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Documenting Disability for People with Co-Occurring Disorders (COD)

A recently published review of a legal case concerning social security disability insurance (SSDI) benefits draws attention to a legal finding that has significance for people with COD: **Smarty, S. & Noffsinger, S. (2007). Parsing mental illness and substance abuse in determining Social Security Disability benefits. Journal of the American Academy of Psychiatry and the Law Online, 35 (4), 543-545. Available online at http://www.jaapl.org/cgi/reprint/35/4/543**

The article reviews a case in which the U.S. Seventh Circuit Court of Appeals overturned a decision by the U.S. District Court for the Northern District of Illinois, Eastern Division which had upheld the decision by a social security administrative law judge (ALJ) to deny SSDI benefits to a woman with co-occurring bipolar disorder and substance use disorders.

By the time of her final hearing before the ALJ in 2003, this woman had 3 years of sobriety; nonetheless, during that time she was still unable to hold onto even very low paying jobs for longer than 8 months because of symptoms related to her bipolar disorder. The ALJ concluded that because her symptoms had improved after she stopped using substances that the substance abuse was the cause of her bipolar disorder. In doing so, the ALJ ignored contrary testimony from psychiatric experts.

The appeals court decision was based on an understanding that whether or not the woman abused substances she would still have a disability as a result of her bipolar disorder. The Court of Appeals pointed out that bipolar disorder often co-occurs with substance use disorders and that people with bipolar disorder may begin using substances to self-medicate the effects of their bipolar disorder. The Court also noted that the ALJ was wrong to conclude that the woman could have held a job if she had not failed to take her medication because noncompliance with prescribed medication regimens is often part of having a bipolar disorder.

The case is important in establishing the rights of people with COD to receive SSDI benefits and in illustrating some of the problems people with COD have within the legal system. The Court of Appeals ruling drew attention to the fact that the ALJ was wrong in ruling that the substance abuse was the root of the problem and ignoring testimony from psychiatric experts that her problems with employment resulted from her bipolar disorder alone, even if her substance abuse had aggravated that disorder.

Another publication of interest in this regard has recently been updated: **O'Connell, J.J., Zevin, B.D., Quick, P.D., Anderson, S., Perret, Y.M., Dalton, M., Post, P.A. (Eds.) (2007).** ***Documenting Disability: Simple Strategies for Medical Providers*****. Nashville, TN: Health Care for the Homeless Clinicians' Network, National Health Care for the Homeless Council, Inc. Available online at http://www.nhchc.org/DocumentingDisability.pdf**

This publication is a practical guide for clinicians trying to secure SSDI and/or Supplemental Security Income (SSI) and related benefits for clients with disabilities (including COD). While aimed at medical providers working with clients who are homeless, it will be of interest to others. It provides many detailed examples and useful tips for how to file for benefits for individuals with substance use disorders who have a co-occurring mental or physical disorder that causes impairment. It also discusses topics such as clinical considerations for people with COD, documenting substance use, SSDI/SSI eligibility requirements, and the Social Security Administration's (SSA) policies on substance use.

In addition, the publication reviews selected case law relating to substance abuse and social security benefits, including a case that concluded that when the mental impairments resulting from substance abuse cannot be distinguished "from other evidenced mental disorders, a finding of not material is appropriate" (p. 73), meaning the individual should be awarded disability status and payments. Another case referenced here states that even active substance use does not preclude the awarding of social security benefits.

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

National Epidemiological Studies

Husky, M. M., Mazure, C. M., Paliwal, P., & McKee, S. A. (2008). Gender differences in the comorbidity of smoking behavior and major depression. *Drug and Alcohol Dependence*, 93 (1-2), 176-179.
Using data from the National Epidemiologic Survey on Alcohol and Related Conditions (NESARC), the authors evaluated the relationship of smoking and major depression among men and women. They found that both current smoking and previous smoking were associated with significantly higher rates of both current and previous episodes of major depression, and that this association was stronger for women than for men.

