

Using acupuncture to treat major depressive disorder: a pilot investigation

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Context: Depression is one of the most common and painful forms of mental suffering. Treatment with acupuncture may help to alleviate, transform and perhaps eliminate symptomology.

Objective: To determine if acupuncture's extraordinary vessels are effective in treating major depressive disorder.

Design: Observational, mixed-method, pilot study.

Setting: Participants were recruited through a newspaper advertisements and prescreened for Major Depressive Disorder.

Participants: Ten men and women (34–66 years of age), screened for Major Depressive Disorder, were treated with acupuncture.

Interventions: Acupuncture's extraordinary vessels – treatment involved four weeks of twice weekly acupuncture treatments followed by four weeks of once weekly treatments.

Main Outcome Measures: Structured Clinical Interview for DSM-IV (SCID). Beck and Reynolds Depression Inventories.

Results: Those who completed the treatments showed significant improvement on both the Beck and Reynolds Depression Inventories and on retakes of the SCID suggesting that acupuncture can provide significant relief from depression in both men and women.

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INTRODUCTION

Depression is a common and potentially disabling disorder that is characterized by chronicity and recurrence.¹ Though figures vary, it is estimated that between 10% and 20% of the population will experience a major depressive episode sometime during their adult lifetime.² Until recently, depression was treated almost exclusively with medication, some form of traditional psychotherapy or a combination of the two. The development of new therapies, including those considered unconventional, have permitted sufferers of depression to explore new avenues for treatment and relief. Ac-

ording to Eisenberg et al.,^{3,4} the use of unconventional therapies, including those that can impact depression are widespread. The use of acupuncture to ameliorate depressive symptomology has grown in recent years and has begun to be studied in controlled settings.^{5,6} Among categories of interest that speak to the increasing popularity of complementary and alternative medicine exist issues regarding a quality of life.⁷ In view of the fact that depression can have such an enormous impact on quality of life, it behooves researchers to investigate the degree of that impact from the perspective of the person experiencing the depression. It is also relevant that components of what is labeled

unconventional treatment be explored through responsible and appropriate methods.⁸

Historically, depression as a disease entity and psychology as a field of study have not existed in Chinese medicine. Chinese medical philosophy does not separate the soma and non-soma (body and mind) in a way that required a separate discussion of the psyche. It has instead, historically observed and routinely outlined, a sophisticated and detailed accounting of soma/non-soma co-occurrences or interactions. Inherent in all Chinese medical discussions are two constructs relative to the soma/non-soma. The first addresses somatic aspects of what are primarily non-somatic (psychological) illnesses and the second speaks to non-somatic (psychological) aspects of what are primarily somatic illnesses. These constructs serve to clarify the classical Chinese understanding of the central indivisible wholeness of the human experience and speak to the methods for gathering information about that understanding.

Modern Chinese medical practitioners are able to understand and approach psychiatric disease classifications such as Major Depressive Episodes in ways the ancient Chinese had neither the opportunity nor inclination to do themselves. Many of these practitioners of Chinese medicine have developed new models from the existing principles, creating differential diagnostic techniques used to define, describe and treat psychological issues and depression within the context of the selected model.

The purpose of this pilot investigation was to assess the utility of acupuncture's extraordinary vessels in treating participants with major depression. The mixed method design emphasized both quantitative and qualitative methods of inquiry that focused on the perceptions of the investigation's various stakeholders. Three research questions guided the process of understanding the nature of participants' depression and the role played by the acupuncture treatments in transforming symptomatology. They are: (1) what is the impact of acupuncture's extraordinary vessel treatments on participants who have been diagnosed with a major depressive episode; (2) what are the pre- and post-understandings of participants who receive extraordinary vessel treatments for a prescribed period of time; and (3) what are appropriate methods of diagnosis and treatment using acupuncture's extraordinary vessels for participants who have been diagnosed with a major depressive episode.

Additionally, a Clinical Reference Manual (CRM)⁹ designed for future use by acupuncturists trained in the methods of treatment used in this study was assessed for its effectiveness in addressing participant concerns, its correspondence to the production of significantly effective treatments

and its general utility. The manual emphasized three components: (1) *theory*: providing a theoretical framework for sections that follow; (2) *diagnostics*: including intake and exam, analysis, and methods for establishing a treatment plan; and (3) *therapeutics and treatment principles*: discussing master and couple points, and topical treatments.

METHODS

The research questions were investigated through the administration of 12 acupuncture treatments based on the extraordinary vessels to 10 participants over an eight week period. To best replicate a private clinical practice, each participant was assessed at each visit, using the four methods of Chinese medicine which include observation, audio-olfaction, inquiry, and palpation.¹⁰ Information gathered through the four methods permitted a specific differential diagnosis leading to a specific extraordinary vessel treatment protocol for each individual's visit. Participants were assessed and treated two times during the first four weeks of the study and one time per week during the second four week period for a total of eight weeks.

