

Regenerative Health Programme

Role of Complementary Therapies, Self-Help Approaches and Health Coaching in:

Depression and anxiety



Smeeding S et al. **Outcome Evaluation of the Veterans Affairs Salt Lake City Integrative Health Clinic for Chronic Pain and Stress-Related Depression, Anxiety, and Post-Traumatic Stress Disorder.** The Journal of Alternative and Complementary Medicine. August 2010, 16(8): 823-835.

Abstract - Objectives: The purpose of this longitudinal outcome research study was to determine the effectiveness of the Integrative Health Clinic and Program (IHCP) and to perform a subgroup analysis investigating

patient benefit. The IHCP is an innovative clinical service within the Veterans Affairs Health Care System designed for nonpharmacologic biopsychosocial management of chronic nonmalignant pain and stress-related depression, anxiety, and symptoms of post-traumatic stress disorder (PTSD) utilizing complementary and alternative medicine and mind-body skills.

Methods: A post-hoc quasi-experimental design was used and combined with subgroup analysis to determine who benefited the most from the program. Data were collected at intake and up to four follow-up visits over a 2-year time period. Hierarchical linear modeling was used for the statistical analysis. The outcome measures included: Health-Related Quality of Life (SF-36), the Beck Depression Inventory (BDI), and Beck Anxiety Inventory (BAI). Subgroup comparisons included low anxiety (BAI<19, n=82), low depression (BDI<19, n=93), and absence of PTSD (n=102) compared to veterans with high anxiety (BAI≥19, n=77), high depression (BDI>19, n=67), and presence of PTSD (n=63).

Results: All of the comparison groups demonstrated an improvement in depression and anxiety scores, as well as in some SF-36 categories. The subgroups with the greatest improvement, seen at 6 months, were found in the high anxiety group (Cohen's d=0.52), the high-depression group (Cohen's d=0.46), and the PTSD group (Cohen's d=0.41).

Conclusions: The results suggest IHCP is an effective program, improving chronic pain and stress-related depression, anxiety, and health-related quality of life. Of particular interest was a significant improvement in anxiety in the PTSD group. The IHCP model offers innovative treatment options that are low risk, low cost, and acceptable to patients and providers.

<http://www.liebertonline.com/doi/abs/10.1089/acm.2009.0510>

Streeter et al. **Effects of Yoga Versus Walking on Mood, Anxiety, and Brain GABA Levels: A Randomized Controlled MRS Study.** The Journal of Alternative and Complementary Medicine. November 2010, 16(11): 1145-1152.
doi:10.1089/acm.2010.0007.

Abstract

Objectives: Yoga and exercise have beneficial effects on mood and anxiety. γ -Aminobutyric acid (GABA)-ergic activity is reduced in mood and anxiety disorders. The practice of yoga postures is associated with increased brain GABA levels. This study addresses the question of whether changes in mood, anxiety, and GABA levels are specific to yoga or related to physical activity.

Methods: Healthy subjects with no significant medical/psychiatric disorders were randomized to yoga or a metabolically matched walking intervention for 60 minutes 3 times a week for 12 weeks. Mood and anxiety scales were taken at weeks 0, 4, 8, 12, and before each magnetic resonance spectroscopy scan. Scan 1 was at baseline. Scan 2, obtained after the 12-week intervention, was followed by a 60-minute yoga or walking intervention, which was immediately followed by Scan 3.

Results: The yoga subjects ($n=19$) reported greater improvement in mood and greater decreases in anxiety than the walking group ($n=15$). There were positive correlations between improved mood and decreased anxiety and thalamic GABA levels. The yoga group had positive correlations between changes in mood scales and changes in GABA levels.

