis

Table 5.41 Other axis 1 diagnosis

Table 5.42 Comorbid anxiety disorder

Table 5.43 Bipolarity Index Score

Table 5.44 Clinical Global Impression of severity (CGI)

Table 5.45 Menarche

Table 5.46 Cycles

Table 5.47 Contraception

Table 5.48 Took medication while pregnant

Table 5.49 Live births

Table 5.50 Miscarriages

Table 5.51 Miscarriages while taking medication

Table 5.52 Developmental problems in offspring

Table 5.53 Peri-menstrual exacerbation

Table 5.54 Mood symptoms associated with pregnancy

Table 5.55 Post-partum onset of symptoms

List of Figures

Figure 4.1 Map of Southern Africa

Figure 4.2 Map of South Africa

Figure 4.3 Map of Limpopo

Figure 5.1 Gender

Figure 5.2 Age of onset bracket

Figure 5.3 Pattern of mood symptoms

Figure 5.4 Psychotic features

Figure 5.5 Substances – Age of onset comparison

Abbreviations used

ADE	Affective Disorders Evaluation
AESOP	Aetiology and Ethnicity of Schizophrenia and Other Psychoses
AIDS	Acquired immunodeficiency syndrome
CCMD-3	Chinese Classification of Mental Disorders, 3rd Edition
CGI	Clinical Global Impression of severity
CNV's	Copy-number variants
DAM	Depressive and Manic episodes
DSM	Diagnostic and Statistical Manual of Mental Disorders
EAOO	Early age of onset
EMBLEM	European Mania in Bipolar Longitudinal Evaluation of
GAD	Generalised anxiety disorder
GC	Cuban Glossary Medication
GWAS	Genome-wide association studies
HIV	Human immunodeficiency virus
ICD	International Classification of Diseases
MHCU	Mental Health Care User
MO	Manic Only episodes
NEC	Not elsewhere classified
NIMH	National Institute for Mental Health
OCD	Obsessive-compulsive disorder
PMHC	Polokwane-Mankweng Hospital Complex
PTSD	Posttraumatic stress disorder
SASH	South African Stress and Health
SASOP	South African Society of Psychiatrists
SCID	Structured Clinical Interview for DSM-IV
STEP-BD	Systematic Treatment Enhancement Program for Bipolar Disorder
TB	Tuberculosis
UK	United Kingdom
USA	United States of America
WHO	World Health Organization
ZCC	Zion Christian Church