DATA TRENDS

TREATING YOUNG PEOPLE WITH CO-OCCURRING DISORDERS: WHAT WORKS?

SOURCES

Cornelius, J. R., Douaihy, A., Bukstein, O. G., Daley, D. C., Wood, S. D., Kelly, T. M., & Salloum, I. M. (2011). Evaluation of cognitive behavioral therapy/ motivational enhancement therapy (CBT/ MET) in a treatment trial of comorbid MDD/ AUD adolescents. *Addictive Behaviors, 36*(8), 843–848.

Chi, F. W., Sterling, S., Campbell, C. I., & Weisner, C. (2013). 12-Step participation and outcomes over 7 years among adolescent substance use patients with and without psychiatric comorbidity. *Substance Abuse, 34*(1), 33–42.

Youth with substance use disorders often also face mental health challenges. Two recent studies analyzed two different treatment approaches for co-occurring substance use and mental health disorders: (1) a standardized therapy approach and (2) 12-step support groups, as modalities for effectively treating and continuing positive outcomes for young people with co-occurring mental health and substance use issues. The findings from these studies are summarized below.

APPROACH 1: COGNITIVE BEHAVIORAL THERAPY AND MOTIVATIONAL ENHANCEMENT THERAPY

Cornelius and colleagues (2011) conducted a two-year follow up study on participants in two studies they had conducted previously to determine the long-term effects of using Cognitive Behavioral Therapy (CBT) and Motivational Enhancement Therapy (MET) together to address co-morbidity in adolescents. In one study, participants had received CBT/ MET to treat their co-morbid conditions. In the other study, participants received treatment as usual (TAU); this second study provided a naturalistic control group for the long-term follow up.

The authors described CBT as a therapy approach based on social learning models that focuses on developing an understanding of the triggers and consequences of drug use. They also stated that their implementation of CBT teaches coping skills to manage craving and other high-risk situations for use. The authors defined MET as an intervention used to increase an individual's engagement in therapy using motivation to make beneficial changes around substance use and high-risk behaviors. This intervention specifically was chosen as a way to encourage treatment adherence in young people because, according to the study authors, young people with substance use disorders have historically possessed low rates of treatment engagement.

At baseline, participants were between 15-20 years old and were diagnosed with both major depressive disorder (MDD) and an alcohol

CBT/ MET can reduce both mental health symptoms and substance use in young people with co-occurring disorders two years after treatment. Young people who had high rates of participation in a 12-step program had higher levels of abstinence from alcohol and drugs years later.

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use disorder (AUD). Participants in the first study then received the intervention treatment of CBT/ MET, and those in study two received TAU. Those who received CBT/ MET received the treatment nine times over twelve weeks. Additionally, half of the intervention group also received Fluoxetine, an SSRI antidepressant medication. However, immediately after treatment there were no differences in mental health or substance use outcomes between the group that received the SSRI and the group that did not, so the two groups were combined in the long-term follow up. Other differences between those who received medication and those who did not were compared in a separate analysis.

Out of the 118 participants from the two initial studies, 75 completed the two-year follow up assessment: 48 who had received CBT/ MET and 27 from the TAU study. Differences in substance use and depressive symptoms between the two groups at baseline and two years after treatment were assessed using repeated measures analysis of variance (ANOVA).

Before the treatment phase, those in the CBT/ MET group demonstrated higher depressive symptomatology than those in TAU. There were no differences between the two groups in terms of AUD. After two years, there were no differences in outcomes between those in the CBT/ MET group who received medication and those who did not. Long term follow up did indicate that both the intervention group and TAU group demonstrated decreased diagnostic criteria in both depressive symptoms and alcohol use between the two time points. However, those in the CBT/ MET group demonstrated significantly more improvements than those participants in the TAU group. More specifically, analyses found significantly decreased depressive symptoms on three assessments including the number of DSM criteria for MDD ($f = 14.6$, $p = 0.000$), the Beck Depression Inventory ($f = 12.4$, $p = 0.001$) and the Hamilton Depression Rating scale ($f = 16.6$, $p = 0.000$). A significantly greater improvement in the DSM criteria for alcohol use disorder was also found in the CBT/ MET group ($f = 14.2$, $p = 0.000$).

