



More Evidence-Based Co-Occurring Disorders (COD) Programs

Since the start of 2008, SAMHSA's National Registry of Evidence-based Programs and Practices (NREPP) has added 5 new evidenced-based programs for co-occurring disorders:

- 1) Coping with Work and Family Stress
- 2) Double Trouble in Recovery
- 3) Pathway's Housing First Program
- 4) Phoenix Academy
- 5) Trauma Affect Regulations: Guide for Education and Therapy (TARGET)

NREPP, online at www.nrepp.samhsa.gov, provides information describing programs and the research that supports their use. There are currently 11 evidenced-based programs in the database that NREPP identifies as relevant for people with COD, including the above five new programs. Three others have been added since our prior article on NREPP in March, 2007: Multisystemic Therapy (MST) for juvenile offenders, Family Behavior Therapy, and the Chestnut Health Systems-Bloomington adolescent outpatient and intensive outpatient treatment models.

The program information NREPP provides includes the population for the program, its purpose, and information on implementation. The information provided on supporting research includes descriptions of the studies' designs, evaluation measurements, outcomes, and key findings. Finally, NREPP provides contact information to obtain training or assistance with implementation or additional information.

Coping with Work and Family Stress is a preventive intervention designed for workplace implementation to help employees learn to cope with stress at work and home. There are 16 group sessions at 90 minutes each. Employees are taught effective coping skills to reduce stress and behavior modification techniques that can enhance protective factors. The group also makes use of social support to aid participants.

Double Trouble in Recovery is a type of mutual aid, self-help group for those who have been diagnosed with COD. Groups are led by facilitators, and group members

assist each other with common problems. The program is based on the 12-Step model of Alcoholics Anonymous. In this structured environment, members can discuss their substance abuse, mental illness, medications, and other relevant experiences.

The **Pathways Housing First Program** is designed to end homelessness and support recovery for those who are homeless and have severe mental disorders and co-occurring substance use disorders. Pathways emphasizes consumers' choices, psychiatric rehabilitation, and providing housing without any prerequisites for the treatment of COD. However, once housing has been established, participants are encouraged to seek treatment services and such services are provided onsite through an Assertive Community Treatment (ACT) team. The ACT team also provides supported employment and recovery services, with all services tailored to the client's current needs and desires.

The **Phoenix Academy** program is a modified therapeutic community for adolescents (aged 13–17) with co-occurring substance use and co-occurring behavioral and/or psychological disorders that incorporates onsite public junior high and high schools for its residents. This program has been successfully implemented at 11 sites in 7 States. In addition to teaching staff, the program has onsite psychiatrists, psychologists, family therapists, and substance abuse counselors.

Trauma Affect Regulations: Guide for Education and Therapy (TARGET) combines psychoeducation and skills training to help clients with substance use disorders who have histories of trauma. Its use has been related to reductions in posttraumatic stress disorder (PTSD) symptoms, reductions in rates of PTSD, reductions in the severity of symptoms of anxiety and depression, improvements in substance-related self-efficacy, improvements in participants' ability to regulate their mood, and improvements in health-related functioning.

This Review contains revisions of abstracts and is not generally the product of an original analysis of the actual articles cited. Readers interested in finding out more about COCE should visit the Web site: <http://coce.samhsa.gov/>

COD Research

Client Characteristics

Darke, S., Kaye, S., McKetin, R., & Dufflou, J. (2008). Major physical and psychological harms of methamphetamine use. *Drug and Alcohol Review*, 27:(3), 253-262.

The authors review both the physical and psychological consequences of methamphetamine use. Among the psychological problems resulting from use are methamphetamine-induced psychosis, depression, anxiety, and suicide.

Fridell, M., Hesse, M., Jæger, M. M., & Kühlnhorn, E. (2008). Antisocial personality disorder as a predictor of criminal behaviour in a longitudinal study of a cohort of abusers of several classes of drugs: Relation to type of substance and type of crime. *Addictive Behaviors*, 33:(6), 799-811.

The authors looked at the relationship between antisocial personality disorder (ASPD) and criminal behavior among a group of Swedish individuals receiving detoxification or treatment for drug abuse between 1977 and 1995 (N=1,052). They found that individuals who had ASPD were 2.16 times more likely than others in the study to have subsequently been charged with theft and 2.44 times more likely to have been charged with multiple offenses.