Office of Applied Studies (2007). *Male admissions with co-occurring psychiatric and substance use disorders* (The DASIS Report: December 13, 2007). Rockville, MD: Substance Abuse and Mental Health Services Administration. Available online at http://oas.samhsa.gov/2k7/maleDual/maleDual.pdf
This SAMHSA report compiles data from the Drug and Alcohol Services Information System (DASIS) regarding men with COD admitted to substance abuse treatment programs in 2006. The report notes that men with COD were more likely to use alcohol, cocaine, marijuana, and/or stimulants on a daily basis than were male admissions without COD. More men with COD (62 percent) than men without COD (52 percent) reported using more than one substance of abuse. Men with COD were also more likely to report five or more prior treatment episodes than men without COD (17 and 10 percent respectively).

Client Characteristics

Cavazos-Rehg, P. A., Spitznagel, E. L., Bucholz, K. K., Norberg, K., Reich, W., Nurnberger, J., Hesselbrock, V., Kramer, J., Kuperman, S., & Bierut, L. J. (2007). The relationship between alcohol problems and dependence, conduct problems and diagnosis, and number of sex partners in a sample of young adults. *Alcoholism: Clinical and Experimental Research*, 31 (12), 2046-2052.
The authors evaluated the effects of alcohol-dependence and conduct disorder on the number of sexual partners using data from 601 young adults between the age 18 to 25 who were related to others who were alcohol-dependent, and participants in another study. The authors found, after controlling for other possible influences, that alcohol dependence, problem drinking, race, age at first sexual intercourse, and age at time of interview were all significantly related to the number of the individuals' sexual partners. Being alcohol dependent and/or having a conduct disorder were significantly associated with a substantially increased chance of having 10 or more sexual partners.

Corte, C. & Becherer, M. (2007). Differential effects of maternal and paternal alcoholism and gender on drinking, alcohol-related self-cognition, and psychopathology. *Journal of Addictions Nursing*, 18 (4), 175-185.
The authors looked at connections between both maternal and paternal alcoholism and the drinking, drinking related cognitions, and co-occurring psychopathology of their young adult offspring. They looked at a sample of 25 young adults who had a current diagnosis of alcohol dependence, 18 who had a prior alcohol dependence diagnosis but were abstinent for 12 or more months, and 23 members of a control group who had no history of alcohol use disorders. They found that paternal alcohol dependence/abuse was independently associated with drinking behavior and social phobia symptoms; maternal alcohol dependence/abuse was associated with increased symptoms of major depression, generalized anxiety disorder, and obsessive-compulsive disorder; and neither maternal or paternal alcohol abuse/dependence significantly effected alcohol-related self cognitions.

D'Amico, E. J., Edelen, M. O., Miles, J. N. V., & Morral, A. R. (2008). The longitudinal association between substance use and delinquency among high-risk youth. *Drug and Alcohol Dependence*, 93 (1-2), 85-92.
The authors looked at the relationship between substance use (SU) and delinquency in a group of 449 youth (87 percent male) they recruited from the Los Angeles juvenile probation system. They analyzed potential relationships between substance use and different types of criminal behavior (i.e., drug-related, interpersonal, and property crimes). After

controlling for gender, age, ethnicity, and time spent in an institution during the course of the study, they concluded that the relationship between substance use and criminal behavior was fairly stable, suggesting that the reciprocal effects of SU and delinquency appear to be fairly stable over time.

Davis, L., Uezato, A., Newell, J. M., & Frazier, E. (2008). Major depression and comorbid substance use disorders. *Current Opinion in Psychiatry*, 21 (1), 14-18.

