

CRA/A-CRA/ACC/CRAFT Reference List (June 2021)

Community Reinforcement Approach (CRA)	page 2
Adolescent Community Reinforcement Approach (A-CRA)	page 19
Assertive Continuing Care (ACC)	page 42
Community Reinforcement and Family Training (CRAFT)	page 46
Websites	page 51

Community Reinforcement Approach (CRA)

Hunt, G. M., & Azrin, N. H. (1973). A community-reinforcement approach to alcoholism. *Behavior Research and Therapy*, 11, 91-104. [https://doi.org/10.1016/0005-7967\(73\)90072-7](https://doi.org/10.1016/0005-7967(73)90072-7)

Several theoretical approaches to alcoholism exist. An operant reinforcement approach was used in the present study to develop a new procedure that rearranged community reinforcers such as the job, family and social relations of the alcoholic such that drinking produced a time-out from a high density of reinforcement. The results showed that the alcoholics who received this Community-Reinforcement counseling drank less, worked more, spent more time with their families and out of institutions than did a matched control group of alcoholics who did not receive these procedures. This new approach appears to be an effective method of reducing alcoholism. An analysis in reinforcement terms is presented of the etiology, epidemiology, and treatment of alcoholism.

Azrin, N. H. (1976). Improvements in the community reinforcement approach to alcoholism. *Behavior Research and Therapy*, 14, 339-348. [https://doi.org/10.1016/0005-7967\(76\)90021-8](https://doi.org/10.1016/0005-7967(76)90021-8)

This study evaluated a modified Community-Reinforcement program for treating alcoholics. The previously tested Community-Reinforcement program included special job, family, social and recreational procedures and was shown to reduce alcoholism. To increase the effectiveness of the program further, the present study incorporated a Buddy system, a daily report procedure, group counseling, and a special social motivation program to ensure the self-administration of Disulfiram (Antabuse). The alcoholics who received the improved Community-Reinforcement program drank less, worked more, spent more time at home and less time institutionalized than did their matched controls who received the standard hospital treatment including Antabuse in the usual manner. These results were stable over a 2-year period. The program appeared even more effective and less time-consuming than the previous program. The present results replicate the effectiveness of the Community-Reinforcement program for reducing alcoholism and indicate the usefulness of the additions to the program.

Azrin, N. H., Sisson, R. W., Meyers, R. J., & Godley, M. D. (1982). Outpatient alcoholism treatment by community reinforcement and disulfiram therapy. *Journal of Behavior Therapy and Experimental Psychiatry*, 13, 105-112. [https://doi.org/10.1016/0005-7916\(82\)90050-7](https://doi.org/10.1016/0005-7916(82)90050-7)

Traditional disulfiram treatment has often been ineffective because of a failure to maintain usage. The present study with 43 alcoholics compared: (1) a traditional disulfiram treatment, (2) a socially motivated Disulfiram Assurance program and (3) a Disulfiram Assurance program combined with reinforcement therapy. About five sessions were given for each program. At the 6-month follow-up, the traditional treatment clients were drinking on most days and no longer taking the medication. The Disulfiram Assurance treatment resulted in almost total sobriety for married or (cohabitating) clients but had little benefit for the single ones. The combined program produced near-total sobriety for the single and married clients. These results indicate a promising integration of chemical, psychological and social treatment of alcoholism.

Mallams, J. H., Godley, M. D., Hall, G. M., & Meyers, R. J. (1982). A social systems approach to resocializing alcoholics in the community. *Journal of Studies on Alcohol*, 43, 1115-1123.
<https://doi.org/10.15288/jsa.1982.43.1115>

Alcoholics who attend a self-governed social club for recovering alcoholics and their families drank less and improved more in general functioning than alcoholics who did not attend.

Sisson, R. W., & Azrin, N. H. (1986). Family-member involvement to initiate and promote treatment of problem drinkers. *Journal of Behavior Therapy and Experimental Psychiatry*, 17, 15-21.
[https://doi.org/10.1016/0005-7916\(86\)90005-4](https://doi.org/10.1016/0005-7916(86)90005-4)

The present study evaluated a method of teaching distressed family members of problem drinkers how to minimize their own distress, reduce the drinking, increase the motivation of the alcoholic to obtain formal treatment and assist in the treatment program. Twelve concerned family members were given either community-reinforcement counseling or a traditional type of counseling (control group). The reinforcement counseling resulted in more alcoholic persons obtaining treatment than did the traditional type and a greater reduction in drinking before the formal treatment was obtained; drinking was reduced further during the joint treatment of the family members and problem drinkers. These results suggest that the drinking of unmotivated alcoholic persons can be reduced by counseling concerned family members in the use of appropriate reinforcement procedures and can lead to the initiation of formal treatment.

Budney, A. J., Higgins, S. T., Delaney, D. D., Kent, L., & Bickel, W. K. (1991). Contingent reinforcement of abstinence with individuals abusing cocaine and marijuana. *Journal of Applied Behavior Analysis*, 24, 657-665. <https://doi.org/10.1901/jaba.1991.24-657>

Two males diagnosed with cocaine dependence received a behavioral intervention comprised of contingency management and the community reinforcement approach. During the initial phase of treatment, reinforcement was delivered contingent on submitting cocaine-free urine specimens. The community reinforcement approach involved two behavior therapy sessions each week. Almost complete cocaine abstinence was achieved, but regular marijuana use continued. During a second phase, reinforcement magnitude was reduced, but remained contingent on submitting cocaine-free specimens. Behavior therapy was reduced to once per week. Cocaine abstinence and regular marijuana use continued. Next, reinforcement was delivered contingent on submitting cocaine- and marijuana-free specimens. This modified contingency resulted in an abrupt increase in marijuana abstinence and maintenance of cocaine abstinence. One- and 5-month follow-ups indicated that cocaine abstinence continued, but marijuana smoking resumed. These results indicate that the behavioral intervention was efficacious in achieving abstinence from cocaine and marijuana; maintenance, however, was achieved for cocaine only.

Higgins, S. T., Delaney, D. D., Budney, A. J., Bickel, W. K., Hughes, J. R., Foerg, F. E., & Fenwick, J. W. (1991). A behavioral approach to achieving initial cocaine abstinence. *American Journal of Psychiatry*, 148, 1218-1224. <https://doi.org/10.1176/ajp.148.9.1218>

The aim of this study was to assess the efficacy of a behavioral treatment program for achieving initial cocaine abstinence in individuals enrolled in outpatient treatment for cocaine dependence. METHOD: Thirteen consecutively admitted outpatients were offered behavioral treatment consisting of contingency management procedures and the community reinforcement approach. Fifteen

consecutively admitted outpatients were offered treatment with 12-step counseling. All 13 of the patients who were offered the behavioral treatment accepted it; 12 of the patients offered 12-step counseling accepted it. RESULTS: Eleven of the 13 patients in the behavioral treatment were retained for 12 weeks of treatment, compared with five of the 12 patients given 12-step counseling. Ten of the patients given behavioral therapy achieved 4 weeks of continuous cocaine abstinence, compared with only three of those given 12-step counseling. Six of the patients in the behavioral treatment group achieved 8 weeks, and three achieved 12 weeks; none of the patients in the 12-step counseling program achieved 8 weeks. CONCLUSIONS: The behavioral treatment described in this paper offers promise as an effective intervention for achieving initial cocaine abstinence. A randomized trial is underway to assess the generality of these findings.

Higgins, S. T., Budney, A. J., Bickel, W. K., Hughes, J. R., Foerg, F. E., & Badger, G. J. (1993). Achieving cocaine abstinence with a behavioral approach. *American Journal of Psychiatry*, 150(5), 763-769. <https://doi.org/10.1176/ajp.150.5.763>

The authors compared the efficacy of a multicomponent behavioral treatment and drug abuse counseling for cocaine-dependent individuals. METHOD: The 38 patients were enrolled in outpatient treatment and were randomly assigned to the two treatments. Counseling in the behavioral treatment was based on the community reinforcement approach, while the drug abuse counseling was based on the disease model of dependence and recovery. Patients in the behavioral, but not the drug counseling, treatment also received incentives contingent on submitting cocaine-free urine specimens. RESULTS: Of the 19 patients who received behavioral treatment, 58% completed 24 weeks of treatment, versus 11% of the patients who received counseling. In the behavioral treatment group 68% and 42% of the patients achieved at least 8 and 16 weeks of documented continuous cocaine abstinence, respectively, versus 11% and 5% in the drug abuse counseling group. CONCLUSIONS: This multicomponent behavioral treatment appears to be an effective intervention for retaining outpatients in treatment and establishing cocaine abstinence.

Azrin, N. H., McMahon, P. T., Donohue, B., Besalel, V. A., Lapinski, K. J., Kogan, E. S., Acierno, R. E., & Galloway, E. (1994). Behavior therapy for drug abuse: A controlled treatment outcome study. *Behavior Research and Therapy*, 32, 857-866. [https://doi.org/10.1016/0005-7967\(94\)90166-X](https://doi.org/10.1016/0005-7967(94)90166-X)

82 Ss were studied in a comparative evaluation of a behavioral vs supportive treatment for illegal drug use. Behavioral treatment included stimulus control, urge control, contracting/family support and competing response procedures for an average of 19 sessions. 37% of Ss in the behavioral condition were drug-free at 2 months, 54% at 6 months, and 65% at 12 months vs 20 ± 6% for the alternative treatment during all 12 months. The behavioral treatment was more effective across sex, age, educational level, marital status and type of drug (hard-drugs, cocaine, and marijuana). Greater improvement for this condition was also noted on measures of employment/school attendance, family relationships, depression, institutionalization and alcohol use.

Higgins, S. T., Budney, A. J., Bickel, W. K., Foerg, F. E., Donham, R., & Badger, G. J. (1994). Incentives improve outcome in outpatient behavioral treatment of cocaine dependence. *Archives of General Psychiatry*, 51, 568-576. <https://doi.org/10.1001/archpsyc.1994.03950070060011>

Objective: To assess whether incentives improved treatment outcome in ambulatory cocaine-dependent patients.

Method: Forty cocaine-dependent adults were randomly assigned to behavioral treatment with or without an added incentive program. The behavioral treatment was based on the Community Reinforcement Approach and was provided to both groups. Subjects in the group with incentives received vouchers exchangeable for retail items contingent on submitting cocaine-free urine specimens during weeks 1 through 12 of treatment, while the group without incentives received no vouchers during that period. The two groups were treated the same during weeks 13 through 24.

Results: Seventy-five percent of patients in the group with vouchers completed 24 weeks of treatment vs 40% in the group without vouchers ($P=.03$). Average durations of continuous cocaine abstinence documented via urinalysis during weeks 1 through 24 of treatment were 11.7 ± 2.0 weeks in the group with vouchers vs 6.0 ± 1.5 weeks in the group without vouchers ($P=.03$). At 24 weeks after treatment entry, the voucher group evidenced significantly greater improvement than the no-voucher group on the Drug scale of the Addiction Severity Index (ASI). and only the voucher group showed significant improvement on the ASI Psychiatric scale.

Conclusions: Incentives delivered contingent on submitting cocaine-free urine specimens significantly improve treatment outcome in ambulatory cocaine-dependent patients

Meyers, R. J., & Smith, J. E. (1995). *Clinical guide to alcohol treatment: The Community Reinforcement Approach*. Guilford Press. Available at <http://www.guilford.com/books/Clinical-Guide-to-Alcohol-Treatment/Meyers-Smith/9780898628579>

This book is the first complete guide to implementing the Community Reinforcement Approach (CRA), an empirically based, highly effective cognitive-behavioral program for treating alcohol problems. An ideal program for any practitioner trying to reconcile the needs of their clients with mandates of HMOs and insurance providers, this approach has been deemed one of the most cost-effective treatments available by recent research. CRA acknowledges the powerful role of environmental contingencies in encouraging or discouraging drinking, and attempts to rearrange these contingencies so that a non-drinking lifestyle is more rewarding than a drinking one. Unique in its breadth, the approach utilizes social, recreational, familial, and vocational strategies to aid clients in the recovery process. This authoritative manual is a hands-on guide to applying these therapeutic procedures.

Smith, J. E., & Meyers, R. J. (1995). The community reinforcement approach. In R. K. Hester, & W. R. Miller (Eds.), *Handbook of alcoholism treatment approaches* (pp. 251-266). Allyn and Bacon.

The Community Reinforcement Approach (CRA) is a broad spectrum behavioral treatment approach for substance-abuse problems / it was developed to utilize social, recreational, familial, and vocational reinforcers to aid clients in the recovery process / CRA acknowledges the powerful role of environmental contingencies in encouraging or discouraging drinking, and attempts to rearrange these contingencies such that sober behavior is more rewarding than drinking behavior / CRA emphasizes motivational techniques and uses positive reinforcement rather than confrontation whenever possible / once the parameters of typical drinking episodes are outlined via functional analysis, a technique called Sobriety Sampling is used to initiate the process of behavior change / an optional part of CRA is a Disulfiram (Antabuse) compliance program / the procedure ensures that the drinker actually takes the Disulfiram and is reinforced for doing so.

Azrin, N. H., Acierno, R., Kogan, E. S., Donohue, B., Besalel, V. A., & McMahon, P. T. (1996). Follow-up results of supportive versus behavioral therapy for illicit drug use. *Behavior Research and Therapy*, 34, 41-46. [https://doi.org/10.1016/0005-7967\(95\)00049-4](https://doi.org/10.1016/0005-7967(95)00049-4)

Follow-up data (mean 9 months) were obtained for 74 subjects who had been treated for a mean of 8 months and 17 sessions in a controlled comparison of Behavioral vs Supportive Counselling for drug abuse. Based on urinalysis, self-report, and family report, all subjects (100%) were actively using drugs at pre-treatment. During the last month of treatment, 81% of the Supportive treatment subjects and 44% of the Behavioral treatment subjects were using drugs at least once. At the follow-up month, drugs were used at least once by 71% of the Supportive vs 42% of Behavioral subjects. When drug use was measured in terms of the number of days of use per month, Supportive counselled subjects did not decrease drug use either by the end of treatment or at follow-up; for Behavioral subjects, drug use decreased by 63% by the end of treatment and by 73% at follow-up. Alcohol use, and days worked/or in school showed a similar pattern of greater improvement for the Behavioral treatment being maintained at the follow-up. These results indicate a substantial treatment-specific reduction of drug usage that endures after treatment is discontinued. The present favorable results appear attributable to the inclusion of family/significant others in therapy and the use of reinforcement contingent on urinalysis results.