Participants were recruited through a solicitation in local newspapers that mentioned acupuncture treatment for depression. Inclusion was based on the participants' meeting the diagnostic criteria for current depressive episode as outlined in the fourth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV).¹¹ They were assessed for major depressive episode using the Structured Clinical Interview for DSM-IV (SCID).¹² A pre-screening process, intended to delimit participation, took place prior to the administration of the SCID. Participants entering the study to receive treatment, were given bi-weekly administrations of the of the Beck Depression Inventory – II (BDI-II)¹³ and the Reynolds Depression Survey Inventory (RDSI)¹⁴ to monitor self-reported depression.

Assessment of personal issues such as quality of life were addressed through pre-interview and mid-stage questionnaire data that emphasized participant perceptions of both the impending process and the ongoing review of this investigation. Data gathering made use of a general interview guide and standardized open-ended interview. In an attempt to understand the meaningfulness of their overall involvement in this investigation, participants were asked at the completion of the study to offer a statement of their personal understanding of the process they experienced. Issues related to quality of life, self understanding and the healing process were expressed in many of these writings.

Participants

Twenty-five men and women were pre-screened using a telephone interview which briefly assessed history of depression and present symptomology. Inclusion criteria consisted of the following: presently experiencing depression, not taking psychotropic medication, medical conditions, not currently receiving mental health services. Those who met these criteria ($n = 14$), were administered the Beck Depression Inventory and the Reynolds Depression Inventory. Based on scores from the Beck and Reynolds Inventories, 12 participants were given the SCID. A total of two men and eight women between the ages of 34 and 66 qualified for the study.

Measures

The Reynolds Depression Screening Inventory (RDSI) consists of 19 questions with a forced choice response. The Beck Depression Inventory (BDI) is the most widely used measure of adult depressive symptomology and its psychometric properties have been demonstrated.

Procedure

After consent was obtained, participants completed the BDI and the RDSI initially and then every other week prior to receiving an acupuncture treatment. Treatments were administered twice a week for the first four weeks and then once a week for the final four weeks. Participants were re-administered the SCID after their final acupuncture treatment. The pre- and post-SCIDS were administered by a clinical psychologist and two supervised graduate students in psychology.

Treatments

Efforts were made to replicate a clinical practice and therefore, treatments that followed patient assessment involved the following: pre-treatments using topical herbs and/or moxibustion were administered by clinical assistants and were followed by an acupuncture treatment using needles. These treatments were administered by the clinical director, a fully licensed acupuncturist.

DATA ANALYSIS

Data analysis revealed that study participants experienced changes in mood state, as recorded through quantitative measurements including the Beck and Reynolds Inventories for depression and the Structured Clinical Interview for DSM-IV

(SCID). Data gathered during interview sessions, and related to the three stated research questions, uncovered significant information relative to participant quality of life; participant understandings of self, the healing process including interactions with care givers; and specifics about the role of the diagnostic intake relative to diagnosis and treatment and related to the use of acupuncture's extraordinary vessels with participants who have been diagnosed as experiencing a major depressive episode.

Interview and questionnaire data were analyzed using a constant comparative analysis¹⁵ to analyze, code and categorize the phenomena. Data was segmented using units of meaning and categories emerged from the data. The emphasis of the qualitative evaluation was to determine the personal impact of the extraordinary vessel treatments on participants demonstrating major depressive symptomology. The resulting units of analysis focused on participant perceptions of the effectiveness of treatments, the utility of the Clinical Reference Manual with emphasis on the intake evaluation form, and the application of findings to similar populations. Quantitative data was analyzed using *t* tests for Beck and Reynolds Inventories and pre- and post-administration of SCID to check for major depressive episode. Data analysis methods were triangulated¹⁶ in order to enhance the validity of the study.

RESULTS AND CONCLUSIONS

Ten participants (eight female and two male) received 12 treatments over an eight-week period. Two female participants did not complete the treatment cycle. Following the series of treatments designed specifically to treat depression, 100% of the participants ($n = 8$) experienced a full remission. Results from this pilot investigation suggest that a reduction in symptomology is possible using acupuncture, particularly, acupuncture's extraordinary vessels. A larger scale investigation may reveal a comparable response in like populations in similar circumstances.

A *t* test revealed significant differences between the pre- and post- Beck Depression Inventories ($t = 5.83$ (7), $p = .001$). A *t* test also revealed a significant difference between the pre- and post-test Reynolds ($t = 3.827$ (7), $p = .003$). Thus, the subjects who completed the acupuncture treatments reported significantly less depressive symptoms. Additionally, none of the participants met criteria for Major Depressive Disorder at the conclusion of the study.

Conclusions drawn from both qualitative and quantitative reporting may offer influence in some or more of the following ways: (1) persons who experience major depressive episodes may have another avenue to pursue as they seek immediate relief and possibly long-term care in treating the disorder; (2) persons who have tried conventional treatments such as medication and found them ineffective, or cannot take them or do not wish to be medicated, may also find relief in unconventional practices; (3) quality of life issues may be impacted positively; (4) participants may find new, perhaps better or more effective ways, to interact with health care providers. Any or all of these potential improvements could also positively influence the overall approach to providing for the health and well-being of those who experience major depressive episodes. This information would suggest that additional studies in related areas be engaged with similar populations.

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