The authors reviewed recent data on the presentation, epidemiology, symptomatology, treatment, reasons for co-occurrence, and expected outcomes for co-occurring major depression and substance use disorders. They pay particular attention to recent research that shows that there are fewer differential effects resulting from the co-occurrence of these disorders than were previously believed to exist.

de Timary, P., Luts, A., Hers, D., & Luminet, O. (2008). Absolute and relative stability of alexithymia in alcoholic inpatients undergoing alcohol withdrawal: Relationship to depression and anxiety. *Psychiatry Research*, 157 (1), 105-113.

The authors sought to determine whether, for people with alcohol dependence, alexithymia (i.e., difficulty recognizing and expressing the nature of one's emotions) is a personality trait or the result of co-occurring depression and anxiety. They evaluated the degree to which scores of alexithymia varied over time (i.e., its absolute stability) and the extent to which the difference in scores among participants remained the same over time (i.e., its relative stability) in a group of 70 substance abuse treatment inpatients who were alcohol dependent. They found that scores of alexithymia had a significant decrease from the onset to the end of withdrawal from alcohol, but that other factors relating to those scores remained the same. After controlling for the effects of anxiety and depression, there was a significant correlation between alexithymia scores at the beginning of the study and those at the end, suggesting that it is a stable personality trait although it may be influenced by alcohol withdrawal.

Hasin, D. S., Keyes, K. M., Hatzenbuehler, M. L., Aharonovich, E. A., & Alderson, D. (2007). Alcohol consumption and posttraumatic stress after exposure to terrorism: Effects of proximity, loss, and psychiatric history. *American Journal of Public Health*, 97 (12), 2268-2275.

The authors evaluated the effect of exposure to trauma resulting from the attack on the World Trade Center (9/11) on alcohol consumption and posttraumatic stress among people living within 12 miles of ground zero. They found that interpersonal loss and previous episodes of major depression were significantly related to posttraumatic stress symptoms, but that an individual's proximity to ground zero was not significantly related. On the other hand, proximity to ground zero and prior episodes of alcohol dependence were significantly related to higher levels of post-9/11 alcohol consumption.

Hyman, S. M., Paliwal, P., Chaplin, T. M., Mazure, C. M., Rounsaville, B. J., & Sinha, R. (2008). Severity of childhood trauma is predictive of cocaine relapse outcomes in women but not men. *Drug and Alcohol Dependence*, 92 (1-3), 208-216.

The authors investigated the effects of childhood trauma histories on relapse to cocaine use after treatment for a group that included 54 women and 70 men. Study participants were cocaine dependent upon entering an inpatient treatment program and were followed for 90 days after completing treatment. The authors found that more childhood emotional abuse (according to self-report) was associated with higher rates of relapse among women. More severe emotional abuse, sexual abuse, and overall trauma in childhood were associated with a greater number of days of cocaine use in women; more severe physical abuse and overall trauma in childhood were associated with a greater amount of cocaine used on average per occasion of use for women as well. They did not find any association between childhood trauma and cocaine use/relapse for men.

Meade, C. S., Graff, F. S., Griffin, M. L., & Weiss, R. D. (2008). HIV risk behavior among patients with co-occurring bipolar and substance use disorders: Associations with mania and drug abuse. *Drug and Alcohol Dependence*, 92 (1-3), 296-300.

The authors analyzed HIV-risk behaviors of people with co-occurring bipolar disorder and substance use disorders. They assessed 101 individuals who met both diagnostic criteria using self-report questionnaires and structured clinical

interviews. These individuals reported high rates of unprotected sexual intercourse (69 percent), sex with multiple partners (39 percent), sex with prostitutes (24 percent), and trading sex for drugs (10 percent). Having recently had a manic episode, having lower overall severity of psychiatric symptoms, and greater severity of drug use were all independently associated with more HIV-risk behaviors. Cocaine dependence was associated with a greater risk of trading sex for drugs.

Plotzker, R. E., Metzger, D. S., & Holmes, W. C. (2007). Childhood sexual and physical abuse histories, PTSD, depression, and HIV risk outcomes in women injection drug users: A potential mediating pathway. *American Journal on Addictions*, 16 (6), 431-438.