Bickel, W. K., Amass, L., Higgins, S. T., Badger, G. J., & Esch, R. (1997). Effects of adding behavioral treatment to opioid detoxification with buprenorphine. *Journal of Consulting and Clinical Psychology*, 65, 803-810. <https://doi.org/10.1037/0022-006X.65.5.803>

This trial assessed whether behavioral treatment improves outcome during a 26-week outpatient opioid detoxification. Thirty-nine opioid-dependent adults were assigned randomly to a buprenorphine dose-taper combined with either behavioral or standard treatment. Behavioral treatment included (a) a voucher incentive program for providing opioid-free urine samples and engaging in verifiable therapeutic activities and (b) the community reinforcement approach, a multicomponent behavioral treatment. Standard treatment included lifestyle counseling. Fifty-three percent of the patients receiving behavioral treatment completed treatment, versus 20% receiving standard treatment. The percentage of patients achieving 4, 8, 12, and 16 weeks of continuous opioid abstinence were 68, 47, 26, and 11 for the behavioral group and 55, 15, 5, and 0 for the standard group, respectively. Behavioral treatment improved outcomes during outpatient detoxification.

Meyers, R. J., & Smith, J. E. (1997). Getting off the fence: Procedures to engage treatment-resistant drinkers. *Journal of Substance Abuse Treatment*, 14, 467-472. [https://doi.org/10.1016/S0740-5472\(97\)00122-0](https://doi.org/10.1016/S0740-5472(97)00122-0)

Historically there have been few options for individuals seeking help for treatment-resistant loved ones with substance abuse problems. This article describes a program with empirical backing called Community Reinforcement and Family Training (CRAFT). This cognitive-behavioral treatment teaches the concerned significant other how to use behavioral principles to reduce the loved one's drinking and to encourage the drinker to seek treatment. Additionally it assists the concerned significant other in alleviating other types of stress and in introducing meaningful reinforcers into his or her own life.

Abbott, P. J., Weller, S. B., Delaney, H. D., & Moore, B. A. (1998). Community Reinforcement Approach in the treatment of opiate addicts. *American Journal of Drug and Alcohol Abuse*, 24(1), 17-30. <https://doi.org/10.3109/00952999809001696>

The authors studied the efficacy of the community reinforcement approach (CRA) as compared to standard counseling in opiate-dependent patients on methadone maintenance. One hundred eighty subjects were randomized to three treatment conditions: standard, CRA, and CRA with relapse prevention (CRA/RP). Of these, 151 subjects were followed up 6 months after intake. Since few of the RP sessions had been concluded at the 6-month follow-up, the two CRA groups were combined for analyses. Weekly urinalysis drug screens and Addiction Severity Index (ASI) scores at intake and 6 months were compared. The combined CRA groups did significantly better than the standard group in the following areas: consecutive opiate-negative urinalysis (3 weeks), and the 6-month ASI drug composite score. These results support the benefit of adding CRA strategies to the treatment of patients who are opiate dependent and on methadone maintenance. Because of insufficient treatment exposure to RP at the 6-month follow-up, the additive effect of RP could not be adequately evaluated; further follow-up will be required.

Smith, J. E., Meyers, R. J., & Delaney, H. D. (1998). The community reinforcement approach with homeless alcohol-dependent individuals. *Journal of Consulting and Clinical Psychology*, 66, 541-548. <https://doi.org/10.1037//0022-006X.66.3.541>

Homeless alcohol-dependent individuals were randomly assigned to receive either a behavioral intervention (i.e., the Community Reinforcement Approach [CRA]) or the standard treatment (STD) at a large day shelter. Ninety-one men and 15 women participated. The majority of participants were White (64%), but both Hispanic (19%) and Native American (13%) individuals were represented as well. Overall, the decline in drinking levels from intake through follow-ups was significant. As predicted, CRA participants significantly outperformed STD group members on drinking measures across the 5 follow-ups, which ranged from 2 months to 1 year after intake. Both conditions showed marked improvement in employment and housing stability.

Miller, W. R., Meyers, R. J., & Hiller-Sturmhofel, S. (1999). The community-reinforcement approach. *Alcohol Research and Health*, 23, 116-121. Available at <https://pubmed.ncbi.nlm.nih.gov/10890805/>

The community-reinforcement approach (CRA) is an alcoholism treatment approach that aims to achieve abstinence by eliminating positive reinforcement for drinking and enhancing positive reinforcement for sobriety. CRA integrates several treatment components, including building the client's motivation to quit drinking, helping the client initiate sobriety, analyzing the client's drinking pattern, increasing positive reinforcement, learning new coping behaviors, and involving significant others in the recovery process. These components can be adjusted to the individual client's needs to achieve optimal treatment outcome. In addition, treatment outcome can be influenced by factors such as therapist style and initial treatment intensity. Several studies have provided evidence for CRA's effectiveness in achieving abstinence. Furthermore, CRA has been successfully integrated with a variety of other treatment approaches, such as family therapy and motivational interviewing, and has been tested in the treatment of other drug abuse.

Wolfe, B. L., & Meyers, R. J. (1999). Cost-effective alcohol treatment: The Community Reinforcement Approach. *Cognitive and Behavioral Practice*, 6, 105-109. [https://doi.org/10.1016/S1077-7229\(99\)80018-2](https://doi.org/10.1016/S1077-7229(99)80018-2)

Recent meta-analyses of the alcohol treatment outcome literature have pointed to a number of therapeutic modalities that consistently surface as generally more effective than others. Yet the gap between science and practice remains largely unaffected by these findings. Among the many possible reasons for this gap, a critical one is the difficulty of synthesizing research findings and methodically

adapting them for private or clinic practice. This paper introduces the Community Reinforcement Approach (CRA), one of the well-supported treatment modalities. CRA is a cost-effective behavioral and social-learning-based treatment protocol. Its innovative, menu-driven approach to substance abuse also integrates several other cost-effective treatments to make a comprehensive package for the clinician. An overview of CRA is provided with the objective of helping the clinician increase his or her cost-effectiveness with alcohol abusing and dependent clients.

Kalman, D., Longbaugh, R., Clifford, P. R., Beattie, M. C., & Maisto, S. A. (2000). Matching alcoholics to treatment: Failure to replicate finding of an earlier study. *Journal of Substance Abuse Treatment, 19*, 183-187. [https://doi.org/10.1016/S0740-5472\(00\)00096-9](https://doi.org/10.1016/S0740-5472(00)00096-9)

The purpose of the present study was to investigate whether sociopathic alcoholics respond differentially to different types of treatment. An earlier study found that alcoholics with antisocial personality disorder had somewhat better outcomes if treated in individually focused versus relationship-focused cognitive-behavioral treatment. The present study was designed to attempt to replicate these findings. One hundred and forty-nine alcoholics (42 of whom scored high on a measure of sociopathy) were randomly assigned to receive either individually focused cognitive-behavioral treatment or a relationship-focused community reinforcement approach. Follow-up evaluations were conducted every 4 months for 2 years. Results failed to support the study hypothesis. Drinking outcomes were similar for sociopathic alcoholics in both treatment conditions. Directions for future research are identified.

Schottenfeld, R. S., Pantalon, M. V., Chaarski, M. C., & Pakes, J. (2000). Community reinforcement approach for combined opioid and cocaine dependence: Patterns of engagement in alternate activities. *Journal of Substance Abuse Treatment, 18*, 225-261. [https://doi.org/10.1016/S0740-5472\(99\)00062-8](https://doi.org/10.1016/S0740-5472(99)00062-8)

We compared outcomes for agonist-maintained patients with combined opioid and cocaine dependence who were treated in an earlier clinical trial with group drug counseling (DC; $n = 57$) or in a current trial with the Community Reinforcement Approach (CRA; $n = 60$). The association between engagement in nondrug-related activities and abstinence was also evaluated. There were no significant differences between the treatments in retention or drug use. The total number of hours and average hours per week engaged in nondrug-related activities was significantly higher for CRA-treated patients who achieved abstinence from opioids, cocaine, or both combined than for those who never achieved abstinence. Although CRA was not more effective overall than DC, the finding that engagement in reinforcing community activities unrelated to drug use (e.g., planned pleasurable events or parenting activities) was associated with abstinence suggests that the planning and reinforcement of specific nondrug-related social, vocational, and recreational activities is a crucial component of CRA.

Azrin, N. H., Donohue, B., Teichner, G. A., Crum, T., Howell, J., & DeCato, L. A. (2001). A controlled evaluation and description of individual-cognitive problem solving and family-behavior therapies in dually-diagnosed conduct-disordered and substance-dependent youth. *Journal of Child and Adolescent Substance Abuse, 11*, 1-43. https://doi.org/10.1300/J029v11n01_01

There is a strong comorbid relationship between conduct and substance disorders in youth. However, there is an absence of controlled studies that have explicitly examined treatment efficacy in this dually-diagnosed population. In the present study, 56 such youth were randomly assigned to receive either individual-cognitive therapy or family-behavioral therapy. Subjects in both intervention groups demonstrated significant improvements in their conduct and reductions in their use of illicit drugs from

pretreatment to post-treatment, and these results were maintained at follow-up. Measures of youth satisfaction with parents, parent satisfaction with youth, and overall mood of these youth demonstrated similar improvements and closely corresponded with improvements in standardized measures of conduct and drug use. No significant differences were found in conduct or reductions of illicit drug use between subjects in the two intervention conditions at post-treatment, or at 6-month follow-up. Study implications are discussed in light of these results.

Higgins, S. T., & Abbott, P. J. (2001). CRA and treatment of cocaine and opioid dependence. In R. J. Meyers & W. R. Miller (Eds.), *International research monographs in the addictions: A Community Reinforcement Approach to addiction treatment* (pp. 123-146). Cambridge University Press. <https://doi.org/10.1017/CBO9780511570117>

The community reinforcement approach (CRA) to treating alcohol and other drug problems is designed to make changes in the client's daily environment, to reduce substance abuse and promote a healthier lifestyle. It is of proven effectiveness, and should be more widely used. This 2001 book presents research on the effectiveness of the CRA for a clinical readership. It includes the original study comparing CRA with traditional treatments of alcohol dependence, and summarizes other trials with alcohol, cocaine and heroin users. The CRA program provides basic guidelines for clinicians, focusing on communication skills, problem-solving and drink-refusal strategies, and addresses the needs of the client as part of a social community. Combining practical advice on such matters with a scientific survey of CRA in use, this book offers a treatment approach to all involved with the support and treatment of those with alcohol and drug problems.

Meyers, R. J., & Godley, M. D. (2001). The community reinforcement approach. In R. J. Meyers, & W. R. Miller (Eds.), *International research monographs in the addictions: A community reinforcement approach to addiction treatment* (pp. 1-7). Cambridge University Press. <https://doi.org/10.1017/CBO9780511570117>

The community reinforcement approach (CRA) to treating alcohol and other drug problems is designed to make changes in the client's daily environment, to reduce substance abuse and promote a healthier lifestyle. It is of proven effectiveness, and should be more widely used. This 2001 book presents research on the effectiveness of the CRA for a clinical readership. It includes the original study comparing CRA with traditional treatments of alcohol dependence, and summarizes other trials with alcohol, cocaine and heroin users. The CRA program provides basic guidelines for clinicians, focusing on communication skills, problem-solving and drink-refusal strategies, and addresses the needs of the client as part of a social community. Combining practical advice on such matters with a scientific survey of CRA in use, this book offers a treatment approach to all involved with the support and treatment of those with alcohol and drug problems.

Miller, W. R., Meyers, R. J., Tonigan, J. S., & Grant, K. A. (2001). Community reinforcement and traditional approaches: Findings of a controlled trial. In R. J. Meyers, & W. R. Miller (Eds.), *International research monographs in the addictions: A Community Reinforcement Approach to Addiction Treatment* (pp. 79-103). Cambridge University Press. <https://doi.org/10.1017/CBO9780511570117>

The community reinforcement approach (CRA) to treating alcohol and other drug problems is designed to make changes in the client's daily environment, to reduce substance abuse and promote a healthier lifestyle. It is of proven effectiveness, and should be more widely used. This 2001 book presents research on the effectiveness of the CRA for a clinical readership. It includes the original study comparing CRA with traditional treatments of alcohol dependence, and summarizes other trials with

alcohol, cocaine and heroin users. The CRA program provides basic guidelines for clinicians, focusing on communication skills, problem-solving and drink-refusal strategies, and addresses the needs of the client as part of a social community. Combining practical advice on such matters with a scientific survey of CRA in use, this book offers a treatment approach to all involved with the support and treatment of those with alcohol and drug problems.

Higgins, S. T., Sigmon, S. C., Wong, C. J., Heil, S. H., Badger, G. J., Donham, R., Dantona, R. L., & Anthony, S. (2003). Community Reinforcement Therapy for cocaine-dependent outpatients. *Archives of General Psychiatry*, 60, 1043-1052. <https://doi.org/10.1001/archpsyc.60.9.1043>

Objective: To examine the contributions of community reinforcement therapy to outcome in the community reinforcement approach (CRA) + vouchers outpatient treatment for cocaine dependence.

Methods: One hundred cocaine-dependent outpatients were randomly assigned to one of 2 treatment conditions: CRA + vouchers or vouchers only. All patients earned incentives in the form of vouchers exchangeable for retail items contingent on cocaine-free urinalysis results during treatment weeks 1 to 12. Incentives were combined with a 24-week course of CRA therapy designed to promote healthy lifestyle changes in the CRA + vouchers condition, while incentives represented the primary treatment in the vouchers-only condition. Patient drug use and psychosocial function were assessed at intake and at least every 3 months for 2 years after treatment entry.

Results: Patients treated with CRA+ vouchers were retained better in treatment, used cocaine at a lower frequency during treatment but not follow-up, and reported a lower frequency of drinking to intoxication during treatment and follow-up compared with patients treated with vouchers only. Patients treated with CRA + vouchers also reported a higher frequency of days of paid employment during treatment and the initial 6 months of follow-up, decreased depressive symptoms during treatment only, and fewer hospitalizations and legal problems during follow-up.

Conclusions: Combining CRA with vouchers had therapeutic effects on substance use and psychosocial functioning during treatment and posttreatment follow-up in cocaine-dependent outpatients, although effects on cocaine use appear to be limited to the treatment period.

Roozen, H. G., Kerkhof, A. J., & Van Den Brink, W. (2003). Experiences with an outpatient relapse program (Community Reinforcement Approach) combined with naltrexone in the treatment of opioid dependence: Effect on addictive behaviors and the predictive value of psychiatric comorbidity. *European Addiction Research*, 9, 53-58. <https://doi.org/10.1159/000068808>

Background: There is increasing interest in naltrexone, an opiate antagonist, in the treatment of opiate addicts. The effects of naltrexone are often compromised by a lack of compliance and drop-out. The effects of this compound are probably more favorable when combined with a psychosocial intervention such as the Community Reinforcement Approach (CRA). **Aim:** To explore the effects of a combination therapy (naltrexone plus CRA treatment) and the predictive value of sociodemographic and psychopathologic characteristics.

