
**Brief inpatient treatment for eating disorders:
Can Motivational Enhancement Therapy improve outcome?**

A dissertation presented by

Helen Y. Dean (B. Psych. Hons.)

to

The School of Psychology in partial fulfilment of the requirements for the degree of
Doctor of Clinical Psychology / Master of Science

University of Sydney
Sydney, New South Wales, Australia

October, 2006

Certificate of Originality

This thesis is submitted to the University of Sydney in fulfillment of the requirements for the Degree of Doctor of Clinical Psychology / Master of Science. The work presented in this thesis is, to the best of my knowledge and belief, original except as acknowledged in the text. I hereby declare that I have not submitted this material, either in full or in part, for a degree at this or any other institution.

.....
H.Y. Dean

.....
Date

Acknowledgements

This thesis would not have eventuated without the support and guidance of my supervisor, Professor Stephen W. Touyz. The encouragement of such a leading figure in the area provided me with confidence, and furthered my belief in the importance of working to improve outcomes for individuals with eating disorders.

My associate supervisors, Dr Elizabeth Rieger and Mr Chris Thornton provided invaluable help with all facets of the study. Most importantly, both Liz and Chris fostered my development as a clinical psychologist, always encouraging me to expand and practice my skills under the guidance of their constructive and positive approaches to clinical supervision.

I was fortunate to be a part of the Doctor of Clinical Psychology class of 2005. My friends and colleagues provided me with warmth, laughs, and collaboration. I could not imagine training with a better group of people.

My family has always encouraged higher learning. As such, I must acknowledge my mother, Glenda Dean, for her never failing support, my father, Dr Nasir Dean, for showing me that if a kid from Kenya can become a doctor, then surely I can too, and my siblings, Dr Anna Dean, and the late Dr Robert Dean, who inspired me with their dedication to academic excellence.

Lastly, I must acknowledge my partner, Ross Rydge. Rosco has been through the ups and downs of the past little while with me, and has never once stopped being amazingly caring and loveable.

Dedication

This thesis is dedicated to the memory of my big brother, Dr Robert N. Dean (26.01.76 – 15.06.05). Robert's struggle with melancholic depression and his contact with clinical psychologists is the reason that I chose to enter this profession. Tragically we lost him to this horrible illness last year. I hope that the work of this thesis can, in some small way, help to further the pursuit of improved treatment and better outcomes for all sufferers of mental illnesses.

Paper already arising from the current research

Dean, H.Y., Touyz, S.W., Rieger, E., & Thornton, C.E. (in press). Can Motivational Enhancement Therapy improve a cognitive behaviourally based inpatient program for eating disorders? In D.Einstein (Ed.). *Innovations and Advances in Cognitive Behaviour Therapy*. Sydney: Australian Academic Press.

Conference presentations arising from the current research

Dean, H., Touyz, S., Rieger, E., & Thornton, C. (2006, October). *Group Motivational Enhancement Therapy for Eating Disorders: an Adjunct to Inpatient Care*. Paper presented at the Annual Australian Association of Cognitive Behaviour Therapy National Conference. Sydney, Australia.

Dean, H., Touyz, S., Rieger, E., & Thornton, C. (2006, September). *Brief Inpatient Treatment for Eating Disorders: Can Motivational Enhancement Therapy Improve Outcome?* Poster presented at the Annual Meeting of the Eating Disorders Research Society, Port Douglas, QLD, Australia.

Dean, H., Touyz, S., Rieger, E., & Thornton, C. (2005, November). *To Change or Not to Change? Motivational Enhancement Therapy as an Adjunct to Inpatient Treatment for Eating Disorders*. Paper presented at the Annual University of Sydney School of Psychology Postgraduate Conference, Sydney, Australia.