The authors looked at the relationship among physical and sexual abuse in childhood, posttraumatic stress disorder (PTSD), depression, and HIV-risk behaviors in a group of 113 female, injection drug users. The sample had high rates of childhood sexual abuse (56 percent) and childhood physical abuse (68 percent); 23 percent of the sample likely qualified for a diagnosis of depression and 53 percent for both a depression and PTSD diagnosis. A history of childhood sexual abuse (but not childhood physical abuse) was associated with increased sex- and drug-related HIV-risk behaviors. Also, childhood sexual abuse was associated with increased rates of PTSD and depression.

Reed, P. L., Anthony, J. C., & Breslau, N. (2007). Incidence of drug problems in young adults exposed to trauma and posttraumatic stress disorder: Do early life experiences and predispositions matter? *Archives of General Psychiatry*, 64 (12), 1435-1442.

The authors investigated the incidence of drug use disorders among young adults who had earlier experiences of trauma, resulting in posttraumatic stress disorder (PTSD). They followed a sample of 988 participants who were first assessed in 1985 and 1986 on entry into first grade and reassessed twice as young adults (between the ages of 19 and 24). Participants selected for the study also had no symptoms of a drug use disorder at their first young adult assessment, so the authors would be able to determine the risk of developing a drug use disorder or drug-related problems in the year between the first and second young adult assessments. They found that, after controlling for childhood risk factors, prior PTSD (but not prior trauma experience alone) was associated with increased risk for a drug use disorder as well as for having symptoms of (but not meeting the diagnostic threshold for) a drug use disorder.

Saatcioglu, O., Yapici, A., & Cakmak, D. (2008). Quality of life, depression and anxiety in alcohol dependence. *Drug and Alcohol Review*, 27 (1), 83-90.

The authors evaluated the effects of anxiety and depression on quality of life self-ratings of 150 individuals being treated at a hospital for alcohol dependence. Participants were evaluated at the beginning of the study and 3 and 6 weeks after the cessation of withdrawal symptoms. Participants with elevated levels of anxiety were compared to those with elevated levels of depression and to those who did not have high levels of either. Participants in the three groups differed significantly in regards to physical health, psychological status, social relationships, and environments. The authors found that levels of both anxiety and depression decreased from the time of the initial assessment to the assessment 3 weeks after withdrawal for those participants who had high levels of anxiety and/or depression. However, for those who did not initially have high levels of anxiety or depression, levels of anxiety increased during that same period. They also found that quality of life (at the 3- and 6-week assessments) was lowest for those participants who had high levels of depression and highest for those who had neither elevated depression nor anxiety.

Waldrop, A. E., Ana, E. J. S., Saladin, M. E., McRae, A. L., & Brady, K. T. (2007). Differences in early onset alcohol use and heavy drinking among persons with childhood and adulthood trauma. *American Journal on Addictions*, 16 (6), 439-442.

The authors investigated differences in age of onset of alcohol use and abuse related to trauma experienced either in childhood or adulthood in a group of 43 men and 46 women (some of whom were alcohol dependent, some of whom had PTSD, some of whom had both disorders, and some of whom had neither). They found that those who had experienced childhood trauma had significantly earlier first alcohol use and drank significantly more than those who had only experienced trauma in adulthood.

Services & Service Systems

Screening & Assessment

Bender, R. E., Griffin, M. L., Gallop, R. J., & Weiss, R. D. (2007). Assessing negative consequences in patients with substance use and bipolar disorders: Psychometric properties of the Short Inventory of Problems (SIP). ***American Journal on Addictions,*** **16 (6), 503-509.**

The authors analyzed the psychometric properties of the Short Inventory of Problems (SIP), an instrument developed to measure the negative consequences of drinking but not previously validated for people with COD. The authors administered the SIP to 57 individuals with co-occurring bipolar and substance use disorders who were clients of an outpatient substance abuse treatment program. The instrument was modified for this evaluation in order to address drug use as well as alcohol use and to assess consequences resulting from the bipolar disorder. This modified version of the SIP was found to be psychometrically sound.