Method: Using a before-and-after design, heroine addicts (n = 24) receiving a combined naltrexone plus CRA treatment are compared with a group (n = 20) on methadone maintenance therapy (reference group).

Results: Over a period of 6 months, 58% (14/24) did not relapse, after 1 year at least 55% (12/22) still met the initial goal of continuous abstinence. At baseline, the treatment group and the reference group were similar on nearly all variables except for the number of times clients were arrested. Within the treatment group, a comparison was made between the continuous abstinent and those who relapsed

into frequent opioid use. Differences were significant in the cluster-B personality disorders and in polydrug users.

Conclusion: The combination of naltrexone plus intensive CRA in an outpatient setting appears to be promising. A high score on cluster-B and polydrug use is associated with relapse.

Miller, W. R., Zweben, J., & Johnson, W. R. (2005). Evidence-based treatment: Why, what, where, when, and how? *Journal of Substance Abuse Treatment*, 29(4), 267-276. <https://doi.org/10.1016/j.jsat.2005.08.003>

Research and clinical perspectives are blended in this commentary on the rapidly emerging requirement for evidence-based treatment (EBT) in substance abuse programs. Although, historically, it has not been a standard of care in behavioral health, there are sound scientific, ethical, and compassionate reasons to learn and deliver an EBT as it becomes available. This article explores a series of issues, including the following: (1) *Why* should EBTs be used in substance abuse treatment? (2) *What* kinds of treatment are EBTs, and how are they determined? (3) *Where* can EBTs be implemented—at what levels of service delivery? (4) *When* should EBTs be used? and (5) *How* do clinicians learn EBTs? Potential pitfalls in implementing EBTs are also considered.

Roozen, H. G., Van Beers, S. E. C., Weevers, H. J. A., Breteler, M. H. M., Willemsen, M. C., Postmus, P. E., & Kerkhof, J. F. M. (2006). Effects on smoking cessation: Naltrexone combined with a cognitive behavioral treatment based on the Community Reinforcement Approach. *Substance Use and Misuse*, 41, 45-60. <https://doi.org/10.1080/10826080500318665>

A promising option in substance abuse treatment is the Community Reinforcement Approach (CRA). The opioid antagonist naltrexone (NTX) may work in combination with nicotine replacement therapy (NRT) to block the effects of smoking stimuli in abstinent smokers. Effects of lower doses than 50 mg/dd. have not been reported. A study was conducted in Amsterdam in 2000/2001 with the objective to explore the effects of the combination NTX (25/50-mg dd.), NRT, and CRA in terms of craving and abstinence. In a randomized open label, 2 × 2 between subjects design, 25 recovered spontaneous pneumothorax (SP) participants received 8 weeks of treatment. Due to side effects, only 3 participants were compliant in the 50-mg NTX condition. Craving significantly declined between each measurement and there was a significant interaction between decline in craving and craving measured at baseline. The abstinence rate in the CRA group was nearly double that in the non-psychosocial therapy group (46% vs. 25%; NS) at 3 months follow-up after treatment.

De Jong, C. A. J., Roozen, H. G., van Rossum, L. G. M., Krabbe, P. F. M., & Kerkhof, A. J. F. M. (2007). High abstinence rates in heroin addicts by a new comprehensive treatment approach. *American Journal on Addictions*, 16, 124-130. <https://doi.org/10.1080/10550490601184472>

In this multi-center, naturalistic study, the effectiveness of naltrexone maintenance combined with the Community Reinforcement Approach (CRA) was investigated in detoxified, opioid-dependent patients (N = 272). Patients were recruited from methadone maintenance programs. With intention-to-treat analysis, 10 months of treatment yielded abstinence rates of 28% and 32% at 10 and 16 months after detoxification. The cumulative abstinence rate at 16 months was 24%. Quality of life, craving, general psychopathology, use of other psychoactive substances, and addiction severity of the abstinent group significantly improved when compared to the relapsed group. This abstinence-oriented approach appears to be a feasible goal, and remains an important option next to long-term methadone maintenance in the management of opioid dependence.

Smith, J. E., Lundy, S. L., & Gianini, L. (2007). *Community Reinforcement Approach (CRA) and Adolescent Community Reinforcement Approach (A-CRA) therapist coding manual*. Chestnut Health Systems.

The Adolescent Community Reinforcement Approach: A Clinical Guide to Treating Substance Use Disorders ([Available for purchase only on Amazon.](#))

- Outlines all of the individual procedures for adolescents, transition age youth, and their families
- Uses an individual, flexible, behavioral approach
- Provides detailed instruction on how to help the client learn more effective coping skills
- This updated version includes:
 - Chapters on Couples Relationship Skills, Medication Adherence and Monitoring, Sobriety Sampling, and Systematic Encouragement (procedures that have evolved to be part of the [A-CRA training and certification](#), but were not previously included in the treatment manual)
 - Expanded procedure examples
 - Detailed instructions for each procedure which map directly on to the therapist fidelity coding manual (Smith, Lundy, & Gianini, 2007)
 - Guidance on how to adapt several A-CRA procedures for group sessions
 - Information about the implementation of A-CRA in various settings, with different cultures and groups, with clients who have co-occurring mental health or criminal justice problems

Bickel, W. K., Marsch, L. A., Buchhalter, A. R., & Badger, G. J. (2008). Computerized behavior therapy for opioid-dependent outpatients: A randomized controlled trial. *Experimental and Clinical Psychopharmacology*, 16(2), 132-143. <https://doi.org/10.1037/1064-1297.16.2.132>

The authors evaluated the efficacy of an interactive, computer-based behavioral therapy intervention, grounded in the community reinforcement approach (CRA) plus voucher-based contingency management model of behavior therapy. Our randomized, controlled trial was conducted at a university-based research clinic. Participants comprised 135 volunteer adult outpatients who met DSM-IV criteria for opioid dependence. All participants received maintenance treatment with buprenorphine and were randomly assigned to one of three treatments: (a) therapist-delivered CRA treatment with vouchers, (b) computer-assisted CRA treatment with vouchers, or (c) standard treatment. The therapist-delivered and computer-assisted CRA plus vouchers interventions produced comparable weeks of continuous opioid and cocaine abstinence ($M = 7.98$ and 7.78 , respectively) and significantly greater weeks of abstinence than the standard intervention ($M = 4.69$; $p < .05$), yet participants in the computer-assisted CRA condition had over 80% of their intervention delivered by an interactive computer program. The comparable efficacy obtained with computer-assisted and therapist-delivered therapy may enable more widespread dissemination of the evidence-based CRA plus vouchers intervention in a manner that is cost-effective and ensures treatment fidelity.

DeFuentes-Merillas, L., & De Jong, C. A. (2008). *Is Belonen Effectief? Community Reinforcement Approach + Vouchers: Resultaten van een Gerandomiseerde, MultiCentre Studie*. NISPA.

The Community Reinforcement Approach (CRA), originally developed for individuals with alcohol use disorders, has been successfully employed to treat a variety of substance use disorders for more than 35 years. Based on operant conditioning, CRA helps people rearrange their lifestyles so that healthy, drug-free living becomes rewarding and thereby competes with alcohol and drug use. Consequently, practitioners encourage clients to become progressively involved in alternative non-

substance-related pleasant social activities, and to work on enhancing the enjoyment they receive within the “community” of their family and job. Additionally, in the past 10–15 years, researchers have obtained scientific evidence for two off-shoots of CRA that are based on the same operant mechanism. The first variant is Adolescent Community Reinforcement Approach (A-CRA), which targets adolescents with substance use problems and their caregivers. The second approach, Community Reinforcement and Family Training (CRAFT), works through family members to engage treatment-refusing individuals into treatment. An overview of these treatments and their scientific backing is presented.

Secades-Villa, R., Garcia-Rodriguez, O., Higgins, S. T., Fernandez-Hermida, J. R., & Carballo, J. L. (2008). Community reinforcement approach plus vouchers for cocaine dependence in a community setting in Spain: Six-month outcomes. *Journal of Substance Abuse Treatment, 34*, 202-207. <https://doi.org/10.1016/j.jsat.2007.03.006>

The aim of this study was to assess the efficacy of the community reinforcement approach (CRA) plus vouchers treatment in achieving cocaine abstinence and treatment retention among patients enrolled in an outpatient program for cocaine dependence in Spain. Forty-three patients were randomly assigned to one of two treatment conditions in a community setting: CRA plus vouchers or standard care. Of the patients who received the CRA plus vouchers program, 73% completed 24 weeks of treatment, as compared with 42% of the patients who received standard care who did. In the CRA plus vouchers group, 40% of the patients achieved 24 weeks of continuous cocaine abstinence, as compared with 21% of the patients in the standard care group who did. These results support the effectiveness and generalizability of the CRA plus vouchers treatment in a community setting outside of the United States. Further follow-up is required to confirm the long-term maintenance of the results.

Garcia-Rodriguez, O., Secades-Villa, R., Higgins, S. T., Fernandez-Hermida, J. R., Carballo, J. L., Errasti Perez, J. M., & Diaz, S. A. (2009). Effects of voucher-based intervention on abstinence and retention in an outpatient treatment for cocaine addiction: A randomized controlled trial. *Experimental and Clinical Psychopharmacology, 17*(3), 131-138. <https://doi.org/10.1037/a0015963>

The aims of this study were to assess whether voucher magnitude improved cocaine abstinence and retention in an outpatient treatment for cocaine dependence, and to determine the effectiveness of a contingency management intervention in a European cultural context. A randomized controlled trial was conducted in which 96 participants who were randomly assigned to 1 of 3 treatment conditions in a community setting: standard outpatient treatment, community reinforcement approach (CRA) plus low monetary value vouchers (each point earned was equivalent to 0.125€, US\$ 0.18), and CRA plus high monetary value vouchers (each point was worth 0.25€, US\$ 0.36). In the standard treatment group, mean percentage of cocaine-negative samples was 88.45%, versus 96.09% in the CRA plus low-vouchers group, and 97.07% in the CRA plus high-vouchers group. Retention rate at 6 months was 36.5% in the standard treatment group, 53.3% in the CRA plus low-vouchers group, and 69.0% in the CRA plus high-vouchers group. The CRA plus vouchers groups obtained better results than the standard program. This study showed that treating cocaine addiction by combining CRA with vouchers was more effective than standard treatment in community outpatient programs in Spain.

Meyers, R. J., Roozen, H. G., & Smith, J. E. (2011). The community reinforcement approach: An update of the evidence. *Alcohol Research and Health, 33*, 380-388. Available at <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3860533>

The Community Reinforcement Approach (CRA), originally developed for individuals with alcohol use disorders, has been successfully employed to treat a variety of substance use disorders for more than 35 years. Based on operant conditioning, CRA helps people rearrange their lifestyles so that healthy, drug-free living becomes rewarding and thereby competes with alcohol and drug use. Consequently, practitioners encourage clients to become progressively involved in alternative non-substance-related pleasant social activities, and to work on enhancing the enjoyment they receive within the “community” of their family and job. Additionally, in the past 10–15 years, researchers have obtained scientific evidence for two off-shoots of CRA that are based on the same operant mechanism. The first variant is Adolescent Community Reinforcement Approach (A-CRA), which targets adolescents with substance use problems and their caregivers. The second approach, Community Reinforcement and Family Training (CRAFT), works through family members to engage treatment-refusing individuals into treatment. An overview of these treatments and their scientific backing is presented.

Fazzino, T. L., Bjorlie, K., & Lejuez, C. W. (2019). A systematic review of reinforcement-based interventions for substance use: Efficacy, mechanisms of action, and moderators of treatment effects. *Journal of Substance Abuse Treatment*, 104, 83-96. <https://doi.org/10.1016/j.jsat.2019.06.016>

Background

Brief reinforcement-based psychosocial interventions such as behavioral activation (BA) and behavioral economics (BE) address imbalances in the reinforcement system that are strongly implicated in substance use. The present study reviewed a growing body of intervention studies that tested the efficacy of BA or BE in addressing substance use outcomes. The study also reviewed a smaller body of evidence exploring mechanisms of action and moderators of treatment efficacy for substance use outcomes.

Method

A comprehensive literature search of four databases was conducted to identify studies that tested either BA or BE interventions targeting outcomes and/or mechanisms of action specific to substance use. The search yielded 12 studies that met these criteria. Ten studies reported main outcomes of BA/BE interventions targeting substance use outcomes ($N = 7$ BA; $N = 3$ BE). Two additional studies addressed mechanisms of change by conducting secondary analyses of data from one of the other ten studies. Eight of the twelve studies tested mechanisms of change and/or moderators related to substance use.

Results

Among all ten outcome studies, 100% provided evidence suggesting efficacy of BA/BE in targeting substance use and/or use-related problems. In 90% (9/10) of studies, the BA/BE intervention condition evidenced significantly higher abstinence rates compared to controls and/or significant decreases in substance use from baseline. Most studies that assessed substance use-related problems (83%; 5/6) reported significant decreases in use-related problems. The majority of studies (80%; 8/10) reported medium to large effect sizes. The pattern of findings was similar for BA and BE interventions. Eight studies assessed change in mechanism of action and 38% (3/8) identified mechanisms of action, however, only two conducted a formal test of whether this variable mediated the relationship between condition and outcome. Two studies tested and identified significant moderators of treatment efficacy.

Conclusions

Preliminary evidence supports the efficacy of reinforcement-based interventions in targeting substance use outcomes. The mechanisms driving BA/BE efficacy and factors that may moderate treatment effects are not sufficiently clear from the studies available and require further examination, although existing data does suggest promise and provides clues for next steps.

Marino, L. A., Campbell, A. N. C., Pavlicova, M., Hu, M., & Nunes, E. V. (2019). Social functioning outcomes among individuals with substance use disorders receiving internet-delivered community reinforcement approach. *Substance Use and Misuse*, 54(7), 1067-1074. <https://doi.org/10.1080/10826084.2018.1528458>

Background: The community reinforcement approach (CRA) is an evidence-based practice for the treatment of substance use disorders and achieving and maintaining abstinence, but few studies have systematically explored the effect of CRA on secondary, yet also important outcomes, such as social functioning. **Objectives:** The purpose of this study was to examine whether an internet-based version of the CRA plus contingency management is associated with improved social functioning of individuals seeking substance use disorder treatment in a multi-site clinical effectiveness trial. **Methods:** Social functioning was measured using the 54-item Social Adjustment Scale assessing role performance in six domains (work, social and leisure activities, extended family relationships, marital relationship, parenting, and immediate family). Generalized linear mixed models tested the effects of treatment, time, sex, baseline abstinence, baseline social functioning and baseline psychological distress on overall social functioning and across social functioning subscales at the end of the 12-week treatment phase and 3 and 6 months post treatment. **Results:** Results showed no significant association between treatment and total social functioning score or any subscale scores. Being male was significantly associated with better social functioning overall at the end of treatment ($p = .024$). Higher levels of psychological distress at baseline predicted significantly worse social functioning at the end of treatment overall ($p = .037$). **Conclusions:** The addition of an internet-based version of the CRA was not associated with greater improvements in social functioning compared to standard outpatient care after 12 weeks of treatment. Implications for internet-delivered CRA are discussed.

