Programme MBRP

Garland EL, Gaylord SA, Boettiger CA, Howard MO. J Psychoactive Drugs. 2010 Jun;42(2):177-92. **Mindfulness training modifies cognitive, affective, and physiological mechanisms implicated in alcohol dependence: results of a randomized controlled pilot trial.** College of Social Work, Florida State University, University Center, Building C, Tallahassee, FL 32306-2570, USA. elgarlan@gmail.com

Mindfulness training may disrupt the risk chain of stress-precipitated alcohol relapse. In 2008, 53 alcohol-dependent adults (mean age = 40.3) recruited from a therapeutic community located in the urban southeastern U.S. were randomized to mindfulness training or a support group. Most participants were male (79.2%), African American (60.4%), and earned less than \$20,000 annually (52.8%). Self-report measures, psychophysiological cue-reactivity, and alcohol attentional bias were analyzed via repeated measures ANOVA. Thirty-seven participants completed the interventions. Mindfulness training significantly reduced stress and thought suppression, increased physiological recovery from alcohol cues, and modulated alcohol attentional bias. Hence, mindfulness training appears to target key mechanisms implicated in alcohol dependence, and therefore may hold promise as an alternative treatment for stress-precipitated relapse among vulnerable members of society.

PMCID: PMC2921532 [Available on 2010/12/1] PMID: 20648913 [PubMed - indexed for MEDLINE]

Vieten C, Astin JA, Buscemi R, Galloway GP. Subst Abus. 2010 Apr;31(2):108-16. Development of an acceptance-based coping intervention for alcohol dependence

relapse prevention.

California Pacific Medical Center Research Institute, San Francisco, California 94115, USA. vietenc@sutterhealth.org

Both psychological and neurobiological findings lend support to the long-standing clinical observation that negative affect is involved in the development and maintenance of alcohol dependence, and difficulty coping with negative affect is a common precipitant of relapse after treatment. Although many current approaches to relapse prevention emphasize change-based strategies for managing negative cognitions and affect, acceptance-based strategies for preventing relapse to alcohol use are intended to provide methods for coping with distress that are fundamentally different from, though in theory complementary to, approaches that emphasize control and change. This paper describes the development of Acceptance-Based Coping for Relapse Prevention (ABCRP), a new intervention for alcohol-dependent individuals who are within 6 months of having quit drinking. Results of preliminary testing indicate that the intervention is feasible with this population; and a small uncontrolled pilot study (N = 23) showed significant (P < .01) improvements in self-reported negative affect, emotional reactivity, perceived stress, positive affect, psychological well-being, and mindfulness level, as well as a trend (P = .06) toward reduction in craving severity between

pre- and postintervention assessments. The authors conclude that this acceptance-based intervention seems feasible and holds promise for improving affect and reducing relapse in alcohol-dependent individuals, warranting further research.

PMID: 20408062 [PubMed - indexed for MEDLINE]

Britton WB, Bootzin RR, Cousins JC, Hasler BP, Peck T, Shapiro SL. Subst Abus. 2010 Apr;31(2):86-97.

The contribution of mindfulness practice to a multicomponent behavioral sleep intervention following substance abuse treatment in adolescents: a treatment-development study.

Department of Psychiatry and Human Behavior, Brown University Medical School, Providence, Rhode Island 02906, USA. Willoughby_Britton@Brown.edu

Poor sleep is common in substance use disorders (SUDs) and is a risk factor for relapse. Within the context of a multicomponent, mindfulness-based sleep intervention that included mindfulness meditation (MM) for adolescent outpatients with SUDs (n = 55), this analysis assessed the contributions of MM practice intensity to gains in sleep quality and self-efficacy related to SUDs. Eighteen adolescents completed a 6-session study intervention and questionnaires on psychological distress, sleep quality, mindfulness practice, and substance use at baseline, 8, 20, and 60 weeks postentry. Program participation was associated with improvements in sleep and emotional distress, and reduced substance use. MM practice frequency correlated with increased sleep duration and improvement in self-efficacy about substance use. Increased sleep duration was associated with improvements in psychological distress, relapse resistance, and substance use-related problems. These findings suggest that sleep is an important therapeutic target in substance abusing adolescents and that MM may be a useful component to promote improved sleep.

PMID: 20408060 [PubMed - indexed for MEDLINE]

Liehr P, Marcus MT, Carroll D, Granmayeh LK, Cron SG, Pennebaker JW. Subst Abus. 2010 Apr;31(2):79-85.

Linguistic analysis to assess the effect of a mindfulness intervention on self-change for adults in substance use recovery.

Christine E. Lynn College of Nursing, Florida Atlantic University, Boca Raton, Florida 33431, USA. pliehr@fau.edu

Substance use is a pervasive health problem. Therapeutic community (TC) is an established substance abuse treatment but TC environments are stressful and dropout rates are high. Mindfulness-based TC (MBTC) intervention was developed to address TC stress and support self-change that could impact treatment retention. Self-change was assessed through feeling and thinking word-use in written stories

of stress from 140 TC residents in a historical control group and 253 TC residents in a MBTC intervention group. Data were collected 5 times over a 9-month period. Linguistic analysis showed no differences between the groups over time; however, over all time points, the MBTC intervention group used fewer negative emotion words than the TC control group. Also, negative emotion (P < .01) and anxiety (P < .01) word-use decreased whereas positive emotion word-use increased (P < .05) over time in both groups. Descriptive data from linguistic analyses indicated that sustained self-change demands participation in mindfulness behaviors beyond the instructor-guided MBTC intervention.