Ruan, W. J., Goldstein, R. B., Chou, S. P., Smith, S. M., Saha, T. D., Pickering, R. P., Dawson, D. A., Huang, B., Stinson, F. S., & Grant, B. F. (2008). The Alcohol Use Disorder and Associated Disabilities Interview Schedule-IV (AUDADIS-IV): Reliability of new psychiatric diagnostic modules and risk factors in a general population sample. ***Drug and Alcohol Dependence*****, 92 (1-3), 27-36.**

The authors used data from 1,899 randomly selected participants in Wave 2 of the National Epidemiologic Survey on Alcohol and Related Conditions (NESARC) study to evaluate the test–retest reliability and internal consistency of the Alcohol Use Disorder and Associated Disabilities Interview Schedule-IV (AUDADIS-IV). They found that for diagnoses and symptom scales for PTSD, attention-deficit/hyperactivity disorder, and borderline personality disorder, narcissistic personality disorder, and schizotypal personality disorder there was good test–retest reliability and internal consistency. They also found that the reliability of the instrument for risk factor measures fell within the good to excellent range.

Torres, L. R., Zayas, L. H., Cabassa, L. J., & Pérez, M. C. (2007). Diagnosing co-occurring substance-related disorders: Agreement between SCID, Hispanic clinicians, and Non-Hispanic clinicians. ***Journal of Clinical Psychiatry*****, 68 (11), 1655-1662.**

The authors sought to determine whether client–clinician matching for Hispanic ethnicity made a difference in diagnosis of COD. They videotaped 88 Hispanic clients interviewed by either Hispanic or non-Hispanic clinicians and had observers (both Hispanic and non-Hispanic, whose ethnicity was matched to that of the interviewer) evaluate the interview and diagnosis. Clients were also administered the Structured Clinical Interview for DSM-IV-TR, Research Version (SCID) to provide a point of comparison. The authors found that non-Hispanic clinicians diagnosed significantly more substance-related disorders than did Hispanic clinicians. Additionally, all clinicians (regardless of ethnicity) under-diagnosed substance-related disorders in comparison to SCID diagnoses. All clinicians had low diagnostic reliability in comparison to other clinicians as well as to the SCID.

Services Integration

Zaller, N., Gillani, F. S., & Rich, J. D. (2007). A model of integrated primary care for HIV-positive patients with underlying substance use and mental illness. ***AIDS Care*****, 19 (9), 1128-1133.**

The authors describe a primary care program developed to help HIV-positive patients with substance use disorders or co-occurring disorders. The program provides linkages to substance abuse treatment and mental health services as well as other services such as housing. The authors note that the program has been successful at assessing clients with COD and referring them to appropriate treatment.

Systems Integration

Verdier, J., Barrett, A., & Davis, S. (2007). *Administration of mental health services by Medicaid agencies* (DHHS Pub. No. [SMA] 07-4301). Rockville, MD: Center for Mental Health Services, Substance Abuse and Mental Health Services Administration. Available online at http://download.ncadi.samhsa.gov/ken/pdf/SMA07-4301/SMA07-4301.pdf

This report from the Center for Mental Health Services' Survey, Analysis, and Financing Branch provides comprehensive information on how State Medicaid agencies administer mental health services. Major findings include that State Medicaid and mental health agencies are within the same umbrella agency in 28 States, most commonly health and human services, and are separate in 23 States; 40 States reported that their Medicaid agencies produce formal reports containing discrete data on Medicaid mental health utilization or expenditures, and in 27 States the mental health agency produces such reports; and more than half of the Medicaid respondents said that Medicaid and mental health agencies collaborate frequently through internal and external meetings, public reports, or presentations to the legislature.