Schmidt, L. K., Andersen, K., Nielsen, A. S., & Moyers, T. B. (2019). Lessons learned from measuring fidelity with the Motivational Interviewing Treatment Integrity code (MITI 4). *Journal of Substance Abuse Treatment*, 97, 59-67. <https://doi.org/10.1016/j.jsat.2018.11.004>

Background and aims

The Motivational Interviewing Treatment Integrity code (MITI) measures fidelity to, and the quality of, Motivational Interviewing (MI), and can also be used when MI is combined with other treatment methods. The current study presents a fidelity measurement with the MITI 4.2.1, in both Motivational Enhancement Therapy sessions and the combined Community Reinforcement Approach-Senior (CRAS).

Method

The MITI 4.2.1 was used to evaluate treatment sessions provided in the Elderly Study, a multi-national randomized trial evaluating treatment for alcohol use disorders in the elderly. Following expert recommendations, training was conducted at two international sites as well as at the Danish site. Twenty percent of the sessions at the Danish study site were rated. Twelve percent were multiply rated by all raters. Interrater reliability was assessed by the Intraclass Correlations Coefficient (ICC).

Results

Mean ICC of the 52 sessions rated by all raters was 0.78 (95% CI: 0.70; 0.86). The rare measures *confront* and *emphasize autonomy*, and the global measure *softening sustain talk* only reached fair levels of ICC, while the remaining measures were good or excellent. In the sessions of MI combined with other treatment approaches in the CRAS, the MITI 4.2.1 has a similar reliability as in MET sessions only, except for the measure *persuade with permission*.

Conclusion

The MITI 4.2.1 is a reliable instrument for measuring fidelity to Motivational Interviewing elements, also in the context of Community Reinforcement Approach Senior. However, in *softening sustain talk*, the rare measures, and *persuade with permission* it has proved more difficult to reach high levels of interrater reliability.

Andersen, K., Behrendt, S., Bilberg, R., Bogenschutz, M. P., Braun, B., Buehringer, G., Ekstrøm, C. T., Mejlidal, A., Petersen, A. H., & Nielsen, A. S. (2020). Evaluation of adding the community reinforcement approach to motivational enhancement therapy for adults aged 60 years and older with DSM-5 alcohol use disorder: A randomized controlled trial. *Addiction*, 115(1), 69-81. <https://doi.org/10.1111/add.14795>

Aim

To examine whether adding the Community Reinforcement Approach for Seniors (CRA-S) to Motivational Enhancement Therapy (MET) increases the probability of treatment success in people aged ≥ 60 years with alcohol use disorder (AUD).

Design

A single blind multi-centre multi-national randomized (1 : 1) controlled trial.

Setting

Out-patient settings (municipal alcohol treatment clinics in Denmark, specialized addiction care facilities in Germany and a primary care clinic in the United States).

Participants

Between January 2014 and May 2016, 693 patients aged 60+ years and fulfilling DSM-5 criteria for AUD participated in comparing MET ($n = 351$) and MET + CRA-S ($n = 342$).

Intervention and comparator

MET (comparator) included four manualized sessions aimed at increasing motivation to change and establishing a change plan. CRA-S (intervention) consisted of up to eight further optional, manualized sessions aimed at helping patients to implement their change plan. CRA-S included a specially designed module on coping with age and age-related problems.

Measurements

The primary outcome was either total alcohol abstinence or an expected blood alcohol concentration of $\leq 0.05\%$ during the 30 days preceding the 26 weeks follow-up (defined as success) or blood alcohol concentration of $> 0.05\%$ during the follow-up period (defined as failure). This was assessed by self-report using the Form 90 instrument. The main analysis involved complete cases.

Findings

The follow-up rate at 26 weeks was 76.2% (76.9% in the MET group and 76.0% in the MET + CRA-S group). The success rate in the MET group was 48.9% [95% confidence interval (CI) = 42.9–54.9%] versus 52.3% (95% CI = 46.2–58.3%) in the MET + CRA-S group. The odds of success in the two conditions did not differ (odds ratio = 1.22, 95% CI = 0.86–1.75, $P = 0.26$, Bayes factor = 0.10). Sensitivity analyses involving alternative approaches to missing values did not change the results.

Conclusions

In older adults with an alcohol use disorder diagnosis, adding the 'community reinforcement approach for seniors' intervention to brief out-patient motivational enhancement therapy treatment did not improve drinking outcome.

Calabria, B., Shakeshaft, A. P., Clifford, A., Stone, C., Clare, P. J., Allan, J., & Bliss, D. (2020). Reducing drug and alcohol use and improving well-being for Indigenous and non-Indigenous Australians using the Community Reinforcement Approach: A feasibility and acceptability study. *International Journal of Psychology*, 55, 88-95. <https://doi.org/10.1002/ijop.12603>

There is a lack of evidence of effective and appropriate drug and alcohol treatment for Aboriginal and Torres Strait Islander peoples. This paper contributes to addressing the evidence gap by examining

the feasibility and acceptability and conducting a pre/post-evaluation of the Aboriginal-adapted Community Reinforcement Approach (CRA) delivered in New South Wales, Australia. Aboriginal and non-Aboriginal clients ($n = 55$) received tailored CRA delivery between March and November 2013. Compared to the original US version, tailored CRA had reduced technical language, reduced number of treatment sessions, and the addition of group delivery option. An Australian training manual with local case studies was developed. Alcohol, Smoking and Substance Involvement Test (ASSIST), Kessler-5 (K-5) and the Growth Empowerment Measure were used. 58% of participants were followed-up at 3 months. Tailored CRA was feasible to deliver in a rural, community-based health setting, and rated by clients as highly effective and acceptable. CRA was associated with statistically significant reductions in the use of alcohol, tobacco, cannabis, amphetamine and over the counter medication, and levels of psychological distress, and an increase in levels of empowerment for Aboriginal and non-Aboriginal clients. This study provides evidence for the feasibility and acceptability of an Aboriginal-adapted psychological intervention addressing drug, alcohol and mental health outcomes.

Roozen, H. G., & Smith, J. E. (2021). CRA and CRAFT: Behavioral treatments for both motivated and unmotivated substance-abusing individuals and their family members. In N. el-Guebaly, G. Carra, M. Galanter, & A. M. Baldacchino (Eds.), *Textbook of addiction treatment* (pp. 475-192). Springer, Cham. https://doi.org/10.1007/978-3-030-36391-8_33

The Community Reinforcement Approach (CRA) is a behavioral treatment for individuals with substance-use problems. It is predicated upon the belief that a non-drinking/non-using lifestyle must be experienced by individuals as rewarding in order for them to choose it consistently over substance use. As part of CRA, the client's "community" (e.g., family, friends, colleagues, organizations, work) is explored to find new areas of potential reinforcement that can compete with substance use. CRA therapists work with clients to decide on which goals they want to pursue in life, and they then teach these clients the skills required to achieve these goals. An adaptation of CRA is the Adolescent Community Reinforcement Approach (A-CRA), which is geared specifically toward the treatment of adolescents, young adults, and their parents or caregivers. Community Reinforcement and Family Training (CRAFT) is a treatment for the family members or close friends (Concerned Significant Others, CSOs) of unmotivated, treatment-refusing substance abusers (Identified Patients, IPs). CRAFT therapists work with CSOs in an attempt to change the home environment of the unmotivated IPs such that a healthy and enjoyable lifestyle is supported over one dominated by substance use. CRAFT goals include getting IPs to seek treatment and reducing IP substance use, and also having CSOs increase their own happiness regardless. CRA, A-CRA, and CRAFT have solid empirical support, and each has been used successfully with diverse populations and various drugs of choice.

Venner, K. L., Serier, K., Sarafin, R., Greenfield, B. L., Hirschak, K., Smith, J. E., & Witkiewitz, K. (2021). Culturally tailored evidence-based substance use disorder treatments are efficacious with an American Indian Southwest tribe: An open-label pilot-feasibility randomized controlled trial. *Addiction*, 116(4), 949-960. <https://doi.org/10.1111/add.15191>

Background and Aims

Many evidence-based treatments (EBTs) for substance use disorder (SUD) exist, yet few are tailored to Indigenous patients. This trial tested the efficacy of a culturally tailored EBT that combined Motivational Interviewing and the Community Reinforcement Approach (MICRA) versus treatment as usual (TAU).

Design

A mixed efficacy/effectiveness randomized controlled trial of MICRA ($n = 38$) and TAU ($n = 41$) using a parallel design with follow-up assessments at 4-, 8-, and 12- months post baseline.

Setting

United States, reservation-based outpatient, addiction specialty care treatment program.

Participants

79 (68% male) American Indian and Alaska Native (AI/AN) Tribal members meeting criteria for SUD and seeking SUD treatment.

Interventions

MICRA (individual therapy sessions beginning with MI for 2–3 sessions) compared with TAU (individual and group counseling sessions in a didactic style with Twelve-Step philosophy and elements of relapse prevention).

Measures

Demographics, percent days abstinent (PDA; the primary outcome at 12 months assessed by Form 90D), Inventory of Drug Use Consequences, Alcohol and Drug Use Self-Efficacy Scale, Native American Spirituality Scale, and SCID-DSM-IV-TR.

Findings

There was no evidence for the benefit of MICRA over TAU (MICRA PDA = 72.63%, TAU = 73.62%, treatment effect: $B = -4.04$ (SE = 5.47); 95% CI = $-14.941, 6.866$; $BF = 3.44$) in the primary outcome. Both groups showed improvements in PDA, SUD severity, and negative consequences from baseline to the 12-month follow-up. Neither self-efficacy nor spirituality were significant mediators of MICRA.

Conclusions

There were no treatment group differences between culturally tailored evidence-based treatments for substance use disorder and treatment as usual in this randomized controlled trial with American Indian and Alaska Native participants. Nonetheless, participants improved over time on several substance-related outcomes.

Adolescent Community Reinforcement Approach (A-CRA)

Azrin, N. H., Donohue, B., Besalel, V. A., Kogan, E. S., & Acierno, R. (1994). Youth drug treatment: A controlled outcome study. *Journal of Child and Adolescent Substance Abuse*, 3, 1-16. https://doi.org/10.1300/J029v03n03_01

Twenty-six youth received six months of treatment (mean of 15 sessions) after random assignment to either a supportive counseling program or to a newly designed behavioral treatment. The behavioral program included several procedures to restructure family and peer relations and to control urges. Drug use was measured by urinalysis, supplemented by family report and self-report. The results showed that during the last month, 9% of youth receiving supportive counseling were abstinent vs. 73% of youth receiving the new behavioral treatment. A greater reduction of drug use was also apparent when measured in terms of urinalysis data alone, days per month of drug use, or overall number of months of abstinence. Improved functioning of youths in the behavioral program was evidenced by significantly greater school/work attendance, improved youth- and parent-relationship satisfaction ratings, improved conduct ratings, decreased depression, and decreased frequency of alcohol use as compared to youth in the supportive counseling program.

Godley, S. H., Meyers, R. J., Smith, J. E., Godley, M. D., Titus, J. C., Karvinen, T., Dent, G., Passetti, L. L., & Kelberg, P. (2001). *The Adolescent Community Reinforcement Approach (ACRA) for adolescent cannabis users* (DHHS Publication No. (SMA) 01-3489, Cannabis Youth Treatment (CYT) Manual Series, Volume 4). Center for Substance Abuse Treatment, Substance Abuse and Mental Health Services Administration. Available at https://www.chestnut.org/resources/aa707cb4-976c-41c2-b503-f7e059a4246b/acra_cyt_v4.pdf?trackid=acra_cyt_v4.pdf

This publication was written for therapists and their supervisors who may want to implement the adolescent community reinforcement approach intervention, which was one of the five interventions tested by the Center for Substance Abuse Treatment's (CSAT's) Cannabis Youth Treatment (CYT) Project. The CYT Project provided funding to support a study that tested the effectiveness of five interventions designed to reduce or eliminate marijuana use and associated problems in adolescents.

Godley, S. H., White, W. L., Diamond, G. S., Passetti, L. L., & Titus, J. C. (2001). Therapists' reactions to manual-guided therapies for the treatment of adolescent marijuana users. *Clinical Psychology: Science and Practice*, 8, 405-417. <https://doi.org/10.1093/clipsy.8.4.405>

Treatment researchers are increasingly advocating the use of evidence-based treatment manuals. Here the authors describe therapist reactions to the use of manual-guided therapies in a multisite, randomized field experiment that evaluated five outpatient treatment protocols for adolescents who abuse or are dependent on marijuana. Data are summarized from qualitative interviews with 16 therapists and 3 case managers who provided the treatments. All of those interviewed felt that the manuals provided a structure to their therapeutic work, and the majority felt they were able to address individual patient needs. Therapists' reactions did vary depending on the type of manual they used (e.g., session-based, principle-based, or procedure-based). Recommendations for the development and use of manual-guided therapies to improve adolescent substance abuse treatment are discussed.

Dennis, M. L., Titus, J. C., Diamond, G. S., Donaldson, J., Godley, S. H., Tims, F. M., Webb, C., Kaminer, Y., Babor, T., Roebuck, M. C., Godley, M. D., Hamilton, N., Liddle, H. A., Scott, C. K., & CYT Steering Committee. (2002). The Cannabis Youth Treatment (CYT) experiment: Rationale, study design, and analysis plans. *Addiction*, 97, S16-S34. <https://doi.org/10.1046/j.1360-0443.97.s01.2.x>

Aims This paper provides a description of the rationale, study design, treatments and assessment procedures used in the Cannabis Youth Treatment (CYT) experiment.

Design CYT was designed to (a) test the relative effectiveness, cost and benefit–cost of five promising treatment interventions under field conditions and (b) provide evidence based manual-guided models of these interventions to the treatment field.

Setting The study involved two community-based treatment programs and two major medical centers.

Participants Participants were 600 adolescents recruited from the regular intake who were between the ages of 12 and 18, had used marijuana in the past 90 days, and met one or more criteria of dependence or abuse.

Interventions Participants were randomly assigned to one of five interventions: Motivational Enhancement Therapy (MET), Cognitive Behavioral Therapy (CBT), Family Support Network (FSN), Adolescent Community Reinforcement Approach (ACRA), or Multidimensional Family Therapy (MDFT).

Measurements Self-report data were collected at intake, 3, 6, 9 and 12 months post discharge using the Global Appraisal of Individual Needs (GAIN), as well as several supplemental self-reports, collateral reports, urine testing, and service logs.