Greenberg, G. A. & Rosenheck, R. A. (2008). Homelessness in the state and federal prison population. *Criminal Behaviour and Mental Health*, 18:(2), 88-103.

The authors used data from a large (N=17,565) survey of State and federal prison inmates to analyze rates and correlates of homelessness in this population. They found that 9 percent of the sample reported at least one episode of homelessness in the year prior to their arrest, which is anywhere from 4 to 6 times greater than the estimated rate in the general population (depending on whose estimate is used). Inmates who had been homeless in the year prior to their arrest were more likely to have mental and substance use disorders than were others in the prison population.

Houston, J. E., Murphy, J., Adamson, G., Stringer, M., & Shevlin, M. (2008). Childhood Sexual Abuse, Early Cannabis Use, and Psychosis: Testing an Interaction Model Based on the National Comorbidity Survey. *Schizophrenia Bulletin*, 34:(3), 580-585.

Using data from the National Comorbidity Survey (NCS), the authors investigated the interaction of two different risk factors for psychosis: childhood sexual abuse and early cannabis use. They found that while the relationship between sexual abuse and later psychosis was significant for individuals who used cannabis prior to the age of 16 it was not significant for those who did not do so.

Leventhal, A. M., Ramsey, S. E., Brown, R. A., LaChance, H. R., & Kahler, C. W. (2008). Dimensions of depressive symptoms and smoking cessation. *Nicotine & Tobacco Research*, 10:(3), 507-517.

The authors evaluated the relationship of particular dimensions of depression diagnoses (i.e., negative affect, somatic features, low positive affect/anhedonia, and interpersonal disturbance) and smoking cessation. These dimensions of depression were evaluated using the Center for Epidemiologic Studies Depression Scale (CESD), which was administered to 157 participants who were considered "heavy drinkers" and were enrolled in a smoking cessation program. The authors found that all four dimensions were related to smoking motives. The somatic features scale was related to severity of nicotine dependence. The low positive affect/anhedonia scale was related to changes in withdrawal symptoms on the day of quitting. All scales except interpersonal disturbance were related to abstinence rates at 8, 16, and 26 weeks after quitting. The only dimension that predicted poorer outcomes incrementally to other dimensions was low positive affect/anhedonia, and that association held even after controlling for nicotine dependence, smoking frequency, and prior diagnoses of major depression. The authors conclude that interventions for smoking cessation should address clients' anhedonia and low positive affect in order to improve outcomes.

Lyons, M., Hitsman, B., Xian, H., Panizzon, M. S., Jerskey, B. A., Santangelo, S., Grant, M. D., Rende, R., Eisen, S., Eaves, L., & Tsuang, M. T. (2008). A twin study of smoking, nicotine dependence, and major depression in men. *Nicotine & Tobacco Research, 10*(1), 97-108.

The authors used data from the Vietnam Era Twin Registry (which contains information on 6,099 male–male twins who served in the military during the Vietnam War era) to understand the possible effects of genetics and environment on smoking, nicotine dependence, and major depression. They found that there was an apparent genetic influence on daily smoking, nicotine dependence, and major depression, and an apparent family-related environmental influence on daily smoking. The genetic factors that influenced nicotine dependence also appeared to have a strong influence on major depression. They found a significant association between major depression and daily smoking as well as the presence of some symptoms of nicotine withdrawal, and that a family vulnerability for major depression was associated with increased rates of smoking as well as certain symptoms of nicotine withdrawal (e.g., restlessness, problems in concentration), even if the individuals did not have a personal history of major depression.

Mahoney, J. J., Kalechstein, A. D., De La Garza, R., & Newton, T. F. (2008). Presence and persistence of psychotic symptoms in cocaine- versus methamphetamine-dependent participants. *American Journal on Addictions, 17*(2), 83-98.

The authors compared levels of psychotic symptoms (evaluated using the Psychotic Symptom Assessment Scale) for 42 individuals who were cocaine dependent and 43 who were methamphetamine dependent. Individuals who have additional substance use disorders, other than nicotine dependence, were excluded from the study. The authors found that while a high proportion of both groups reported psychotic symptoms such as auditory hallucinations and paranoia, those who were methamphetamine dependent were more likely to report such symptoms than those who were cocaine dependent.

