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BMSA TREATMENT FOR DEPRESSION: A PRELIMINARY REPORT ON A GROUP TREATMENT PROGRAM

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Abstract

The therapeutic efficacy of BMSA interventions with clinically depressed adults attending a six-day group program, followed by monthly individual consultations over a six-month period, was investigated. Five males and ten females aged 29 to 61 years diagnosed with moderate to severe depression, were referred for participation in the trial by general medical practitioners, psychologists and a psychiatrist in Perth, Western Australia. Participants were not prescribed anti-depressant medication at the time of the study. The Beck Depression Inventory, The Montgomery Asberg Depression Rating Scale, Lifeworks Joy Inventory, and Subjective Units of Discomfort Scale were administered at pre- and post-treatment. Post-treatment results indicated a clinically and statistically significant reduction in depression severity.

Introduction

Clinical depression affects approximately 20% of the population of Australia, restricting quality of life, productivity and range of choices. The estimated cost of depression to the public health system presently approaches \$500 million¹. According to the World Health Organisation² clinical depression will become the biggest health care challenge in developed societies such as Australia in the next 20 years.

Pharmacotherapy to remedy imbalances in neuro-transmitters which underlie endogenous depression, or reduce symptoms of exogenous depression to make it easier for individuals to resolve external factors, and traditional psychotherapy to reduce cognitions and behaviours that support depressive symptomatology and promote alternative cognitions and behaviours, have been the principal modes of treatment for clinical depression^{3,4}.

BMSA treatments address conditioned neurology and somatic symptoms associated with depression. Reducing the magnitude of somatic symptoms of depression serves to minimise depressive cognitive styles, rather than vice versa as with conventional cognitive behaviour therapy. There is a growing evidence-base to support their use in psychotherapy^{5,6,7}.

Trends in psychotherapy research suggest that rather than there being a standardised psychotherapeutic or pharmacological 'magic bullet' intervention, it is the quality of the therapeutic alliance as assessed subjectively by the client, that is the most significant variable in the determination of treatment outcome⁸. Involving the client in therapeutic decision-making and self-administering treatment is a means of building therapeutic alliance that has been found to have clinical merit⁶.

The aim of the present study was to investigate the efficacy of a comprehensive group program for clinical depression which trained participants in self-administering BMSA techniques.

Hypothesis

There will be a clinically and statistically significant post-treatment reduction in the magnitude of clinically depressed adults' scores on the Beck Depression Inventory (BDI), Subjective Units of Distress Scale (SUDS) and the Montgomery Asberg Depression Rating Scale (MADRS), as well as a significant post-treatment increase in the magnitude of participants' scores on the Lifeworks Joy Inventory (LJI).

Participants will also be asked to complete a BDI, a MADRS and a LJI at six and twelve-month follow-up and this will be reported subsequently.

Method

Five males (Mean age = 48.0 years) and ten females (Mean age = 43.2 years) diagnosed with moderate to severe clinical depression, from metropolitan Perth, Western Australia participated in the trial. It was deemed unethical to include a no-treatment control group. Moderate to severe clinical depression is not typically associated with rapid spontaneous remission, which implies that a statistically significant reduction in depression severity was plausibly due to the intervention.

The proportion of females to males sampled in the study (2:1) is consistent with presentation rates reported in Australian census data⁹ and was therefore considered to be representative of the wider population.

While the sample size was small, this was not deemed to be a problem given that the treatment was expected to have a large effect.

Information about the trial was provided to the public through local newspaper articles and television coverage. Inquiring members of the public were sent information/referral packs/consent forms to take to their referring medical practitioner.

The criterion for participation was a written DSM-IV or ICD-9 diagnosis of depression, in the moderate to severe clinical range, from a state registered medical practitioner. Additional criteria were that psychosis or generalised anxiety disorder were not present, and that the participant was not taking anti-depressant medication.

The purpose of the trial was to test the efficacy of BMSA interventions. This is a relatively new approach to the treatment of mental disorders. BMSA intervention attempts to engage the client in thought about the problem state while manipulating

the visual, auditory, kinaesthetic, olfactory and gustatory representations of the problem state.

Instruments

Beck Depression Inventory (BDI)

The BDI is a 21-item inventory that yields a summed score/rating for clinical depression¹⁰. Obtained scores on the scale correspond to clinical ratings of 'not present', 'mild', 'moderate' and 'severe' clinical depression. The scale has an extensive body of evidence to support its validity¹⁰.