Findings This paper reports on the study's implementation including the psychometric properties of the measures (alphas over 0.8), validity of self-report (kappa over 0.6), high rates of treatment completion (81% completed two or more months), and high rates of follow-up (over 94% per wave).

Conclusions The feasibility of implementing the CYT manual-guided treatment and quality assurance model in community-based adolescent treatment programs is discussed.

Diamond, G. S., Godley, S. H., Liddle, H. A., Sampl, S., Webb, C., Tims, F. M., & Meyers, R. J. (2002). Five outpatient treatment models for adolescent marijuana use: A description of the Cannabis Youth Treatment interventions. *Addiction*, 97, S70-S83. <https://doi.org/10.1046/j.1360-0443.97.s01.3.x>

The five manual-guided treatment models tested in the Cannabis Youth Treatment study funded by the Center for Substance Abuse Treatment are described. The five models include (a) a 6-week intervention consisting of two sessions of individual motivational enhancement therapy plus three sessions of group cognitive behavioral therapy (MET/CBT5); (b) a 12-week intervention consisting of two sessions of motivational enhancement therapy plus 10 sessions of group cognitive behavioral therapy treatment (MET/CBT12); (c) a 12-week intervention consisting of MET/CBT12 plus the family support network (FSN), a multi-component intervention that includes parent education, family therapy and case management; (d) a 12-week intervention based on the adolescent community reinforcement approach (ACRA), an individual behavioral treatment approach designed to help adolescents and their parents reshape their environment and learn new skills; and (e) multi-dimensional family therapy (MDFT), a multi-faceted, developmentally and contextually oriented family-based model targeting individual, family and social systems. For each model, we describe the treatment background and/or its empirical support, its theoretical underpinnings, its goals and proposed treatment mechanism and the structure and content of each treatment. Procedures used for maintaining treatment fidelity and monitoring quality assurance are also described. These interventions represent the first readily available, manual-guided interventions to be evaluated in a large randomized field study for this population. Consequently, these manuals have the potential to advance treatment and research for adolescents with substance use disorders.

French, M. T., Roebuck, M. C., Dennis, M. L., Diamond, G. S., Godley, S. H., Tims, F. M., Webb, C., & Herrell, J. M. (2002). The economic cost of outpatient marijuana treatment for adolescents: Findings from a multisite experiment. *Addiction*, 97, S84-S97. <https://doi.org/10.1046/j.1360-0443.97.s01.4.x>

Aims Despite recent advances in the economic evaluation of adult substance abuse treatment, information and basic research is lacking on the cost of adolescent substance abuse treatment. The present study conducted an economic cost analysis of several outpatient adolescent treatment approaches.

Design The Cannabis Youth Treatment (CYT) study evaluated five structured treatments for cannabis-using adolescents. One of the approaches was implemented by all of the four geographically and institutionally diverse treatment facilities collaborating in CYT; each of the other four approaches was implemented in two of the sites. Using the Drug Abuse Treatment Cost Analysis Program (DATCAP), the economic cost of each site-specific treatment was determined.

Findings The average economic costs of the five types of outpatient treatments ranged from \$837 to \$3334 per episode, and varied by both direct factors (e.g. hours of treatment, treatment retention) and indirect factors (e.g. cost of living, staff level, case-load variation).

Conclusions These adolescent treatment cost estimates are examined in terms of their calculation, variability by condition, variability by site within condition and comparability with previous DATCAP results from outpatient drug-free programs for adults. Future research will integrate treatment outcomes and costs to complete cost-effectiveness and benefit–cost analyses of the five therapies.

Dennis, M. L., Godley, S. H., Diamond, G. S., Tims, F. M., Babor, T., Donaldson, J., Liddle, H. A., Titus, J. C., Kaminer, Y., Webb, C., Hamilton, N., & Funk, R. R. (2004). The Cannabis Youth Treatment (CYT) study: Main findings from two randomized trials. *Journal of Substance Abuse Treatment*, 27, 197-213. <https://doi.org/10.1016/j.jsat.2003.09.005>

This article presents the main outcome findings from two inter-related randomized trials conducted at four sites to evaluate the effectiveness and cost-effectiveness of five short-term outpatient interventions for adolescents with cannabis use disorders. Trial 1 compared five sessions of Motivational Enhancement Therapy plus Cognitive Behavioral Therapy (MET/CBT) with a 12-session regimen of MET and CBT (MET/CBT12) and another that included family education and therapy components (Family Support Network [FSN]). Trial II compared the five-session MET/CBT with the Adolescent Community Reinforcement Approach (ACRA) and Multidimensional Family Therapy (MDFT). The 600 cannabis users were predominately white males, aged 15–16. All five CYT interventions demonstrated significant pre-post treatment during the 12 months after random assignment to a treatment intervention in the two main outcomes: days of abstinence and the percent of adolescents in recovery (no use or abuse/dependence problems and living in the community). Overall, the clinical outcomes were very similar across sites and conditions; however, after controlling for initial severity, the most cost-effective interventions were MET/CBT5 and MET/CBT12 in Trial 1 and ACRA and MET/CBT5 in Trial 2. It is possible that the similar results occurred because outcomes were driven more by general factors beyond the treatment approaches tested in this study; or because of shared, general helping factors across therapies that help these teens attend to and decrease their connection to cannabis and alcohol.

Godley, S. H., Dennis, M. L., Godley, M. D., & Funk, R. R. (2004). Thirty-month relapse trajectory cluster groups among adolescents discharged from outpatient treatment. *Addiction*, 99(Suppl. 2), 129-139. <https://doi.org/10.1111/j.1360-0443.2004.00860.x>

Aims To identify adolescent relapse trajectory groups following discharge from out-patient substance abuse treatment.

Design, setting and participants Adolescents aged 12–18, who were assigned randomly to one of five out-patient interventions ($n = 563$) in four United States communities and followed-up 3, 6, 9, 12 and 30 months post-intake.

Outcome measures Self-report measures of days using any alcohol or other drugs (AOD), days of alcohol use, days of cannabis use, days of heavy use, days of crack/cocaine use, days of heroin/opiate use, days AOD use interfered with responsibilities and days in a controlled environment.

Findings Adolescents can be grouped empirically into five relapse trajectories over 30 months following out-patient treatment: (a) low AOD use with limited days in a controlled environment; (b) low AOD use with high days in a controlled environment; (c) moderate/decreasing AOD use; (d) increasing AOD use; and (e) consistently high AOD use.

Conclusions There was considerable heterogeneity in the relapse trajectories, varying by the initial response to treatment, the stability (versus increase/decrease) of the response and an interaction with time in a controlled environment. Cannabis and alcohol were the two main substances involved, although the two groups with the poorest trajectories had increasing levels of cocaine, opiate and other substance use at the 30-month follow-up. This study demonstrates the chronicity of substance use even among a subgroup of adolescents and the importance of studying more complex longitudinal patterns of recovery.

Diamond, G. S., Leckrone, J., Dennis, M. L., & Godley, S. H. (2006). The Cannabis Youth Treatment study: The treatment models and preliminary findings. In R. Roffman, & R. Stephens (Eds.), *Cannabis dependence: Its nature, consequences, and treatment* (pp. 247-274). Cambridge University Press. Available at <http://www.cambridge.org/us/academic/subjects/medicine/mental-health-psychiatry-and-clinical-psychology/cannabis-dependence-its-nature-consequences-and-treatment?format=HB>

Cannabis dependence is controversial. What are the health and behavioral risks of becoming cannabis-dependent? What counseling approaches have been tested with adults and adolescents, and how effective are they? What are the arguments for legalization, regulation, or prohibition? Looking back and toward the future, what do we know and what do we need to learn? This state-of-the-science review sets out to answer all such questions, beginning with an historical examination and moving into diagnosis, classification, epidemiology, public health, policy, issues relating to regulation and prohibition, and evidence-based interventions.

Garner, B. R., Godley, M. D., Funk, R. R., Dennis, M. L., & Godley, S. H. (2007). The impact of continuing care adherence on environmental risks, substance use and substance-related problems following adolescent residential treatment. *Psychology of Addictive Behaviors*, 21(4), 488-497. <https://doi.org/10.1037/0893-164X.21.4.488>

The effectiveness of adolescent treatment to reduce substance use has been demonstrated by a number of different literature reviews, yet longer term outcome studies have suggested that continued alcohol and other drug use is common. Participation in continuing care services and reductions in environmental risk factors (e.g., peer substance use or alcohol or drug use in the home) have both been found to be associated with improved posttreatment substance use. The authors conducted Path analysis to examine the experimental direct effect of the Assertive Continuing Care Protocol (S. H. Godley, M. D. Godley, & M. L. Dennis, 2001) on general continuing care adherence following residential treatment and the protocol's indirect effect (via general continuing care adherence) on social and

environmental risk factors, as well as subsequent substance use and substance-related problems. Supporting previous findings, the final model indicates that greater adherence to continuing care is associated with reductions in environmental risk, which in turn is associated with reduced adolescent substance use and substance-related problems 9 months after discharge from residential treatment.

Slesnick, N., Prestopnik, J. L., Meyers, R. J., & Glassman, M. (2007). Treatment outcome for street-living, homeless youth. *Addictive Behaviors*, 32, 1237-1251. <https://doi.org/10.1016/j.addbeh.2006.08.010>

Comprehensive intervention for homeless, street living youth that addresses substance use, social stability, physical and [mental health](#) issues has received very little attention. In this study, street living youth aged 14–22 were recruited from a drop-in center and randomly assigned to the Community Reinforcement Approach (CRA) or treatment as usual (TAU) through a drop-in center. Findings showed that youth assigned to CRA, compared to TAU, reported significantly reduced substance use (37% vs. 17% reduction), depression (40% vs. 23%) and increased social stability (58% vs. 13%). Youth in both conditions improved in many other behavioral domains including substance use, internalizing and [externalizing problems](#), and emotion and [task oriented coping](#). This study indicates that homeless youth can be engaged into treatment and respond favorably to intervention efforts. However, more treatment development research is needed to address the barriers associated with serving these youth.

Smith, J. E., Lundy, S. L., & Gianini, L. (2007). *Community Reinforcement Approach (CRA) and Adolescent Community Reinforcement Approach (A-CRA) therapist coding manual*. Chestnut Health Systems.

No abstract available.

Waldron, H. B., Kern-Jones, S., Turner, C. W., Peterson, T. R., & Ozechowski, T. J. (2007). Engaging resistant adolescents in drug abuse treatment. *Journal of Substance Abuse Treatment*, 32, 133-142. <https://doi.org/10.1016/j.jsat.2006.07.007>

In the first phase of a two-part treatment development study, families with a treatment-resistant drug-abusing adolescent ($n = 42$) were offered 12 sessions of Community Reinforcement and Family Training (CRAFT). This parent-focused intervention was designed to help parents facilitate their adolescents' entry into treatment, to support adolescents' subsequent behavior change, and to improve parent and family functioning. In the second phase, successfully engaged adolescents ($n = 30$) were offered 12 sessions of a multicomponent individual cognitive-behavioral therapy (CBT) targeting substance use and related problem behaviors. For parents and adolescents, measures were collected on pretreatment and posttreatment, with an additional follow-up assessment for parents at 3 months after treatment. Parents on CRAFT intervention experienced a significant reduction in negative symptoms, and 71% of parents were successful in engaging their resistant youths in treatment. The CBT intervention for engaged youths was associated with a statistically significant, but not clinically significant, reduction in marijuana use.

Garner, B. R., Barnes, B. N., & Godley, S. H. (2009). Monitoring fidelity in the Adolescent Community Reinforcement Approach (A-CRA): The training process for A-CRA raters. *Journal of Behavior Analysis in Health, Sports, Fitness, and Medicine*, 2(1), 43-54. <https://doi.org/10.1037/h0100373>

Ensuring evidence-based treatments are delivered with a high degree of fidelity is an important aspect of transporting these practices to community-based treatment providers. Just as training is critical for clinicians who plan to deliver the Adolescent Community Reinforcement Approach (A-CRA),

a process of training and vetting individuals who assess sessions for fidelity also is critical. This article describes the training process for session raters who assess fidelity of A-CRA during the clinician training and certification process. A-CRA is currently being implemented in 32 independent community-based agencies as part of a large initiative funded by the Center for Substance Abuse Treatment.

Garner, B. R., Godley, S. H., Funk, R. R., Dennis, M. L., Smith, J. E., & Godley, M. D. (2009). Exposure to Adolescent Community Reinforcement Approach treatment procedures as a mediator of the relationship between adolescent substance abuse treatment retention and outcome. *Journal of Substance Abuse Treatment*, 36, 252-264. <https://doi.org/10.1016/j.jsat.2008.06.007>

Data from 399 adolescents, who participated in one of four randomly controlled trials of the Adolescent Community Reinforcement Approach (A-CRA) intervention, were used to examine the extent to which exposure to A-CRA procedures mediated the relationship between treatment retention and outcomes. Although zero-order correlations indicated that retention in treatment was a significant predictor of alcohol and other drug (AOD) use ($r = -0.18, p < .001$), this relationship was reduced to nonsignificance ($p = .39$) when exposure to A-CRA procedures was included in the model. Overall, the final model evidenced a very good fit (root mean square error of approximation = .00; comparative fit index = 1.00) and explained 29% and 43% of the variance in adolescents' posttreatment AOD use and AOD-related problems, respectively. In addition, Chi-Squared Automatic Interaction Detection analysis was used to derive a target level of A-CRA exposure, which was found to be significantly related to being in recovery at follow-up. The current findings are useful, as little research to date has identified significant mediators of the relationship between retention and treatment outcomes or identified target thresholds of treatment exposure.

Godley, S. H., Smith, J. E., Meyers, R. J., & Godley, M. D. (2009). Adolescent Community Reinforcement Approach (A-CRA). In D. W. Springer, & A. Rubin (Eds.), *Substance abuse treatment for youth and adults* (pp. 109-201). John Wiley & Sons. Available at <https://www.wiley.com/en-us/Substance+Abuse+Treatment+for+Youth+and+Adults%3A+Clinician%27s+Guide+to+Evidence+Based+Practice-p-9780470543764>

State-of-the-art, empirical support for the treatment of substance abuse

Part of the Clinician's Guide to Evidence-Based Practice Series, *Substance Abuse Treatment for Youth and Adults* provides busy mental health practitioners with detailed, step-by-step guidance for implementing clinical interventions that are supported by the latest scientific evidence.