Treatment Planning & Services

Abrantes, A. M., Palm, K. M., Strong, D. R., & Ramsey, S. E. (2007). Treatment utilization after psychiatric inpatient hospitalization among adolescents with and without substance use disorders. *Addictive Disorders & Their Treatment*, 6 (4), 147-156.

The authors investigated the use of treatment services among a group of 11 adolescents who were smokers and were hospitalized for a psychiatric disorder (71 percent of whom also met criteria for a substance use disorder). They were evaluated upon entering the hospital and at 1, 6, and 12 months after discharge from the facility. As they expected, participants with COD were more likely to engage in group therapy (primarily for their substance abuse problems). For participants with COD, they also found associations between the use of stimulant medications and greater frequency of drinking and between greater group therapy participation and fewer days of marijuana use during follow-up.

Cook, J. A., Razzano, L. A., Burke-Miller, J. K., Blyler, C. R., Leff, H. S., Mueser, K. T., Gold, P. B., Goldberg, R. W., Shafer, M. S., Onken, S. J., McFarlane, W. R., Donegan, K., Carey, M. A., Kaufmann, C., & Grey, D. D. (2007). Effects of co-occurring disorders on employment outcomes in a multisite randomized study of supported employment for people with severe mental illness. *Journal of Rehabilitation Research and Development*, 44 (6), 837-850. Available online at http://www.rehab.research.va.gov/jour/07/44/6/pdf/cook.pdf

The authors conducted a large (N=1,273) evaluation of the effectiveness of supported employment for people with serious mental illness that included a significant number of people with COD (n=451). In analyzing the data, the authors concluded that substance use disorders did not have a significant effect on total earnings, hours worked, or ability to obtain competitive employment for people who also had a diagnosis of a serious mental illness (49 percent of whom had a primary diagnosis of schizophrenia or schizoaffective disorder, 21 percent of whom had major depression, and 16 percent of whom had bipolar disorder), suggesting again that when an individual with COD has a significant impairment related to employment the mental health disorder should be looked at closely as the cause of unemployability. The authors also found that supportive employment initiatives significantly improved work-related outcomes for people with COD. They did, however, use a retrospective chart analysis to determine diagnosis, lumped together both current and lifetime diagnoses for substance use disorders, and may have excluded a number of individuals with COD from their original sample for either being employed at the start of the study or dropping out before it was completed, all factors that might effect the results of the study.

Drebing, C. E., Van Ormer, E. A., Mueller, L., Hebert, M., Penk, W. E., Petry, N. M., Rosenheck, R., & Rounsaville, B. (2007). Adding contingency management intervention to vocational rehabilitation: Outcomes for dually diagnosed veterans. *Journal of Rehabilitation Research and Development*, 44 (6), 851-866.

The authors examined the potential benefits of adding contingency management to a vocational rehabilitation program for a group of 100 veterans with COD. Participants who received cash incentives (up to a total of $1,170) for performing specific tasks designed to improve recovery and employment outcomes, performed significantly more intense job searches and made the transition to competitive employment more quickly and more often. However, there were no significant differences in regards to job tenure. Also, while abstinence rates were significantly better for those who received contingency management during the first 16 weeks of follow-up, there were no significant differences at later follow-up assessments.

Kodl, M. M., Fu, S. S., Willenbring, M. L., Gravely, A., Nelson, D. B., & Joseph, A. M. (2008). The impact of depressive symptoms on alcohol and cigarette consumption following treatment for alcohol and nicotine dependence. *Alcoholism: Clinical and Experimental Research*, 32 (1), 92-99.

The authors studied the effects of depressive symptoms on abstinence from nicotine and alcohol following treatment for the same. They use data from the Timing of Alcohol and Smoking Cessation Study (TASC), which randomly assigned 462 individuals in treatment for alcohol dependence who were also smokers to either a concurrent or delayed intervention. All subjects were also assessed (at baseline and the 6-, 12-, and 18-month follow-up sessions) for symptoms of depression. Being assessed with depressive symptoms at any given assessment was associated with an increased chance of drinking before the next assessment. There were, however, no significant associations between depressive symptoms and abstinence from cigarettes.