Montgomery Asberg Depression Rating Scale (MADRS)

The MADRS is a 10-item inventory that yields a summed score/rating for clinical depression¹¹. Their scale has been used extensively in clinical trials of pharmacotherapeutic medications for depression.

Subjective Units of Discomfort Scale (SUDS)

The SUDS (adapted from Wolpe¹² as described in Shapiro¹³,) measures intensity of subjective distress in response to a particular stimulus, including a recalled memory. It has been shown to correlate with other physiological stress measures¹⁴. This 11 point scale uses 10 as the highest level of discomfort and 0 as the lowest level, or absence of distress. An absence of emotional reactivity to a traumatic memory is considered an indicator of recovery¹⁵.

Validity of Cognition Scale (VoC)

The VoC is a semantic differential scale measuring the "felt truth" about a self-statement relating to the memory¹³. VoC scores correlate with other veracity measures^{13,16}. This 7 point scale ranges from 1=being completely false to 7=being completely true. In this study, the VoC was an individually selected positive statement, such as "I did the best I could." Therefore, a higher score represents a more positive perspective.

The Lifeworks Joy Inventory

The LJI is a 21- item inventory that yields a summed score/rating for happiness and contentment with life¹⁷. It includes a validity of cognition (VoC) rating for each item and a section for qualitative comments by respondents.

Procedure

Patients completed a BDI, MADRS and LJI, as well as recording a SUDS rating at pre- and post-treatment. This evaluation procedure will be repeated at six-month and 12-month intervals and reported elsewhere.

Participants were taught over six days (7 hours daily, with 1 hour of free time for lunch break, and brief refreshment breaks morning and afternoon) how to self-administer BMSA interventions.

Consistent with NH&MRC guidelines, participants signed consent forms which advised them of the purpose of the trial and their rights to withdraw their participation at any stage, without supplying a reason and without penalty.

Results

One of the male participants and one of the female participants elected to withdraw their participation part-way through the trial. The incomplete results of these two participants have not been included in the analyses.

Two of the participants, while meeting the criteria for the trial (written DSMV IV or ICD-9 diagnosis of clinical depression in the moderate to severe range) did not gain a score consistent with depression on the Beck Depression Inventory. The results of these two participants have also not been included in this paper.

Following the six days of the group training program, results indicated ten of the remaining eleven participants no longer met the criteria for clinical depression on the BDI or MADRS.

Table 1 shows pre- and post-treatment mean scores, standard deviations and mean standard errors for the four rating scales employed in the trial. Scores on measures of depression decreased while the corresponding measure of joy and contentment increased.

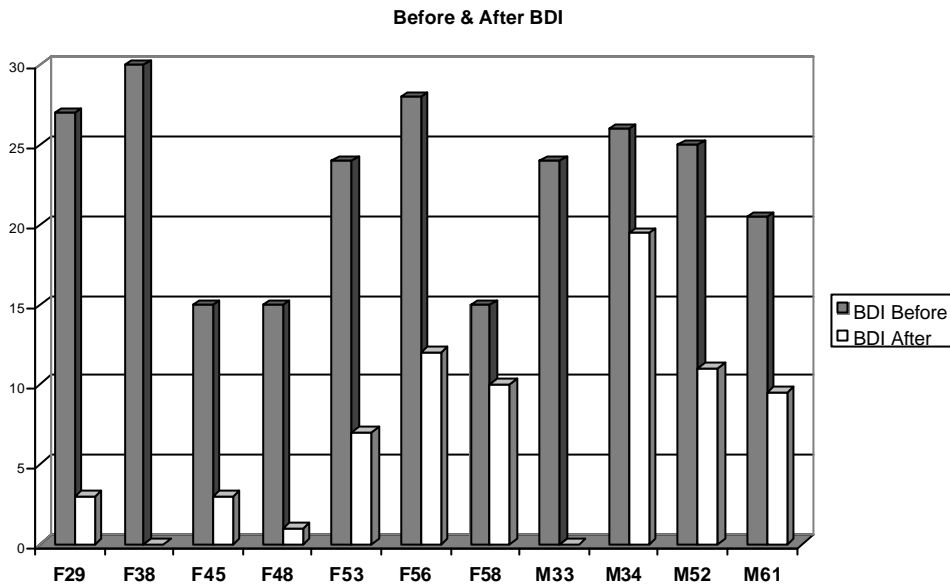
Table 1. Pre and Post-treatment Score Means, Standard Deviations, Mean Standard Errors on Symptom Measures