Conclusions: The 12-week yoga intervention was associated with greater improvements in mood and anxiety than a metabolically matched walking exercise. This is the first study to demonstrate that increased thalamic GABA levels are associated with improved mood and decreased anxiety. It is also the first time that a behavioral intervention (i.e., yoga postures) has been associated with a positive correlation between acute increases in thalamic GABA levels and improvements in mood and anxiety scales. Given that pharmacologic agents that increase the activity of the GABA system are prescribed to improve mood and decrease anxiety, the reported correlations are in the expected direction. The possible role of GABA in mediating the beneficial effects of yoga on mood and anxiety warrants further study.

<http://www.liebertonline.com/doi/abs/10.1089/acm.2010.0007>

Freeman MP, Fava M, Lake J, Trivedi MH, Wisner KL, Mischoulon D. **Complementary and alternative medicine in major depressive disorder: the American Psychiatric Association Task Force report.** *Journal of Clinical Psychiatry.* 2010, 71(6):669-81.

BACKGROUND Although mindfulness-based therapy has become a popular treatment, little is known about its efficacy.

OBJECTIVES To conduct an effect size analysis of this popular intervention for anxiety and mood symptoms in clinical samples.

DATA SOURCES A literature search was conducted using PubMed, PsycInfo, the Cochrane Library, and manual searches.

REVIEW METHODS The search identified 39 studies totaling 1,140 participants receiving mindfulness-based therapy for a range of conditions, including cancer, generalized anxiety disorder, depression, and other psychiatric or medical conditions.

RESULTS Effect size estimates suggest that mindfulness-based therapy was moderately effective for improving anxiety (Hedges' $g = 0.63$) and mood symptoms (Hedges' $g = 0.59$) from pre to post-treatment in the overall sample. In patients with anxiety and mood disorders, this intervention was associated with effect sizes (Hedges' g) of 0.97 and 0.95 for improving anxiety and mood symptoms, respectively. These effect sizes were robust, unrelated to publication year or number of treatment sessions, and were maintained over follow-up.

CONCLUSION These results suggest that mindfulness-based therapy is a promising intervention for treating anxiety and mood problems in clinical populations.

http://article.psychiatrist.com/dao_1-login.asp?ID=10006918&RSID=82428552429371

Hofmann SG, Sawyer AT, Witt AA, Oh D. **The effect of mindfulness-based therapy on anxiety and depression: A meta-analytic review.** Journal of Consulting and Clinical Psychology. 2010, 78(2):169-83.

BACKGROUND Although mindfulness-based therapy has become a popular treatment, little is known about its efficacy.

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<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2848393/?tool=pubmed>

Hou WH, Chiang PT, Hsu TY, Chiu SY, Yen YC. **Treatment effects of massage therapy in depressed people: a meta-analysis.** Journal of Clinical Psychiatry. 2010, 71(7):894-901.

Objective: To systematically investigate the treatment effects of massage therapy in depressed people by incorporating data from recent studies.

Data Sources: A meta-analysis of randomized controlled trials (RCTs) of massage therapy in depressed people was conducted using published studies from PubMed, EMBASE, PsycINFO, and CINAHL electronic database from inception until July 2008.

The terms used for the search were derived from medical subheading term (MeSH) massage combined with MeSH depression. Hand searching was also checked for bibliographies of relevant articles. Retrieval articles were constrained to RCTs/clinical trials and human subjects. No language restrictions were imposed.

Study Selection: We included 17 studies containing 786 persons from 246 retrieved references. Trials with other intervention, combined therapy, and massage on infants or pregnant women were excluded.

Data Extraction: Two reviewers independently performed initial screen and assessed quality indicators by Jadad scale. Data were extracted on publication year, participant characteristics, and outcomes by another single reviewer.

Data Synthesis: All trials showed positive effect of massage therapy on depressed people. Seventeen RCTs were of moderate quality, with a mean quality score of 6.4 (SD = 0.85). The pooled standardized mean difference in fixed- and random-effects models were 0.76 (95% CI, 0.61–0.91) and 0.73 (95% CI, 0.52–0.93), respectively. Both indicated significant effectiveness in the treatment group compared with the control group. The variance between these studies revealed possible heterogeneity

($\tau^2 = 0.06$, Cochran $\chi^2 = 25.77$, $P = 0.06$).