PMCID: PMC2873789 [Available on 2011/4/1] PMID: 20408059 [PubMed - indexed for MEDLINE]

Zgierska A, Marcus MT. Subst Abus. 2010 Apr;31(2):77-8. **Mindfulness-based therapies for substance use disorders: part 2.** PMCID: PMC2888107 [Available on 2011/4/1] PMID: 20408058 [PubMed - indexed for MEDLINE]

Brewer JA, Sinha R, Chen JA, Michalsen RN, Babuscio TA, Nich C, Grier A, Bergquist KL, Reis DL, Potenza MN, Carroll KM, Rounsaville BJ. Subst Abus. 2009 Oct-Dec;30(4):306-17.

Mindfulness training and stress reactivity in substance abuse: results from a randomized, controlled stage I pilot study.

Department of Psychiatry, Yale University School of Medicine, New Haven, Connecticut, USA. judson.brewer@yale.edu

Stress is important in substance use disorders (SUDs). Mindfulness training (MT) has shown promise for stress-related maladies. No studies have compared MT to empirically validated treatments for SUDs. The goals of this study were to assess MT compared to cognitive behavioral therapy (CBT) in substance use and treatment acceptability, and specificity of MT compared to CBT in targeting stress reactivity. Thirty-six individuals with alcohol and/or cocaine use disorders were randomly assigned to receive group MT or CBT in an outpatient setting. Drug use was assessed weekly. After treatment, responses to personalized stress provocation were measured. Fourteen individuals completed treatment. There were no differences in treatment satisfaction or drug use between groups. The laboratory paradigm suggested reduced psychological and physiological indices of stress during provocation in MT compared to CBT. This pilot study provides evidence of the feasibility of MT in treating SUDs and suggests that MT may be efficacious in targeting stress.

PMID: 19904666 [PubMed - indexed for MEDLINE]

Bowen S, Chawla N, Collins SE, Witkiewitz K, Hsu S, Grow J, Clifasefi S, Garner M, Douglass A, Larimer ME, Marlatt A.

Subst Abus. 2009 Oct-Dec;30(4):295-305.

Mindfulness-based relapse prevention for substance use disorders: a pilot efficacy trial.

Addictive Behaviors Research Center, Department of Psychology, University of Washington, Seattle, Washington, USA. swbowen@u.washington.edu

The current study is the first randomized-controlled trial evaluating the feasibility and initial efficacy of an 8-week outpatient Mindfulness-Based Relapse Prevention (MBRP) program as compared to treatment as usual (TAU). Participants were 168 adults with substance use disorders who had recently completed intensive inpatient or outpatient treatment. Assessments were administered pre-intervention, post-intervention, and 2 and 4 months post-intervention. Feasibility of MBRP was demonstrated by consistent homework compliance, attendance, and participant satisfaction. Initial efficacy was supported by significantly lower rates of substance use in those who received MBRP as compared to those in TAU over the 4-month post-intervention period. Additionally, MBRP participants demonstrated greater decreases in craving, and increases in acceptance and acting with awareness as compared to TAU. Results from this initial trial support the feasibility and initial efficacy of MBRP as an aftercare approach for individuals who have recently completed an intensive treatment for substance use disorders.

PMID: 19904665 [PubMed - indexed for MEDLINE]

Zgierska A, Rabago D, Chawla N, Kushner K, Koehler R, Marlatt A. Subst Abus. 2009 Oct-Dec;30(4):266-94.

Mindfulness meditation for substance use disorders: a systematic review. Department of Family Medicine, University of Wisconsin, School of Medicine and Public Health, Madison, Wisconsin, USA. Aleksandra.Zgierska@fammed.wisc.edu

Relapse is common in substance use disorders (SUDs), even among treated individuals. The goal of this article was to systematically review the existing evidence on mindfulness meditation-based interventions (MM) for SUDs. The comprehensive search for and review of literature found over 2000 abstracts and resulted in 25 eligible manuscripts (22 published, 3 unpublished: 8 randomized controlled trials, 7 controlled nonrandomized, 6 noncontrolled prospective, and 2 qualitative studies, and 1 case report). When appropriate, methodological quality, absolute risk reduction, number needed to treat, and effect size were assessed. Overall, although preliminary evidence suggests MM efficacy and safety, conclusive data for MM as a treatment of SUDs are lacking. Significant methodological limitations exist in most studies. Further, it is unclear which persons with SUDs might benefit most from MM. Future trials must be of sufficient sample size to answer a specific clinical question and should target both assessment of effect size and mechanisms of action.

PMCID: PMC2800788 [Available on 2010/10/1] PMID: 19904664 [PubMed - indexed for MEDLINE]

Marcus MT, Zgierska A. Subst Abus. 2009 Oct-Dec;30(4):263-5. **Mindfulness-based therapies for substance use disorders: part 1.** PMCID: PMC2818765 PMID: 19904663 [PubMed - indexed for MEDLINE]