

Copyright is owned by the Author of the thesis. Permission is given for a copy to be downloaded by an individual for the purpose of research and private study only. The thesis may not be reproduced elsewhere without the permission of the Author.

**What People Think About Medicines:
The Relationship between Medication Beliefs and
Adherence to Antidepressant Therapy**

A thesis presented in partial fulfilment of the requirements for the Degree
of Master of Science in Psychology at Massey University

Judith Russell

2006

Abstract

Major depressive disorder is a common mental disorder seen in primary care and treatment with antidepressant medication has been shown to be an effective treatment. Non-adherence to treatment regimens is considered by many to be the most serious challenge facing medical practice today. Research on medication adherence has more recently shifted its focus to the cognitive factors (i.e., patient beliefs) that determine adherence. Prior research has shown that pre-treatment perception of benefits and barriers to medication predict initial medication adherence. To contribute to this emerging literature, the present study assessed 85 depressed primary care patients about their beliefs in the *necessity* for and *concerns* about antidepressant therapy, and reported adherence using validated questionnaires (BMQ, Horne, Weinman, & Hankins, 1999; MARS, Horne & Weinman, 2002). The results of the present study showed no relationship between patient beliefs about the *necessity* of antidepressant therapy for their health and reported adherence. As predicted, participants holding stronger *concerns* about the potential adverse effects of the medication and stronger *necessity* beliefs, compared to *concerns* beliefs, reported increased rates of adherence. Depression severity was found to be associated with reported adherence, but was independent of the relationship between medication *concerns* and adherence.

The present study replicated previous research and added further support for the theoretical basis of medication adherence by showing that there are similar theoretically based, determinants of adherence among patients with chronic physical health issues and those with mental health issues.

Acknowledgements

The support and guidance received from my supervisor Dr Nikolaos Kazantzis has been invaluable. Thank you for giving your time, expert knowledge, skill and advice over this time.

Thanks also to the research laboratory group, Aniel, Robyn, Paul, Sarah, Yolanda, Greg and Margo. Your positive encouragement and input into this project has been appreciated.

My grateful thanks is extended to Dr Rob Horne, University of Brighton, England, for his willingness to share his expertise and experience in the field of medication adherence.

To my husband John, and children, Michael Timothy and Grace, a huge thank you for your unwavering support, love and belief that I could achieve things at times I didn't believe possible.

I am grateful to the general practitioners, practice staff and most of all the general practice patients who gave up their time to participate in this study. Without your enthusiasm and willingness to participate, this study would not have been possible.
Thank you.

Lastly, thanks to our extended families and friends who have always been there and supported us.

Table of Contents

	Page
Abstract	ii
Acknowledgments	iii
Table of Contents	iv
List of Tables	ix
Chapter One: Introduction to Treatment Adherence	1
What is Adherence?	2
Methodological Issues in the Assessment of Adherence	5
Lack of Standard Definition	5
Assessment Methods	7
Pharmacy and Prescription Records	7
Medication Measurement	8
Electronic and Computer Based Monitoring	9
Self Report	10
Biochemical Analysis	13
Direct Observation	14
The Costs of Medication Non-Adherence	15
Rates of Non-adherence to Treatment Regimens	17
Medication Adherence in Patients with Mental Health Disorders	19
Chapter Summary	20

Chapter Two: Depression in Primary Care	22
The Prevalence of Mental Disorders	22
The Epidemiology and Prevalence of Depression in Primary Care	23
The Burden of Depression	25
The Nature of Depression	27
Risk Factors for Depression	29
Comorbidity	30
Etiology of Depression: Two Empirically Supported Models	31
The Medical or Biological Model of Depression	31
The Cognitive Model of Depression	31
The Treatment of Depression	33
Chapter Summary	36
Chapter Three: Factors Affecting Medication Non-Adherence.	37
Demographic and Socio-Economic Factors	38
Doctor-Patient Relationship and Communication	39
Disappearance or Lack of Symptoms	42
Complexity of the Medication Regimen	43
Unpleasant Side Effects	45
Stigma	46
Social Support	47
Psychiatric Disorders and Adherence	48
Chapter Summary	49

Chapter Four: Cognitions and Adherence	50
Social Cognition Models and Adherence	51
Health Belief Model	52
Theory of Planned Behaviour and Theory of Reasoned Action	55
Self-Regulatory Model and Adherence	58
Cognitive Model of Medication Adherence	64
Chapter Summary	65
Chapter Five: The Present Study	67
Aim and Hypotheses	67
Chapter Six: Method	69
Research Design	69
Participants	69
Measures	70
Beliefs about Medicines Questionnaire (BMQ)	70
Medication Adherence Rating Scale (MARS)	72
Beck Depression Inventory (BDI-II)	75
Questionnaire Package	76
Procedure	76
Data Collection	77
Ethics	78
Power Calculations	79

Statistical Analysis Procedure	79
Data Entry and Screening	80
Data Analysis	80
Chapter Seven: Results	84
Participants	84
Descriptive Statistics	85
Data Analysis	87
Chapter Eight: Discussion of Results.	91
Review of Findings	91
Study Limitations	97
Further Research	100
Conclusions	102
References	104
Appendices	134
Appendix A: List of Participating General Practitioners	134
Appendix B: Questionnaires Used in Study	136
Beliefs about Medicines (BMQ)	137
Medication Adherence Report Scale (MARS).	138
Appendix C: Participant Forms	139
Participant Information Sheet	140
Participant Consent Form	142
Demographic information sheet	143

Medication information sheet.	144
Appendix D: Histograms of Variable Distributions.	145
Appendix E: Scatter-plots of Relationships between Variables.	149

List of Tables

Table 1: Medication Adherence Report Scale Statements of Non Adherence	73
Table 2: Demographic Characteristics of Participants	84
Table 3 Descriptive Statistics for Dependent Measures	86
Table 4: Frequency and distributions of BDI-II scores in the present sample	87
Table 5: Spearman correlations of relationships between medication beliefs, depression severity and adherence.	88