Conclusions: Massage therapy is significantly associated with alleviated depressive symptoms. However, standardized protocols of massage therapy, various depression rating scales, and target populations in further studies are suggested.

http://article.psychiatrist.com/dao_1-login.asp?ID=10006792&RSID=82428552429637

Rocha Araujo DM, Vilarim MM, Nardi AE. **What is the effectiveness of the use of polyunsaturated fatty acid omega-3 in the treatment of depression?** Expert Review of Neurotherapeutics. 2010, 10(7):1117-29.

This systematic review aims to identify the effect of polyunsaturated fatty acid omega-3 on depressive disorder. A bibliographical search was conducted in the databases SciELO, PubMed and ISIWEB. The keywords used were: "depression" and "omega-3 fatty acids", "depression" and "omega-3 polyunsaturated fatty acid", "depression" and "n-3 fatty acids". A total of 19 studies were identified: four double-blind randomized studies, four cohorts, two cross-sectional lines and nine case-controls. Only five studies presented dropout of less than 30% and controlled for the most important confounding variables. Of the evaluated studies, 13 showed a significant positive association between omega-3 and depression, while six studies did not show a relationship between the referred variables. Therefore, future studies with similar methodology would aid in determining the precise effect of omega-3 on depressive disorders. http://www.expert-reviews.com/doi/abs/10.1586/ern.10.77?url_ver=Z39.88-2003&rfr_id=ori:rid:crossref.org&rfr_dat=cr_pub%3dpubmed

Shih M, Yang YH, Koo M. **A meta-analysis of hypnosis in the treatment of depressive symptoms: a brief communication.** International Journal of Clinical and Experimental Hypnosis. 2009, 57(4):431-42.

Abstract

The efficacy of hypnosis in the treatment of depressive symptoms was subjected to a meta-analysis. Studies were identified using Google Scholar and 6 electronic databases: PubMed, Cochrane Library, PsiTri, PsychLit, Embase, and the Cochrane Depression, Anxiety and Neurosis Review Group (CCDAN). The keywords used were (a) hypnosis, (b) hypnotherapy, (c) mood disorder, (d) depression, and (e) dysthymia. Six studies qualified and were analyzed using the Comprehensive Meta-Analysis software package. The combined effect size of hypnosis for depressive symptoms was 0.57. Hypnosis appeared to significantly improve symptoms of depression ($p < .001$). Hypnosis appears to be a viable nonpharmacologic intervention for depression. Suggestions for future research are discussed.

<http://www.informaworld.com/smpp/content~db=all?content=10.1080/00207140903099039>

Wang C, Bannuru R, Ramel J, Kupelnick B, Scott T, Schmid CH. **Tai Chi on psychological well-being: systematic review and meta-analysis.** BMC Complementary and Alternative Medicine. 2010;10:23.

Background Physical activity and exercise appear to improve psychological health. However, the quantitative effects of Tai Chi on psychological well-being have rarely been examined. We systematically reviewed the effects of Tai Chi on stress, anxiety, depression and mood disturbance in eastern and western populations.

Methods Eight English and 3 Chinese databases were searched through March 2009.

Randomized controlled trials, non-randomized controlled studies and observational studies reporting at least 1 psychological health outcome were examined. Data were extracted and verified by 2 reviewers. The randomized trials in each subcategory of health outcomes were meta-analyzed using a random-effects model. The quality of each study was assessed.

Results Forty studies totaling 3817 subjects were identified. Approximately 29 psychological measurements were assessed. Twenty-one of 33 randomized and nonrandomized trials reported that 1 hour to 1 year of regular Tai Chi significantly increased psychological well-being including reduction of stress (effect size [ES], 0.66; 95% confidence interval [CI], 0.23 to 1.09), anxiety (ES, 0.66; 95% CI, 0.29 to 1.03), and depression (ES, 0.56; 95% CI, 0.31 to 0.80), and enhanced mood (ES, 0.45; 95% CI, 0.20 to 0.69) in community-dwelling healthy participants and in patients with chronic conditions. Seven observational studies with relatively large sample sizes reinforced the beneficial association between Tai Chi practice and psychological health.