Edited by renowned educators David W. Springer and Allen Rubin, this thorough yet practical reference draws on a roster of experts and researchers in the field who have assembled state-of-the-art knowledge into this well-rounded guide. Each chapter serves as a practitioner-focused how-to guide and covers interventions that have the best empirical support for treating substance abuse problems, including:

- Family behavior therapy for substance abuse and associated problems
- Motivational interviewing
- Problem solving and social skills training
- Adolescent community reinforcement approach (A-CRA)
- Cognitive behavioral coping skills therapy for adults
- Seeking Safety treatment for clients with PTSD and substance abuse

Hupp, C. L., Mertig, K., Krall (Malek), K. L., Godley, M. D., & Godley, S. H. (2009). *Adolescent Community Reinforcement Approach (A-CRA) and Assertive Continuing Care (ACC) supervisor rating manual*. Chestnut Health Systems.

No abstract available.

Dakof, G., Godley, S. H., & Smith, J. E. (2010). Family therapies and the Community Reinforcement Approach for youth with a substance use disorder. In Y. Kaminer, & K. Winters (Eds.), *Clinical manual of adolescent substance abuse treatment* (pp. 239-268). American Psychiatric Association.

Adolescent substance abuse treatments that involve family members and that seek to change or influence an adolescent's environment have demonstrated considerable efficacy in numerous randomized clinical trials. Compared with standard care, these treatments have demonstrated superiority in enrolling and retaining youth in substance abuse treatment, and in reducing not only drug use but also psychiatric comorbidity. A shared assumption among approaches is that adolescents are part of multiple systems, which are critical to incorporate as change agents or to address during treatment. In this chapter, we highlight two of these approaches, the adolescent community reinforcement approach (A-CRA) and multidimensional family therapy (MDFT), by presenting certain core interventions, practice guidelines, and principles of A-CRA and of MDFT in the context of case illustrations of how each approach addresses relapse during a treatment episode.

Garner, B. R., Godley, S. H., Dennis, M. L., Godley, M. D., & Shepard, D. S. (2010). The Reinforcing Therapist Performance (RTP) experiment: Study protocol for a cluster randomized trial. *Implementation Science*, 5, 5. <https://doi.org/10.1186/1748-5908-5-5>

Background

Rewarding provider performance has been recommended by the Institute of Medicine as an approach to improve the quality of treatment, yet little empirical research currently exists that has examined the effectiveness and cost-effectiveness of such approaches. The aim of this study is to test the effectiveness and cost-effectiveness of providing monetary incentives directly to therapists as a method to improve substance abuse treatment service delivery and subsequent client treatment outcomes.

Design

Using a cluster randomized design, substance abuse treatment therapists from across 29 sites were assigned by site to either an implementation as usual (IAU) or pay-for-performance (P4P) condition.

Participants

Substance abuse treatment therapists participating in a large dissemination and implementation initiative funded by the Center for Substance Abuse Treatment.

Intervention

Therapists in both conditions received comprehensive training and ongoing monitoring, coaching, and feedback. However, those in the P4P condition also were given the opportunity to earn monetary incentives for achieving two sets of measurable behaviors related to quality implementation of the treatment.

Outcomes

Effectiveness outcomes will focus on the impact of the monetary incentives to increase the proportion of adolescents who receive a targeted threshold level of treatment, months that therapists demonstrate monthly competency, and adolescents who are in recovery following treatment.

Similarly, cost-effectiveness outcomes will focus on cost per adolescent receiving targeted threshold level of treatment, cost per month of demonstrated competence, and cost per adolescent in recovery.

Godley, S. H., & Kenney, M. (2010). How to implement an outpatient evidence-based treatment in a residential program. *Counselor, 11*, 10-16.

No abstract available.

Corvalan-Wood, J., Rajaei, L., & Godley, S. H. (2011). Implementing evidence-based treatment in a TASC drug court system. *Counselor, 12*, 10-15. <https://counselormagazine.com/article/implementing-evidence-based-treatment/>

No abstract available. See link to read article.

Garner, B. R., Godley, S. H., & Bair, C. M. L. (2011). The impact of pay-for-performance on therapists' intentions to deliver high-quality treatment. *Journal of Substance Abuse Treatment, 41*, 97-103. <https://doi.org/10.1016/j.jsat.2011.01.012>

This article examined the extent to which assignment to a pay-for-performance (P4P) experimental condition impacted therapists' intentions to deliver high-quality treatment and the extent to which therapists' intentions could be explained by the theory of planned behavior. Data were collected from 95 therapists who agreed to participate in a P4P experiment related to their implementation of an evidence-based treatment (EBT) for adolescents with substance use problems. Relative to those in the control condition, therapists in the P4P condition reported significantly greater intentions to achieve monthly competence ($B = 1.41, p < .001$) and deliver a targeted threshold level of treatment to clients ($B = 1.31, p < .001$). In addition, therapists' intentions could be partially explained by the theory of planned behavior. Meta-analyses have found intentions to be one of the best predictors of behavior; thus, these findings provide initial support for using P4P approaches as a method of increasing the quality of substance use treatment.

Godley, S. H., Garner, B. R., Smith, J. E., Meyers, R. J., & Godley, M. D. (2011). A large-scale dissemination and implementation model. *Clinical Psychology: Science and Practice, 18*, 67-83. <https://doi.org/10.1111/j.1468-2850.2011.01236.x>

Multiple evidence-based treatments for adolescents with substance use disorders are available; however, the diffusion of these treatments in practice remains minimal. A dissemination and implementation model incorporating research-based training components for simultaneous implementation across 33 dispersed sites and over 200 clinical staff is described. Key elements for the diffusion of the Adolescent Community Reinforcement Approach and Assertive Continuing Care were as follows: (a) 3 years of funding to support local implementation; (b) *comprehensive training*, including a 3.5-day workshop, biweekly coaching calls, and ongoing performance feedback facilitated by a web tool; (c) a *clinician certification process*; (d) a *supervisor certification process* to promote long-term sustainability; and (e) *random fidelity reviews* after certification. Process data are summarized for 167 clinicians and 64 supervisors.

Godley, S. H., Hedges, K., & Hunter, B. (2011). Gender and racial differences in treatment process and outcome among participants in the Adolescent Community Reinforcement Approach. *Psychology of Addictive Behaviors, 25*, 143-154. <https://doi.org/10.1037/a0022179>

Increasingly, evidence-based treatments are being implemented by community treatment providers, and it is important to understand whether they can be implemented with similar quality and equivalent effectiveness across gender and racial groups. This study examined whether initiation, engagement, dosage, treatment satisfaction, or outcomes for adolescents who received the Adolescent Community Reinforcement

Approach (A-CRA) in a large implementation effort were equivalent by gender or racial group. Analyses of data from 2,141 adolescents representing 33 sites across the United States revealed no significant differences for initiation, engagement, or retention by gender or race. Ninety-six percent of the sample reported being satisfied with treatment; however, male adolescents had significantly higher rates of treatment satisfaction than female adolescents, and African American adolescents had significantly higher rates of treatment satisfaction than Caucasian adolescents. A subset of the initial sample ($n = 1,819$) was used to investigate outcomes. All racial groups had significant increases in days abstinent from alcohol and other drugs and in the percentage in recovery across the measurement period but did not differ from one another at the six-month follow-up. Female adolescents had a higher percentage of days abstinent from alcohol and other drugs and were more likely to be in recovery at the six-month follow-up than male adolescents. Overall, process indicators suggest the intervention was well implemented across gender and racial groups and equally effective across racial groups, with males having equivalent gains in abstinence and recovery compared with females despite males having greater intake severity and differential outcomes at six months.

Ruiz, B. S., Korchmaros, J. D., Greene, A., & Hedges, K. (2011). Evidence-based substance abuse treatment for adolescents: Engagement and outcomes. *Practice*, 23(4), 215-233.
<https://doi.org/10.1080/09503153.2011.597207>

Over the past decade the empirical foundation which supports the use of evidence-based practices in adolescent substance abuse treatment has increased significantly. However, there remains a gap in the literature regarding the effectiveness of utilising assertive methods for re-engaging adolescents that leave treatment early or providing continuing care following treatment. This paper helps to fill this gap by (1) describing the Assertive Adolescent Family Treatment (AAFT) initiative funded to replicate the implementation of the Adolescent Community Reinforcement Approach (A-CRA) followed by Assertive Continuing Care (ACC); (2) discussing the primary components of A-CRA and ACC (e.g., number of sessions, therapeutic content) and the implementation strategies employed in an adolescent outpatient treatment setting in the Southwestern United States (e.g., personnel, training, fidelity monitoring); (3) describing a sample of 144 adolescent participants between the ages of 12 and 17 years old that received A-CRA and/or ACC; and (4) examining differential effects of A-CRA and ACC on key outcomes. The article concludes with a discussion of the practical implications and applications for social work practice.

Smith, D. C., Godley, S. H., Godley, M. D., & Dennis, M. L. (2011). Adolescent Community Reinforcement Approach outcomes differ among emerging adults and adolescents. *Journal of Substance Abuse Treatment*, 41(4), 422-430. <https://doi.org/10.1016/j.jsat.2011.06.003>

One fifth of all public treatment admissions are emerging adults, and few studies have considered whether treatments are developmentally appropriate. This study compares outcomes between adolescents and emerging adults with substance use disorders who received the Adolescent Community Reinforcement Approach (A-CRA). Propensity score matching was used to create a weighted comparison group of adolescents ($n = 151$) who had similar demographic characteristics, clinical severity, and treatment retention as the group of emerging adults ($n = 152$). We examined age differences in abstinence and other psychosocial outcomes at the last available follow-up. Emerging adults and adolescents both reduced their substance use at follow-up. However, emerging adults were less likely to be abstinent and in remission and had more days of alcohol use when compared with adolescents. This study's findings are consistent with prior work on emerging adults. Additional research should examine features of interventions that are most effective in addressing the developmental needs of emerging adults.

White, W. L., & Garner, B. R. (2011). Counselor staff turnover in addiction treatment: Toward science-based answers to critical questions. *Counselor*, 12, 56-59.

Workforce development in the addiction treatment industry includes the duration, breadth, and depth of preparatory education people receive before entering the treatment field; the screening, selection, orientation, and ongoing training and supervision process; and the circumstances under which addiction professionals end

their tenure within a particular organization and the larger field. Given the status of staff turnover as one of the key performance measures related to workforce development (Kaplan, 2003), it is surprising how few scientific studies have been conducted on its prevalence, patterns, effects, and remediation strategies. This paucity is surprising in light of the potentially profound effects this issue exerts on the quality of addiction treatment and the quality of work life in addiction treatment organizations. The purpose of this article is to give addiction professionals a thumbnail sketch of what is being learned about staff turnover within recent scientific studies.

Garner, B. R., Godley, S. H., Dennis, M. L., Hunter, B. D., Bair, C. M. L., & Godley, M. D. (2012). Using pay-for-performance to improve treatment implementation for adolescent substance use disorders: Results from a cluster randomized experiment. *Archives of Pediatrics and Adolescent Medicine*, 166(10), 938-944. <https://doi.org/10.1001/archpediatrics.2012.802>

Objective To test whether pay for performance (P4P) is an effective method to improve adolescent substance use disorder treatment implementation and efficacy.

Design Cluster randomized trial.

Setting Community-based treatment organizations.

Participants Twenty-nine community-based treatment organizations, 105 therapists, and 986 adolescent patients (953 with complete data).

Intervention Community-based treatment organizations were assigned to 1 of the following conditions: the implementation-as-usual (IAU) control condition or the P4P experimental condition. In addition to delivering the same evidence-based treatment (ie, using the Adolescent Community Reinforcement Approach [A-CRA]), each organization received standardized levels of funding, training, and coaching from the treatment developers. Therapists in the P4P condition received US \$50 for each month that they demonstrated competence in treatment delivery (ie, A-CRA competence) and US \$200 for each patient who received a specified number of treatment procedures and sessions (ie, target A-CRA) that has been found to be associated with significantly improved patient outcomes.

Main Outcome Measures Outcomes included A-CRA competence (ie, a therapist-level implementation measure), target A-CRA (ie, a patient-level implementation measure), and remission status (ie, a patient-level treatment effectiveness measure).

Results Relative to therapists in the IAU control condition, therapists in the P4P condition were significantly more likely to demonstrate A-CRA competence (24.0% vs 8.9%; event rate ratio, 2.24; 95% CI, 1.12-4.48; $P = .02$). Relative to patients in the IAU control condition, patients in the P4P condition were significantly more likely to receive target A-CRA (17.3% vs 2.5%; odds ratio, 5.19; 95% CI, 1.53-17.62; $P = .01$). However, no significant differences were found between conditions with regard to patients' end-of-treatment remission status.

Conclusion Pay for performance can be an effective method of improving treatment implementation.

Garner, B. R., Hunter, B. D., Godley, S. H., & Godley, M. D. (2012). Training and retaining staff to competently deliver an evidence-based practice: The role of staff attributes and perceptions of organizational functioning. *Journal of Substance Abuse Treatment*, 42, 191-200. <https://doi.org/10.1016/j.jsat.2011.10.016>

Within the context of an initiative to implement evidence-based practices (EBPs) for adolescents with substance use disorders, this study examined the extent to which staff factors measured at an initial EBP training workshop were predictive of EBP competence and turnover status of staff ($N = 121$) measured 6, 9, and 12 months posttraining. By the final assessment point, 52.3% of staff transitioned to the employed/EBP-competent category, 26.6% transitioned to the not employed/not EBP-competent category, 4.6% transitioned to the not employed/EBP-competent category, and 16.5% had not transitioned out of the initial category. Multilevel multinomial regression analysis identified several measures that were significant predictors of staff transitions to the not employed/not EBP-competent category (e.g., program needs, job satisfaction, burnout) and transitions to the employed/EBP-competent category (e.g., months in position, pressures for change, influence). Findings have implications for the development and testing of strategies to train and retain staff to deliver EBPs in practice settings.

Garner, B. R., Hunter, B. D., Modisette, P. C., Ihnes, P. C., & Godley, S. H. (2012). Treatment staff turnover in organizations implementing evidence-based practices: Turnover rates and their association with client outcomes. *Journal of Substance Abuse Treatment, 42*, 134-142. <https://doi.org/10.1016/j.jsat.2011.10.015>

High staff turnover has been described as a problem for the substance use disorder treatment field. This assertion is based primarily on the assumption that staff turnover adversely impacts treatment delivery and effectiveness. This assumption, however, has not been empirically tested. In this study, we computed annualized rates of turnover for treatment staff ($N = 249$) participating in an evidence-based practice implementation initiative and examined the association between organizational-level rates of staff turnover and client-level outcomes. Annualized rates of staff turnover were 31% for clinicians and 19% for clinical supervisors. In addition, multilevel analyses did not reveal the expected relationship between staff turnover and poorer client-level outcomes. Rather, organizational-level rates of staff turnover were found to have a significant positive association with two measures of treatment effectiveness: less involvement in illegal activity and lower social risk. Possible explanations for these findings are discussed.