Abstract

Despite a number of different psychotherapeutic approaches having been examined for use with patients with eating disorders, there is still no established psychological treatment associated with acceptable levels of long-term recovery. These poor recovery rates are associated with the observation that eating disorder patients are often ambivalent, or even resistant, to treatment. As such, research has begun to explore the use of Motivational Enhancement Therapy (MET), a treatment approach that aims to engage ambivalent and change resistant patients in the treatment process, with these individuals. Poor motivation to recover is particularly prominent within the inpatient eating disorder setting. However, no previous study has examined the use of MET to foster willingness to engage in treatment with this group of patients. The objectives of the current study were twofold. Firstly, an examination of the effectiveness of an inpatient eating disorders unit affiliated was undertaken in order to further the research base upon which future inpatient interventions can be built and compared. The second objective was to develop and evaluate a brief MET group program for inpatient eating disorder sufferers. The goal of the intervention was to enhance patients' motivation to more effectively utilise the inpatient program and to hence positively impact upon their psychological, physical and behavioural functioning. Forty-two consecutive inpatients meeting DSM-IV criteria for an eating disorder were recruited into the current study and sequentially allocated to groups. Twenty-three inpatients completed four MET groups in addition to routine hospital care. A control group of 19 participants in the standard hospital treatment program was also employed (TAU group). The inpatient unit was associated with significant improvements on a number of physical, behavioural and emotional outcome measures. Despite no significant differences between the MET and the TAU groups being found on the overall formal outcome measures, there were nevertheless differences between the groups. Specifically, the MET groups appeared to foster longer-term motivation and engagement, and to promote treatment continuation. This study hopes to start a constructive debate on the role of MET in the inpatient eating disorders unit.

Overview

The present research entails an examination of brief inpatient treatment and the development and evaluation of a four-session intervention of Motivational Enhancement Therapy for eating disorder sufferers. Chapter 1 provides a general overview of eating disorders. Particular importance is given to a review of the current psychotherapeutic outcome literature encompassing a range of treatment approaches. Chapter 2 discusses the barriers to successful treatment, in particular the common occurrences of patient resistance to treatment, and treatment refusal and drop-out. The objectives and hypotheses for the study are described in Chapter 3. In Chapter 4, the methodology employed in the current research is described. Chapter 5 provides details of the sample, including patient attrition rates. Results pertaining to the present treatment trial are presented in Chapter 6. Chapter 7 consists of a general discussion of the results of the current study, the perceived limitations and strengths and directions for future research into motivational approaches within eating disorders.

List of Tables

Table 1.1	DSM-IV-TR criteria for anorexia nervosa	p.2
Table 1.2	DSM-IV-TR criteria for bulimia nervosa	p.3
Table 1.3	DSM-IV-TR criteria for eating disorder not otherwise specified	p.4
Table 2.1	The characteristics of each change process of the transtheoretical model of change	p.28
Table 4.1	List of questionnaires administered at each assessment point	p.49
Table 4.2	Guidelines for the implementation of motivational interviewing	p.58
Table 4.3	Summary of the four MET sessions implemented in the current study	p.59
Table 5.1	Comparison of MET and TAU groups on demographic characteristics at pre-treatment assessment	p.67
Table 5.2	Numbers (and percentages) of participants per eating disorder diagnosis for the MET and TAU groups at pre-treatment.	p.67
Table 5.3	Results of independent samples t-tests for the pre-treatment mean scores for all questionnaires between the MET (n = 23) and TAU (n = 19) groups.	p.68
Table 5.4	Differences in pre-treatment dichotomous demographic and diagnostic characteristics between completers and non-completers at both post-treatment and follow-up.	p.72
Table 5.5	Differences in pre-treatment continuous variables between completers, and non-completers at post-treatment and follow-up.	p.72
Table 6.1	Percentages of participants classified in each stage of change across assessment occasions according to the ANSOCQ.	p.75
Table 6.2	Results of paired t-tests for all motivational scales between pre-treatment and post-treatment (n = 35).	p.76
Table 6.3	Results of paired t-tests for all motivational scales between post-treatment and the six-week follow-up (n = 28).	p.77