These results demonstrate that, in combination, CBT and MET may be an effective treatment for adolescents diagnosed with both MDD and AUD. The effects of this approach lasted two years past treatment. The SSRI Fluoxetine did not appear effective when combined with CBT/ MET in either the short or long term for this particular group. However, the small sample size used to assess long term effectiveness is a limitation to this study and replication of its findings are warranted.

APPROACH 2: 12-STEP PROGRAMS

A study by Chi and colleagues (2013) examined the long-term effects of participating in a 12-step program on post-treatment substance use abstinence for youth with and without mental health challenges.

Participants for this seven-year study (N=419) were recruited from four Kaiser Permanente Chemical Dependency Recovery Programs in California, and were aged 13-18 at baseline. This sample was 34% female, and race/ ethnic distribution was as follows: 50% of participants reported as Caucasian, 21% Hispanic, 14% African American, 8% Native American, and 6% Asian/ Pacific Islander.

Psychiatric diagnoses were taken from Kaiser Permanente's inpatient and outpatient databases. Adolescents with co-occurring disorders were those who received at least one psychiatric diagnosis on the International Classification of Diseases (ICD)-9 in the two years prior to the study through six months after entering substance abuse treatment. Severity of symptoms was measured at intake by internalizing and externalizing scales on the Youth Self-Report questionnaire (YSR). Follow up evaluations were conducted by phone at one, three, five, and seven years after intake.

To measure 12-step group participation, the Alcoholics Anonymous (AA) Affiliation scale was modified to include Narcotics Anonymous (NA), Cocaine Anonymous (CA) and other 12-step groups. Meeting attendance was measured by the number of meetings attended in the six months prior to the assessment; activity involvement within the program (e.g., considering oneself a member, having a sponsor, having sponsored anyone, calling other members for help, etc.) was measured by adding up the total number of activities selected (scores ranging from 0 to a maximum

of 3+). Substance use was measured by assessing thirty-day abstinence from alcohol and drug use measured at each time interval.

Differences between adolescents with co-occurring disorders and those with only substance use issues were compared. At baseline, when compared to those who presented with only a substance use disorder, adolescents with co-occurring issues had higher levels of substance use, reported more abuse/ dependence symptoms and had higher YSR internalizing and externalizing scores. There were no differences in substance use treatment retention or length of stay between the two groups at any time intervals. However, 12-step meetings were more highly attended in years one and three by young people with co-occurring diagnoses than those who were just managing a substance use disorder (33% vs. 19%, p = .0032; and 16% vs. 7%, p = 0.0106). Those with co-morbid conditions also reported being abstinent more often than those with SUD only.

Analyses were conducted to examine the relationship between post-treatment participation in 12-step groups and substance use outcomes for young people with both co-occurring and substance abuse-only diagnoses. Adolescents with and without co-occurring disorders who attended at least ten 12-step meetings in the prior six months of each measurement interval were more than three and five times as likely to be abstinent from alcohol at follow-ups as those who attended fewer or no meetings (OR = 3.02, *P* = .0049; and OR = 5.29, *P* =.0063, respectively). Adolescents in both groups who had high meeting attendance were also 5 times more likely to be abstinent from drugs. Similarly, those with and without co-occurring disorders who were more actively involved in their 12-step programs were more than twice and eight times as likely to be abstinent from alcohol over time as those with less involvement (OR = 2.55, *P* = .0322; and OR = 8.17, *P* < .0001, respectively). Results from this study show that 12-step programs may help some young people with psychiatric and substance use issues maintain abstinence from substance use over the long-term.

CONCLUSION

These two recent studies demonstrate promising initial results regarding the long-term effectiveness of various non-medicine based treatment approaches for supporting adolescents and young adults with co-occurring disorders. The first study showed that CBT/ MET can reduce both mental health symptoms and substance use in young people with co-occurring disorders two years after treatment. The second study found that those young people with co-occurring disorders who had high rates of participation in a 12-step program had higher levels of abstinence from alcohol and drugs years later. However, more research needs to be done to replicate these findings and to better understand the best ways to treat young people who face both mental health and substance use challenges.

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