Garnick, D. W., Lee, M. T., O'Brien, P. L., Panas, L., Ritter, G. A., Acevedo, A., Garner, B. R., Funk, R. R., & Godley, M. D. (2012). The Washington Circle engagement performance measures' association with adolescent treatment outcomes. *Drug and Alcohol Dependence, 124*, 250-258. <https://doi.org/10.1016/j.drugalcdep.2012.01.011>

Background

For adolescents, substance use disorder (SUD) treatment outcomes (e.g., abstinence, problematic behaviors) often cannot be measured soon enough to influence treatment trajectory. Although process measures (e.g., treatment engagement) can play an important role, it is essential to demonstrate their association with outcomes. This study explored the extent to which engagement in outpatient treatment was associated with outcomes and whether demographic/clinical characteristics moderated these relationships.

Methods

This is a prospective study of adolescents ($N=1,491$) who received outpatient treatment for SUDs at one of 28 treatment sites taking part in a national evidence-based practice implementation initiative. Information from the Global Appraisal of Individual Needs interviews at intake and six-month follow-up, as well as encounter data, were used. Adjusted hierarchical logistic models were used to estimate effects of engagement on six-month outcomes.

Results

Sixty-one percent of adolescents engaged in outpatient treatment. Adolescents engaging in treatment had significantly lower likelihoods of reporting any substance use (OR 0.60, 95% CI 0.41, 0.87), alcohol use (OR 0.63, 95% CI 0.45, 0.87), heavy alcohol use (OR 0.53, 95% CI 0.33, 0.86), and marijuana use (OR 0.64, 95% CI 0.45, 0.93). This association of engagement with abstinence outcomes was not limited to any particular group. Treatment engagement, however, was not associated with adolescents' self-report of illegal activity or trouble controlling behavior at follow-up.

Conclusion

At the individual level, the Washington Circle engagement measure was a predictor of some positive outcomes for adolescents in outpatient treatment. Efforts to better engage adolescents in treatment could improve quality of care.

Lee, M. T., Garnick, D. W., O'Brien, P. L., Panas, L., Ritter, G. A., Acevedo, A., Garner, B. R., Funk, R. R., & Godley, M. D. (2012). Adolescent treatment initiation and engagement in an evidence-based practice initiative. *Journal of Substance Abuse Treatment, 42*(4), 346-355. <https://doi.org/10.1016/j.jsat2011.09.005>

This study examined client and program factors predicting initiation and engagement for 2,191 adolescents at 28 outpatient substance abuse treatment sites implementing evidence-based treatments. Using

Washington Circle criteria for treatment initiation and engagement, 76% of the sample initiated, with 59% engaging in treatment. Analyses used a 2-stage Heckman probit regression, accounting for within-site clustering, to identify factors predictive of initiation and engagement. Adolescents treated in a pay-for-performance (P4P) group were more likely to initiate, whereas adolescents in the race/ethnicity category labeled *other* (Native American, Asian, Pacific Islander, Native Alaskan, Native Hawaiian, mixed race/ethnicity), or who reported high truancy, were less likely to initiate. Race/ethnicity groups other than Latinos were equally likely to engage. Among White adolescents, each additional day from first treatment to next treatment reduced likelihood of engagement. Although relatively high initiation and engagement rates were achieved, the results suggest that attention to program and client factors may further improve compliance with these performance indicators.

Shepard, D. S., Zeng, W., Strickler, G. K., Lwin, A. K., Cros, M. A., & Garner, B. R. (2012). The Brief Treatment Cost Analysis Tool (TCAT-Lite) for substance abuse treatment: Reliability and application. *Alcoholism Treatment Quarterly*, 30(4), 377-396. <https://doi.org/10.1080/07347324.2012.719425>

Although several costing instruments have been previously developed, few have been validated or applied systematically to the delivery of evidence-based practices (EBPs). Using data collected from 26 organizations implementing the same EBP, this article examines the reliability, validity, and applicability of the brief Treatment Cost Analysis Tool (TCAT-Lite). The TCAT-Lite demonstrated good reliability—correlations between replications averaged 0.61. Validity also was high, with correlation of treated episodes per \$100,000 between the TCAT-Lite and independent data of 0.57. In terms of applicability, cost calculations found that if all organizations had operated at optimal scale (124 client episodes per year), existing funds could have supported 64% more clients.

Tobin, T., Huntington, N., Lang, D., Carpenter, J., Centerbar, D., & Fulmore, D. (2012). *Program evaluation for Assertive Adolescent and Family Treatment (AAFT) final report*. Advocates for Human Potential.

No abstract available.

Garner, B. R., Funk, R. R., & Hunter, B. D. (2013). Clinician turnover and client treatment outcomes: An examination from the client perspective. *Journal of Substance Abuse Treatment*, 44(4), 444-448. <https://doi.org/10.1016/j.jsat.2012.09.004>

The turnover of substance use disorder (SUD) treatment staff has been assumed to adversely impact treatment effectiveness, yet only limited research has empirically examined this assumption. Representing an extension of prior organizational-level analyses of the impact of staff turnover on client outcomes, this study examined the impact of SUD clinician turnover on adolescent treatment outcomes using a client perspective. Multilevel regression analysis did reveal that relative to those adolescents who did not experience clinician turnover, adolescents who experienced both direct and indirect clinician turnover reported a significantly higher percentage of days using alcohol or drugs at 6-month follow-up. However, clinician turnover was not found to have significant associations (negative or positive) with the other five treatment outcomes examined (e.g., substance-related problems, involvement in illegal activity). Thus, consistent with our prior findings, the current study provides additional evidence that turnover of SUD clinicians is not necessarily associated with adverse treatment outcomes.

Garner, B. R., & Hunter, B. D. (2013). Examining the temporal relationship between psychological climate, work attitude, and staff turnover. *Journal of Substance Abuse Treatment*, 44(2), 193-200. <https://doi.org/10.1016/j.jsat.2012.05.002>

Relative to the broader industrial–organizational (I-O) psychology field, research on the turnover of substance use disorder (SUD) treatment staff is in its infancy. Despite its long and rich history, recent reviews of the turnover literature within I-O psychology have noted that there remains considerable room for improvement. In particular, recommendations have been made for research that considers time in the turnover

process and explores more distal causes of staff turnover. Addressing these gaps, this article examined the temporal relationship between latent measures of psychological climate, work attitude, and staff turnover. Using data from 95 SUD treatment staff clustered within 29 treatment organizations, multilevel discrete-time survival analyses revealed that a latent measure of work attitude (e.g., job satisfaction, pay satisfaction, turnover intentions) fully mediated the temporal relationship between latent measures of psychological climate (e.g., supervisor support, coworker support, role conflict) and subsequent staff turnover.

Godley, S. H., & Godley, M. D. (2013). Behavioral treatments for adolescents with substance use disorders. In P. M. Miller (Ed.), *Interventions for addiction: Comprehensive addictive behaviors and disorders* (pp. 167-175). Elsevier, Academic Press. Available at <https://www.elsevier.com/books/interventions-for-addiction/miller/978-0-12-398338-1>

Interventions for Addiction examines a wide range of responses to addictive behaviors, including psychosocial treatments, pharmacological treatments, provision of health care to addicted individuals, prevention, and public policy issues. Its focus is on the practical application of information covered in the two previous volumes of the series, *Comprehensive Addictive Behaviors and Disorders*. Readers will find information on treatments beyond commonly used methods, including Internet-based and faith-based therapies, and criminal justice interventions. The volume features extensive coverage of pharmacotherapies for each of the major drugs of abuse—including disulfiram, buprenorphine, naltrexone, and others—as well as for behavioral addictions. In considering public policy, the book examines legislative efforts, price controls, and limits on advertising, as well as World Health Organization (WHO) efforts. *Interventions for Addiction* is one of three volumes comprising the 2,500-page series, *Comprehensive Addictive Behaviors and Disorders*. This series provides the most complete collection of current knowledge on addictive behaviors and disorders to date. In short, it is the definitive reference work on addictions.

Garner, B. R., Hunter, B. D., Smith, D. C., Smith, J. E., & Godley, M. D. (2014). The relationship between child maltreatment and substance abuse treatment outcomes among emerging adults and adolescents. *Child Maltreatment*, 19(3-4), 261-269. <https://doi.org/10.1177/1077559514547264>

Emerging adulthood is the period of greatest risk for problematic substance use. The primary aim of the current study was to examine the relationship between a broad measure of child maltreatment and several key outcomes for a large clinical sample of emerging adults ($n = 858$) and adolescents ($n = 2,697$). The secondary aim was to examine the extent to which the relationship between child maltreatment and treatment outcomes differed between emerging adults and adolescents. Multilevel latent growth curve analyses revealed emerging adults and adolescents who experienced child maltreatment reported significantly greater reductions over time on several treatment outcomes (e.g., substance use, substance-related problems, and emotional problems). Overall, analyses did not support differential relationships between child maltreatment and changes over time in these substance use disorder treatment outcomes for emerging adults and adolescents. The one exception was that although emerging adults with child maltreatment did reduce their HIV risk over time, their improvements were not as great as were the improvements in HIV risk reported by adolescents who had experienced child maltreatment.

Godley, S.H., Hunter, B.D., Fernández-Artamendi, S.F., Smith, J.E., Meyers, R.J., & Godley, M.D. (2014). A comparison of treatment outcomes for Adolescent Community Reinforcement participants with and without co-occurring disorders. *Journal of Substance Abuse Treatment*, 46, 463-471. <https://doi.org/10.1016/j.jsat.2013.10.013>

This study examined the relationship between Adolescent Community Reinforcement Approach (A-CRA) participation with treatment engagement, retention, and satisfaction, and with substance use and emotional problem outcomes. Participants had substance use disorders (SUD) only or co-occurring substance use and psychiatric problems. Those with co-occurring problems reported more days of substance use and emotional problems at intake to treatment than those with SUD only. All groups received equivalent exposure

to A-CRA during treatment implementation. At the 12-month follow-up, adolescents classified as externalizers ($n=468$) or those with both externalizing and internalizing problems ($n=674$) had significantly greater improvement in their days of abstinence and substance problems relative to adolescents with substance use disorders only ($n=666$). Additionally, adolescents reporting symptoms of internalizing ($n=154$), externalizing, or both externalizing and internalizing disorders had significantly greater improvements in days of emotional problems relative to adolescents with SUD only.

Godley, S. H., Smith, J. E., Passetti, L. L., & Subramaniam, G. (2014). The Adolescent Community Reinforcement Approach (A-CRA) as a model paradigm for the management of adolescents with substance use disorders and co-occurring psychiatric disorders. *Substance Abuse*, 35(4), 352-363. <https://doi.org/10.1080/08897077.2014.936993>

Background

Integrated treatment for youth with substance use disorders (SUDs) and co-occurring psychiatric disorders is recommended; however, there are few studies that have evaluated integrated treatment approaches.

Methods

This paper includes a brief review of cognitive-behavioral and family therapies, since they have been demonstrated to be effective treatments for the disorders that commonly co-occur with substance use. It also describes how an integrated treatment paradigm has been implemented using one Empirically Supported Treatment, the Adolescent Community Reinforcement Approach (A-CRA).

Results

There is existing research that supports the use of several A-CRA procedures to treat substance use and commonly co-occurring psychiatric disorders.

Conclusions

In the absence of further research, it is reasonable in the interim to train clinicians in treatments that incorporate components that have been found to be effective for both substance use and commonly co-occurring psychiatric disorders. These treatments can then be adapted as needed based on an individual youth's set of problems. Further research is needed to test treatments for various combinations of SUDs and psychiatric disorders (i.e., depression, trauma-related problems, conduct disorder/behavior problems, and attention-deficit/hyperactivity disorder [ADHD]).

Hunter, B. D., Godley, M. D., & Godley, S. H. (2014). Feasibility of implementing the Adolescent Community Reinforcement Approach in school settings for adolescents with substance use disorders. *Advances in School Mental Health Promotion*, 7(2), 105-122. <https://doi.org/10.1080/1754730X.201.888224>

Nationally, approximately 10% of adolescents in need of treatment for a substance use (SU) disorder receive treatment. School-based treatment may provide an important opportunity to reduce the treatment gap by facilitating access to services. While some school-based SU treatment exists, little is known about whether newer, evidence-based treatments (e.g. Adolescent Community Reinforcement Approach [A-CRA]) can be well implemented in schools. The objectives of this study were to compare adolescents receiving A-CRA services in school-based versus clinic-based settings in regard to (1) intake characteristics, (2) treatment implementation quality, and (3) clinical outcomes. Results suggest that A-CRA in school-based settings was more likely to reach girls and youth with shorter SU histories; A-CRA was well implemented within school-based settings and the school-based group had equivalent or better outcomes than the clinicbased group

Hunter, B. D., Godley, S. H., Hesson-McInnis, M., & Roizen, H. G. (2014). Longitudinal change mechanisms for substance use and illegal activity for adolescents in treatment. *Psychology of Addictive Behaviors*, 28, 507-515. <https://doi.org/10.1037/a0034199>

The current study investigated: (a) the relationships of exposure to the Adolescent Community Reinforcement Approach (A-CRA) with reductions in substance use, illegal activity, and juvenile justice system involvement in adolescents diagnosed with a substance use disorder, and (b) the pathways by which

reductions in the target behaviors were achieved. This study is a secondary data analysis of longitudinal data from a large-scale implementation effort for A-CRA. The sample consisted of 1,467 adolescents who presented to substance use treatment and reported past-year engagement in illegal activity. Participants had an average age of 15.8 years (SD = 1.3) and were 25% female, 14% African American, 29% Hispanic, 35% Caucasian, 16% mixed ethnicity, and 6% other ethnicity. Path analyses provided support that participation in A-CRA had a significant, direct association with reduced substance use; a significant, indirect association with reduced illegal activity through reductions in substance use; and a significant indirect association with reduced juvenile justice system involvement through reductions in both substance use and illegal activity. In addition, post hoc analyses using a bootstrapping strategy provided evidence that reductions in substance use partially mediated the relationship between A-CRA and illegal activity.

Hunter, S. B., Ayer, L., Han, B., Garner, B. R., & Godley, S. H. (2014). Examining the sustainment of the Adolescent-Community Reinforcement Approach in community addiction treatment settings: Study protocol and design. *Implementation Science*, 9, 104. <https://doi.org/10.1186/s13012-014-0104-1>

Background

Although evidence-based treatments are considered the gold standard for clinical practice, it is widely recognized that evidence-based treatment implementation in real world practice settings has been limited. To address this gap, the federal government provided three years of funding, training and technical assistance to 84 community-based treatment programs to deliver an evidence-based treatment called the Adolescent-Community Reinforcement Approach (A-CRA). Little is known about whether such efforts lead to long-term A-CRA sustainment after the initial funding ends.