Rais, M., Cahn, W., Van Haren, N., Schnack, H., Caspers, E., Hulshoff Pol, H., & Kahn, R. (2008). Excessive brain volume loss over time in cannabis-using first-episode schizophrenia patients. *American Journal of Psychiatry, 165*(4), 490-496.

The authors compared magnetic resonance imaging scans of 51 individuals who had recent-onset schizophrenia and 31 healthy controls taken at the beginning of the study and 5 years later. Of those who had schizophrenia, 19 used cannabis during the 5-year follow-up period and 32 abstained from any illicit drugs. During the follow-up period individuals with schizophrenia had larger decreases in gray matter volume and increases in lateral and third ventricle volumes than did members of the control group. The extent of brain volume reduction was greater among those who used cannabis than among those who did not.

Scherrer, J. F., Xian, H., Lyons, M. J., Goldberg, J., Eisen, S. A., True, W. R., Tsuang, M., Bucholz, K. K., & Koenen, K. C. (2008). Posttraumatic stress disorder; combat exposure; and nicotine dependence, alcohol dependence, and major depression in male twins. *Comprehensive Psychiatry, 49*(3), 297-304.

The authors used data from the Vietnam Era Twin Registry (which contains information on 6099 male–male twins who served in the military during the Vietnam War era) to analyze the relationship between PTSD, major depression, alcohol dependence, and nicotine dependence. After controlling for PTSD and genetic and environmental factors, the authors did not find any significant relationship between combat exposure and any of the other disorders they were investigating. They note that these findings suggest that PTSD may represent a genetically mediated vulnerability to a number of disorders occurring after trauma exposure.

Sullivan, T. P. & Holt, L. J. (2008). PTSD symptom clusters are differentially related to substance use among community women exposed to intimate partner violence. *Journal of Traumatic Stress, 21*(2), 173-180.

The authors examined PTSD symptomatology and drug use among 212 women who had histories of abuse by an intimate partner. Respondents who used illicit drugs reported more severe PTSD than did those who did not use substances or used alcohol only.

Services & Service Systems

Definitions, Terminology & Classification

Mathias, S., Lubman, D. I., & Hides, L. (2008). Substance-induced psychosis: A diagnostic conundrum. *Journal of Clinical Psychiatry*, 69:(3), 358-367.

The authors examined the literature published between 1992 and 2007 regarding substance-induced psychotic disorders in order to better understand the validity and application of DSM-IV-TR criteria for this disorder. They located 49 articles that had clinical data on substance-induced psychotic disorders but only 18 that focused on clinical characteristics or outcomes for patients diagnosed with substance-induced psychotic disorder. They conclude, based on a review of these articles, that there is a need for a more rigorous examination of the validity of the DSM-IV diagnostic criteria for this disorder. The authors also propose a broader method of classifying this disorder that they believe better reflects the field's current knowledge regarding substance-induced psychotic disorder and does not infer causation.

Screening & Assessment

Glasner-Edwards, S., Mooney, L. J., Marinelli-Casey, P., Hillhouse, M., Ang, A., Rawson, R., & Authors, T. M. T. P. C. (2008). Identifying methamphetamine users at risk for major depressive disorder: Findings from the methamphetamine treatment project at three-year follow-up. *American Journal on Addictions*, 17:(2), 99-102.

The authors used data from a large (N=526) clinical trial of individuals in treatment for methamphetamine abuse to determine what factors might be predictive of a diagnosis of major depressive disorder at assessment 3 years after treatment. The two risk factors that were significantly associated with a later diagnosis of major depressive disorder were Beck Depression Inventory scores of 20 or more and a prior suicide attempt or attempts.

Norman, S. B., Inaba, R. K., Smith, T. L., & Brown, S. A. (2008). Development of the PTSD-alcohol expectancy questionnaire. *Addictive Behaviors*, 33:(6), 841-847.

The authors tested the use of the Post-traumatic stress disorder-Alcohol Expectancy Questionnaire, a self-report questionnaire designed to evaluate positive and negative alcohol-related expectancies among those who have PTSD. They found the instrument had internal consistency, reliability, and concurrent validity within the Alcohol Expectancies Questionnaire.

Satre, D., Wolfe, W., Eisendrath, S., & Weisner, C. (2008). Computerized screening for alcohol and drug use among adults seeking outpatient psychiatric services. *Psychiatric Services*, 59:(4), 441-444.