Conclusions Tai Chi appears to be associated with improvements in psychological well-being including reduced stress, anxiety, depression and mood disturbance, and increased self-esteem. Definitive conclusions were limited due to variation in designs, comparisons, heterogeneous outcomes and inadequate controls. High-quality, well-controlled, longer randomized trials are needed to better inform clinical decisions.

<http://www.biomedcentral.com/1472-6882/10/23>

Okamoto A, Kuriyama H, Watanabe S, Aihara Y, Tadai T, Imanishi J, et al. **The effect of aromatherapy massage on mild depression: a pilot study.** *Psychiat Clin Neuros.* 2005;59:363. No abstract

<http://onlinelibrary.wiley.com/doi/10.1111/j.1440-1819.2005.01385.x/pdf>

Yim et al. **A review of the effects of aromatherapy for patients with depressive symptoms.** *J Complement Alternat Med* Vol 15, No 2, 2009, pg 187-195.

Abstract

Purpose: We reviewed studies from 2000 to 2008 on using essential oils for patients with depression or depressive symptoms and examined their clinical effects. **Methods:** The review was conducted among five electronic databases to identify all peer-reviewed journal papers that tested the effects of aromatherapy in the form of therapeutic massage for patients with depressive symptoms.

Results: The results were based on six studies examining the effects of aromatherapy on depressive symptoms in patients with depression and cancer. Some studies showed positive effects of this intervention among these three groups of patients. **Conclusions:** We recommend that aromatherapy could continue to be used as a complementary and alternative therapy for patients with depression and secondary depressive symptoms arising from various types of chronic medical conditions. More controlled studies with sound methodology should be conducted in the future to ascertain its clinical effects and the underlying psychobiologic mechanisms.

<http://bit.ly/eWlyTa>

Meeks TW, Wetherell JL, Irwin MR, Redwine LS, Jeste DV. **Complementary and alternative treatments for late-life depression, anxiety, and sleep disturbance: a review of randomized controlled trials** *J Clin Psychiatry.* 2007 Oct;68(10):1461-71.

Objective: We reviewed randomized controlled trials of complementary and alternative medicine (CAM) treatments for depression, anxiety, and sleep disturbance in nondemented older adults.

Data sources: We searched PubMed (1966-September 2006) and PsycINFO (1984-September 2006) databases using combinations of terms including depression, anxiety, and sleep; older adult/elderly; randomized controlled trial; and a list of 56 terms related to CAM.

Study selection: Of the 855 studies identified by database searches, 29 met our inclusion criteria: sample size ≥ 30 , treatment duration ≥ 2 weeks, and publication in English. Four additional articles from manual bibliography searches met inclusion criteria, totaling 33 studies.

Data extraction: We reviewed identified articles for methodological quality using a modified Scale for Assessing Scientific Quality of Investigations (SASQI). We categorized a study as positive if the CAM therapy proved significantly more effective than an inactive control (or as effective as active control) on at least 1 primary psychological outcome. Positive and negative studies were compared on the following characteristics: CAM treatment category, symptom(s) assessed, country where the study was conducted, sample size, treatment duration, and mean sample age.

Data synthesis: 67% of the 33 studies reviewed were positive. Positive studies had lower SASQI scores for methodology than negative studies. Mind-body and body-based therapies had somewhat higher rates of positive results than energy- or biologically-based therapies.

Conclusions: Most studies had substantial methodological limitations. A few well-conducted studies suggested therapeutic potential for certain CAM interventions in older adults (e.g., mind-body interventions for sleep disturbances and acupuncture for sleep and anxiety). More rigorous research is needed, and suggestions for future research are summarized.

http://article.psychiatrist.com/dao_1-login.asp?ID=10003281&RSID=60055396938366