	Mean	Standard Deviation	Mean Standard Error
Joy			
pre-treatment	82.2	22.8	6.3
post-treatment	108.9	32.4	9.0
Depression (BDI)			
pre-treatment	20.7	7.3	2.0
post-treatment	7.9	7.6	2.1
Depression (MADRS)			
pre-treatment	29.5	8.6	2.4
post-treatment	6.5	4.4	1.2
Subjective distress			
pre-treatment	6.1	1.2	0.3
post-treatment	3.4	2.2	0.6

Note. N=13. Joy (LJI) = Score on Lifeworks Joy Inventory, Depression (BDI)= Score on Beck Depression Inventory, Depression (MADRS) = Montgomery Asberg Depression Rating Scale, Subjective distress = Subjective Units of Distress Scale.

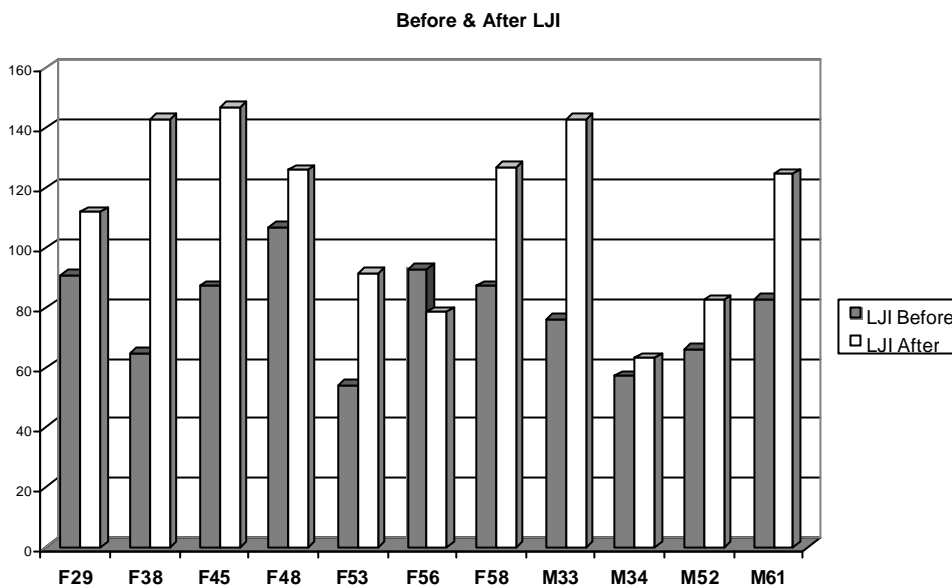
A paired samples t-test indicated that following participation in the 6-day group training program, there was a statistically significant reduction in participants' scores on the Beck Depression Inventory ($t(12)=5.9, p<.01$), Subjective Units of Distress Scale ($t(12)=4.4, p<.01$), Montgomery Asberg Depression Rating Scale ($t(12)=8.9, p<.01$). There was also a significant increase in participants' scores on the Lifeworks Joy Inventory ($t(12)=4.4, p<.01$) following the program.

Figure 1 Individual participant pre- and post-treatment BDI scores



Note: Subjects indicated female (F) or male (M) followed by age.

Figure 2 Individual participant pre- and post-treatment LJI score



Note: Subjects indicated female (F) or male (M) followed by age.

Discussion

Preliminary findings indicate that the treatment program was associated with a clinically and statistically significant reduction in depression severity, as indexed by the BDI, MADRS, and SUDS. There was also a significant increase in joy and contentment as assessed on the LJI. Six and 12 month follow-up data will be analysed to monitor the maintenance of gains observed and will be reported separately. These results provide qualified support for the efficacy of neuro-somatic psychotherapies delivered in a group treatment format.

Though promising, the absence of other group therapy research using neuro-somatic treatments warrants replication of the results reported, with similarly experienced therapists and methodology to differentiate potential therapist or history effects. Notwithstanding these cautions, the current findings are consistent with the gains noted in Barrett and Gomes' (2000) study of neuro-somatic therapy albeit using an individual therapy format.

The present study found that a custom designed program for clinical depression based on BMSA treatments did facilitate large magnitude reductions in depression severity. As such, it has significant implications for therapists involved in the management of an illness that has major individual and social costs.

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