Mueser, K. T., Kavanagh, D. J., & Brunette, M. F. (2007). Implications of research on comorbidity for the nature and management of substance misuse. In P. M. Miller, & D. J. Kavanagh (Eds.), *Translation of addictions science into practice*. (pp. 277-320). Amsterdam NL: Elsevier B.V.

The authors of this book chapter review epidemiological and treatment research on COD. They note that there is a mutual influence between substance use disorders and mental disorders as well as evidence of common factors influencing both types of disorders. In regards to treatment, they note that there is support for the use of integrated treatment models as well as motivational interventions, but the evidence is inconsistent and not large.

Pacula, R. L., Ringel, J., Dobkin, C., & Truong, K. (2008). The incremental inpatient costs associated with marijuana comorbidity. *Drug and Alcohol Dependence*, 92 (1-3), 248-257.

The authors investigated incremental costs associated with marijuana use for patients hospitalized for mood, thought, and alcohol use disorders. They used data from the 1993–2000 National Hospital Discharge Survey to analyze the potential effect of marijuana use on length of hospital stay and overall hospital charges. They found marijuana use significantly increased costs for patients admitted for alcohol use disorders and mood disorders but not for thought disorders.

Ralevski, E., Ball, S., Nich, C., Limoncelli, D., & Petrakis, I. (2007). The impact of personality disorders on alcohol-use outcomes in a pharmacotherapy trial for alcohol dependence and comorbid Axis I disorders. *American Journal on Addictions*, 16 (6), 443-449.

The authors analyzed the effects of co-occurring antisocial personality disorder (ASPD) and/or borderline personality disorder (BPD) on clients who were alcohol dependent and had other Axis I disorders. All participants had co-occurring alcohol use and other Axis I disorders and were enrolled in a 12-week trial of naltrexone and disulfiram for their alcohol dependence. They received either naltrexone alone, placebo alone, open label disulfiram and naltrexone, or open label disulfiram and placebo. A diagnosis of ASPD or BPD did not affect drinking related outcomes or response to medication.

Schreiber, S., Peles, E., & Adelson, M. (2008). Association between improvement in depression, reduced benzodiazepine (BDZ) abuse, and increased psychotropic medication use in methadone maintenance treatment (MMT) patients. *Drug and Alcohol Dependence*, 92 (1-3), 79-85.

The authors examined the association between depression and benzodiazepine abuse among a group of 75 individuals in methadone maintenance treatment. They found that the only significant predictor of depression (as measured with the 21-item Hamilton rating scale for depression) at re-assessment was pre-existing depression. Participants who stopped benzodiazepine abuse and began treatment with psychotropic medications for depression showed significant decreases in their depression scores.

Thomas, S. E., Randall, P. K., Book, S. W., & Randall, C. L. (2008). A complex relationship between co-occurring social anxiety and alcohol use disorders: What effect does treating social anxiety have on drinking? *Alcoholism: Clinical and Experimental Research*, 32 (1), 77-84.

The authors investigated whether treatment with paroxetine for social anxiety disorder also reduced alcohol consumption among individuals with a co-occurring alcohol use disorder who had stated that they used alcohol to cope with anxiety. Subjects participated in a double blind, randomized trial in which 25 received a placebo and 20 received paroxetine; neither group received treatment for their alcohol use disorders. Those receiving paroxetine did improve in anxiety-related outcomes but not in quantity or frequency of drinking or the percentage of days drinking that were said to be related to coping with anxiety. However, drinking for those who received the placebo was correlated with severity of social anxiety, which was not the case for those receiving paroxetine. The authors suggest that while paroxetine may not reduce overall drinking it does appear to have an effect on the reason why an individual with anxiety drinks.