The authors investigated the use of a computerized instrument for screening for alcohol and drug use among a group of 422 individuals seeking outpatient psychiatric services (other than substance abuse treatment), 74 percent of whom completed the computerized screening. Of those who completed, 70 percent of men (n=90) and 62 percent of women (n=180) reported alcohol use in the prior month, 41 percent of men (n=37) and 23 percent of women (n=41) reported heavy drinking, and 13 percent of men (n=17) and 11 percent of women (n=32) reported cannabis use. The authors conclude that computerized screeners like this can be successfully used in outpatient psychiatric programs.

Systems Integration

Begley, C. E., Hickey, J. S., Ostermeyer, B., Teske, L. A., Vu, T., Wolf, J., Kunik, M. E., & Rowan, P. J. (2008). Best practices: Integrating behavioral health and primary care: The Harris County Community Behavioral Health Program. *Psychiatric Services*, 59:(4), 356-358.

The authors describe the Harris County Community Behavioral Health Program, a program that integrates behavioral treatment services and primary care services for low-income, uninsured individuals. The program has treated approximately 3,000 individuals in the first 11 months, with a cost per patient of \$268. They found improvements in the detection of behavioral health problems in the population served and in the number of services received per patient served.

Treatment Planning & Services

Cusack, K., Morrissey, J., & Ellis, A. (2008). Targeting Trauma-Related Interventions and Improving Outcomes for Women with Co-Occurring Disorders. *Administration and Policy in Mental Health and Mental Health Services Research*, 35:(3), 147-158.

The authors reanalyzed data from the Women, Co-Occurring Disorders and Violence Study to determine whether women in the study responded differently to the integrated mental health/substance abuse treatment intervention according to specific characteristics. They found that treatment effects were significantly larger for those participants who had high levels of PTSD symptoms, and that, in fact, the effect was nearly nonexistent for those who had low levels of symptoms.

Johnson, S. D. (2008). Substance use, post-traumatic stress disorder and violence. *Current Opinion in Psychiatry*, 21:(3), 242-246.

The author discusses co-occurring PTSD and substance use disorders with particular attention to the role of violence as a contributing factor to these COD. The author notes that there have been problems with the lack of consistent measures of PTSD that make it difficult to compare results across studies, and calls for more consistency and more attention to the role of violence and its effects on treatment outcomes.

Muhonen, L. H., Lönnqvist, J., Juva, K., & Alho, H. (2008). Double-blind, randomized comparison of memantine and escitalopram for the treatment of major depressive disorder comorbid with alcohol dependence. *Journal of Clinical Psychiatry*, 69:(3), 392-399.

The authors conducted a double-blind, randomized comparison of memantine, a noncompetitive glutamate N-methyl-D-aspartate receptor blocker used to treat Alzheimer's, and escitalopram, a selective serotonin reuptake inhibitor used to treat depression, with a group of 80 Finnish individuals with co-occurring alcohol dependence and major depression. They found that both medications reduced depression (as measured by the Montgomery-Asberg Depression Rating Scale) and anxiety (measured with the Hamilton Rating Scale for Anxiety), with no significant differences between the medications.

Thylstrup, B. & Hesse, M. (2008). Substance abusers' personality disorders and staff members' emotional reactions. *BMC Psychiatry*, 8:(21).

Earlier research has found that the aggressive behavior of individuals with cluster B personality disorders increases treatment providers' negative emotional responses to those clients while the apparent neediness of those individuals with cluster C personality disorders increases treatment providers' positive responses. In order to clarify those previous findings in relation to individuals with co-occurring substance use disorders, the authors surveyed staff who work with people with mental disorders (selected from workshops) about their responses to a group of individuals with personality disorders and co-occurring substance use disorders. Staff members reported significantly greater feelings of distance from those clients who had Cluster B disorders, greater feelings about wanting to be helpful for those with cluster C disorders, and no significant differences regarding those with Cluster A disorders.

Wagner, E. F. (2008). Developmentally informed research on the effectiveness of clinical trials: A primer for assessing how developmental issues may influence treatment responses among adolescents with alcohol use problems. *Pediatrics*, 121:(Supplement 4), S337-S347.

The author discusses the potential effects of developmental issues on treatment responses for adolescents with alcohol use disorders. The author reviews the literature on the possible impacts of different developmental issues and presents some promising ideas and methods concerning how developmental processes influence adolescents' behaviors and treatment responses.