Table 6.4	Results of paired t-tests for eating disorder pathology and behaviour scales between pre-treatment and post treatment (n = 35).	p.79
Table 6.5	Results of paired t-tests for eating disorder pathology and behaviour scales between post-treatment and six week follow up (n = 28).	p.80
Table 6.6	Results of paired t-test for the BDI-II between pre-treatment and post-treatment (n = 34).	p.82
Table 6.7	Means and standard deviations of the pre-treatment and post-treatment measures for the MET and TAU groups.	p.83
Table 6.8	Results of independent samples t-tests comparing the MET (n = 19) and TAU (n = 16) groups for the post-pre treatment difference scores for all outcome measures.	p.85
Table 6.9	Means and standard deviations of the post-treatment and follow-up measures for the MET and TAU groups.	p.87
Table 6.10	Results of independent samples t-tests comparing differences between the MET (n = 17) and TAU groups (n =11) for the post-treatment to follow-up difference for all outcome measures.	p.88
Table 6.11	Means and standard deviations of the pre-treatment and follow-up measures for the MET and TAU groups.	p.90
Table 6.12	Results of independent samples t-tests comparing differences between the MET (n =17) and TAU (n =11) groups for the pre-treatment-follow-up difference scores for all outcome measures.	p.91
Table 6.13	Mean BMI for treatment condition over the intervention and at follow up for those initially underweight patients (n =27).	p.92
Table 6.14	Treatment options taken at follow-up assessment by participants in the MET (n = 19) and TAU (n = 16) groups.	p.95
Table 6.15	Contemplation ladder mean scores for each of the four MET sessions (n = 19).	p.96

List of Figures

Figure 2.1	The stages of change from the Transtheoretical Model of Change	p.26
Figure 4.1	Occasions of assessment across the treatment trial	p.46
Figure 5.1	Recruitment and attrition of the study sample	p.70
Figure 6.1	Mean BMI across the intervention for the overall sample of initially underweight treatment completers	p.81
Figure 6.2	Mean BMI for each treatment condition over the intervention and at six-week follow-up.	p.93
Figure 6.3	Mean ANSOCQ scores for the MET and TAU groups across assessment occasions	p.94
Figure 6.4	Percentage of respondents at each assessment period classified as being in action stages of change according to the ANSOCQ	p.94
Figure 6.5	Contemplation ladder means across the four MET sessions.	p.96

Contents

Chapter 1.	Literature Review 1. Overview of eating disorders and treatment approaches.	p.1
1.1	Overview of the diagnostic and clinical features of eating disorders	p.1
1.2	Treatment for eating disorders	p.8
1.3	Hospital based treatment	p.8
1.4	Psychotherapeutic treatment	p.11
Chapter 2.	Literature Review 2. Motivational concerns within the eating disorders.	p.20
2.1	Barriers to the successful treatment of eating disorders	p.20
2.2	Understanding deficiencies in motivation to recover	p.25
2.3	Increasing motivation to change problematic behaviours	p.35
Chapter 3.	Rationale and objectives for the current study	p.43
3.1	Objectives of the current study	p.44
3.2	Hypotheses for the current study	p.45
Chapter 4.	Methodology	p.46
4.1	Study design	p.46
4.2	Ethical approval	p.47
4.3	Participants	p.47
4.4	Assessment	p.48
4.5	Assessment measures	p.49
4.6	The Motivational Enhancement Therapy intervention	p.55
4.7	Statistical analyses	p.62
Chapter 5.	Characteristics of the Sample	p.64
5.1	Recruitment	p.64
5.2	Pre-treatment characteristics of the sample	p.64
5.3	Comparison of treatment groups at pre-treatment	p.66
5.4	Patient attrition	p.69
5.5	Differences at pre-treatment between completers and non-completers	p.70

Chapter 6. Results	p.74
6.1 Results of the overall effectiveness of four weeks of inpatient treatment. Comparison of pre-treatment, post-treatment and follow-up data.	p.74 p.82
6.2 Results of the effectiveness of the MET groups plus treatment as usual compared with treatment as usual alone.	p.95
6.3 Analysis of MET treatment process	
Chapter 7. Discussion	p.97
7.1 Overview of the current study	p.97
7.2 Discussion of the findings of the current study	p.98
7.3 How might the MET have fostered motivation to change?	p.106
7.4 Discussion of the strengths of the current study	p.107
7.5 Discussion of the limitations of the current study	p.109
7.6 Implications from the current study and directions for future research	p.110
References	p.112
Appendices	p.129
A Letters of Ethical Approval	
B Participant Information Sheets and Consent Forms	
C Copies of Questionnaires	
D Copy of the Motivational Enhancement Therapy manual	
E Condensed SSPS Statistical Output	