Methods/Design

We will use a longitudinal mixed method data analytic approach to characterize sustainment over time and to examine the factors associated with the extent to which A-CRA is sustained. We will use implementation data collected during the funding period (e.g., organizational functioning, staff certification rates and penetration) and supplement it with additional data collected during the proposed project period regarding implementation quality and the hypothesized predictors of sustainment (i.e., inner and outer contextual variables) collected over three waves from 2013 to 2015 representing program sustainment up to five years post-initial funding.

Discussion

Gaining a better understanding of the factors that influence the evidence-based treatment sustainment may lead to more effective dissemination strategies and ultimately improve the quality of care being delivered in community-based addiction treatment settings.

McGarvey, E. L., Leon-Verdin, M., Bloomfield, K., Wood, S., Winters, E., & Smith, J. (2014). Effectiveness of A-CRA/ACC in treating adolescents with cannabis-use disorders. *Community Mental Health Journal*, 50(2), 150-157. <https://doi.org/10.1007/s10597-012-9566-2>

An evidence-based treatment for adolescent cannabis users, Adolescent Community Reinforcement Approach with Assertive Continuing Care, was implemented in a rural county and small city in the USA. A total of 147 adolescents, ages 12–18, were enrolled and assessed at baseline and three time points: 3, 6, and 12 months using the Global Appraisal of Individual Needs and related measures. Program effectiveness was confirmed. The treatment was equally effective for youth from the city versus the county. More than two-thirds (68.7 %) of the adolescents reported quitting use of cannabis by 12 months. The days of cannabis use in the last 90 days decreased significantly from the first follow-up, controlling for age (p value < .01), and shows consistent decline until the end of the treatment. In addition to reduction in substance use, the average number of days missing school and expelled from school decreased significantly from baseline to the end of the treatment.

Smith, D. C., Tabb, K. M., Fisher, D., & Cleeland, L. (2014). Drug refusal skills training does not enhance outcomes of African American adolescents with substance use problems. *Journal of Substance Abuse Treatment*, 46(2), 274-279. <https://doi.org/10.1016/j.jsat.2013.07.004>

In prior research by Witkiewitz and colleagues, African American adults receiving refusal skills training (RST) had fewer heavy drinking days and were categorized as having more successful outcomes. This study extends findings to adolescents receiving the Adolescent Community Reinforcement Approach (A-CRA). Propensity score matching was used to create three groups equivalent on baseline characteristics, including: African Americans receiving refusal skills training (AA+RST; $n=214$), African Americans not receiving RST (AA-RST; $n=212$), and Caucasians receiving RST (CA+RST; $n=214$). In propensity weighted regression models that controlled for overall A-CRA exposure, racial group by RST status was not a significant predictor of substance use frequency or abstinence/early remission outcomes. Higher exposure to A-CRA, however, was a significant predictor of both outcomes. Universal receipt of RST may not improve the outcomes of African American adolescents with substance use problems, and outcomes may be driven more by the overall number of A-CRA procedures received.

Smith, J. E., Gianini, L. M., Garner, B. R., Krall, K. L., & Godley, S. H. (2014). A behaviorally-anchored rating system to monitor treatment integrity for community clinicians using the Adolescent Community Reinforcement Approach. *Journal of Child and Adolescent Substance Abuse*, 23, 185-199. <https://doi.org/10.1080/1067828X.2012.729258>

This study evaluated a process for training raters to reliably rate clinicians delivering the Adolescent Community Reinforcement Approach (A-CRA) in a national dissemination project. The unique A-CRA coding system uses specific behavioral anchors throughout its 73 procedure components. Five randomly selected raters each rated “passing” and “not passing” examples of the 19 A-CRA procedures. Ninety-four percent of the final intraclass correlation coefficients were at least “good” ($\geq .60$) and 66.7% were “excellent” ($\geq .75$), and 95% of the ratings exceeded the 60% or better agreement threshold between raters and the gold standard. Raters can be trained to provide reliable A-CRA feedback for large-scale dissemination projects.

Curtis, S. V. & Wodarski, J. S. (2015). The East Tennessee assertive adolescent family treatment program: A three-year evaluation. *Social Work in Public Health*, 30(3), 225-235. <https://doi.org/10.1080/19371918.2014.992713>

The Assertive Adolescent Family Treatment Program targeted adolescents defined as age 12 to 17 years and transition age youth (age 18–24) who were served by the Helen Ross McNabb Center Regional Mental Health System. Most of the participating individuals met the *Diagnostic and Statistical Manual of Mental Disorders(IV-TR)* criteria for substance abuse or substance dependence and co-occurring mental health disorder. Significant findings in the study included a decrease in illegal drug use, decrease in alcohol consumption, decrease in criminal activity, decrease in violent behaviors, and an increase in cognitive ability. Other findings indicated a decrease in risky sexual behaviors and an increase in participant interaction with supportive friends and family. This study indicates success of the Assertive Adolescent Family Treatment Program and the intervention models used. More research is needed in East Tennessee to generalize the findings and establish a stronger evidence base.

Hunter, S. B., Han, B., Slaughter, M. E., Godley, S. H., & Garner, B. R. (2015). Associations between implementation characteristics and evidence-based practice sustainment: A study of the adolescent community reinforcement approach. *Implementation Science*, 10, 173. <https://doi.org/10.1186/s13012-015-0364-4>

Background

Few empirical studies longitudinally examine evidence-based practice (EBP) sustainment and the hypothesized factors that influence it. In an effort to address this gap, the current study examined

sustainment of an EBP for adolescent substance use called the adolescent community reinforcement approach (A-CRA).

Methods

A-CRA sustainment was assessed via information collected as part of key informant interviews and surveys with clinical staff from community-based treatment organizations that had received federal funding to implement A-CRA. Administrative data from the funding period on implementation was also used. Using discrete-time survival analysis, we regressed A-CRA sustainment on several factors theorized to influence EBP sustainment. Factors examined included outer setting, inner setting, implementation quality during the funding period, and intervention-related characteristics.

Results

Overall, data from 83 % of the targeted sample of treatment organizations was collected. A-CRA sustainment was strongly related to the time since funding loss. Strong relationships were found between sustainment status and implementation quality during the funding period, agency focus, funding stability, and political support for the treatment along with staff perceptions of the treatment's complexity and implementation difficulty.

Conclusions

Consistent with the Consolidated Framework for Implementation Research, the current study found several factors related to the outer setting (e.g., funding stability), inner setting (e.g., agency focus), implementation quality during the funding period (e.g., staff trained, clients served), and characteristics of the intervention (e.g., implementation complexity) to be associated with EBP sustainment. Future research is warranted to examine the extent to which these relationships are stable over time. Efforts to ensure that adequate implementation occurs during the initial implementation period and that adequate funding, infrastructure, and staff support following the ending of initial support are critical to a program's survival.

Garner, B. R., Hunter, S. B., Funk, R. R., Griffin, B. A., & Godley, S. H. (2016). Toward evidence-based measures of implementation: Examining the relationship between implementation outcomes and client outcomes. *Journal of Substance Abuse Treatment*, 67, 15-21. <https://doi.org/10.1016/j.jsat.2016.04.006>

Background

Developing consistent, valid, and efficient implementation outcome measures is necessary to advance implementation science. However, development of such measures has been limited to date, especially for validating the extent to which such measures are associated with important improvements in client outcomes. This study seeks to address this gap by developing one or more evidence-based measures of implementation (EBMIs; i.e., implementation outcome measure that is predictive of improvements in key client outcomes) for the Adolescent Community Reinforcement Approach (A-CRA), an evidence-based practice (EBP) for adolescent substance use.

Methods

Data for the current study were collected as part of a large-scale federally funded EBP dissemination and implementation initiative. The multilevel dataset included 65 substance use treatment organizations, 308 clinicians, and 5873 adolescent clients. Adjusted multilevel regression analyses were used to examine the extent to which client-level outcome measures assessed at 6-month follow-up (i.e., substance use, emotional problems) could be predicted by four implementation outcomes: two measures of fidelity (i.e., session exposure, procedure exposure) and two measures of penetration (i.e., absolute client penetration, absolute staff penetration).

Results

Adjusting for client substance use at intake, as well as several client characteristics (e.g., age, race, criminal justice involvement), client substance use at follow-up was significantly lower for treatment organizations that had higher procedure exposure ($B=-1.227$, standard error [SE]=0.583, 95% confidence interval=-2.370, 0.252; $p<.05$). None of the other three implementation outcome measures were found to predict improvements in client outcomes.

Conclusions

The current study provides support for procedure exposure as an organizational-level EBMI for A-CRA. Thus, future efforts focused on implementing A-CRA could be improved by measuring and monitoring the extent to which A-CRA procedures are being delivered to clients. Additionally, given the dearth of studies that have examined the relationship between organizational-level measures of implementation and client outcomes, this article provides a prototype for future research to identify EBMI for other behavioral treatments.

Godley, S. H., Godley, M. D., & Passetti, L. L. (2016). Treatment outcomes for A-CRA participants with co-occurring problems. *Counselor, 17*(2), 56-59.

This study examined the relationship between Adolescent Community Reinforcement Approach (A-CRA) participation with treatment engagement, retention, and satisfaction, and with substance use and emotional problem outcomes. Participants had substance use disorders (SUD) only or co-occurring substance use and psychiatric problems. Those with co-occurring problems reported more days of substance use and emotional problems at intake to treatment than those with SUD only. All groups received equivalent exposure to A-CRA during treatment implementation. At the 12-month follow-up, adolescents classified as externalizers ($n = 468$) or those with both externalizing and internalizing problems ($n = 674$) had significantly greater improvement in their days of abstinence and substance problems relative to adolescents with substance use disorders only ($n = 666$). Additionally, adolescents reporting symptoms of internalizing ($n = 154$), externalizing, or both externalizing and internalizing disorders had significantly greater improvements in days of emotional problems relative to adolescents with SUD only.

Godley, S. H., Smith, J. E., Meyers, R. J., & Godley, M. D. (2016). *The Adolescent Community Reinforcement Approach: A clinical guide for treating substance use disorders*. Chestnut Health Systems. Available at <https://www.amazon.com/Adolescent-Community-Reinforcement-Approach-Substance/dp/0998058009>

The Adolescent Community Reinforcement Approach (A-CRA) is an evidence-based, developmentally-appropriate behavioral treatment for youth and young adults ages 12 to 25 years old with substance use disorders and related problems. Listed in several state and federal registries, including the National Registry of Evidence-Based Programs and Practices, A-CRA clinicians help youth and parents increase the family, social, and educational/vocational reinforcers to support recovery. Written by Drs. Susan H. Godley, Jane Ellen Smith, Robert J. Meyers, and Mark D. Godley, the principal researchers and experts in A-CRA, *The Community Reinforcement Approach: A Clinical Guide for Treating Substance Use Disorders* provides behavioral and mental health professionals with the detailed guidance needed to implement this evidence-based treatment.

Henderson, C. E., Wevodau, A. L., Henderson, S. E., Colbourn, S. L., Gharagozloo, L., North, L. W., & Lotts, V. A. (2016). An independent replication of the Adolescent Community Reinforcement Approach with justice-involved youth. *American Journal on Addictions, 25*(3), 233-240. <https://doi.org/10.1111/ajad.12366>

Background and Objectives

Substance use disorders among youth remain a serious public health problem. Although research has overwhelmingly supported the use of evidenced-based interventions, one of the primary limitations of the current evidence base is that for the vast majority of treatments, the developers of the treatments are also the ones conducting research on them, raising the possibility of allegiance bias.

Methods

The present study was an independently conducted randomized controlled trial ($n = 126$) comparing an evidenced-based treatment for adolescent substance use, Adolescent-Community Reinforcement Approach (A-CRA), and assertive continuing care (ACC), to services as usual (SAU) provided by a juvenile probation department. Latent growth curve modeling was used to compare the treatments on change in substance use assessed by the Global Appraisal of Individual Needs (GAIN) at baseline and 3, 6, and 12 months following treatment entry.

Results

All youth evidenced a substantial reduction in substance use frequency and substance-related problems following treatment; however, youth treated with A-CRA/ACC evidenced a substantially greater decrease in substance-related problems.

Conclusions and Scientific Significance

Results are consistent with studies conducted by A-CRA/ACC model developers supporting the effectiveness of the clinical approach and, because the outcomes resulted from an independent replication, are encouraging for the transportation potential of A-CRA/ACC. (Am J Addict 2016;25:233–240)

Campos-Melady, M., Smith, J. E., Meyers, R. J., Godley, S. H., & Godley, M. D. (2017). The effect of therapists' adherence and competence in delivering the Adolescent Community Reinforcement Approach on client outcomes. *Psychology of Addictive Behaviors*, 31(1), 117-129.
<https://doi.org/10.1037/adb0000216>

In the article, the disclosed interest for Mark D. Godley in the author note is misrepresented. The accurate representation is that the organization employing Mark D. Godley, Chestnut Health Systems, receives fees for A-CRA training. In addition, the disclosed interest statement for Jane Ellen Smith and Robert J. Meyers should read Jane Ellen Smith and Robert J. Meyers each have private consulting businesses that conduct workshops on CRA or A-CRA; they also receive royalties on the CRA book. All versions of this article have been corrected.] Central to the debate over the implementation of empirically supported treatments is whether therapist skill has a measurable, positive relationship with client outcome. The fidelity and skill with which therapists deliver treatments have been studied under the constructs of adherence and competence. Evidence for a relationship between adherence and competence and client outcomes has been mixed, possibly due to small sample sizes, potentially inadequate measures for rating therapists' skill, and limited statistical methods. The current study used a data set in which 91 therapists provided services to 384 clients from the Assertive Adolescent and Family Treatment project. Therapists trained to deliver the Adolescent Community Reinforcement Approach (A-CRA) submitted audiorecorded sessions to independent raters during their training process. Measures of adherence and competence derived from session ratings were examined in a multilevel model for associations with client substance use outcomes at 3-, 6-, and 12-month follow-ups. Therapist competence was significantly predictive of decreases in clients' days of substance use. Therapist adherence was not predictive of client substance use outcomes in the full sample; however, when only those clients who completed the 12-month follow-up were included, between-therapists adherence was found to be predictive of a decrease in client substance use. This study adds to the evidence that competence in the delivery of treatment is associated with better client treatment outcomes. Adherence may be associated with better treatment outcomes as it was in follow-up completers. Future research should investigate the nature of the relationship between protocol-specific adherence and competence and client outcomes

Forman-Hoffman, V. L., Middleton, J. C., McKeeman, J. L., Stambaugh, L. F., Christian, R. B., Gaynes, B. N., Kane, H. L., Kahwati, L. C., Lohr, K. N., & Viswanathan, M. (2017). Quality improvement, implementation, and dissemination strategies to improve mental health care for children and adolescents: A systematic review. *Implementation Science*, 12, 93. <https://doi.org/10.1186/s13012-017-0626-4>

Background

Some outcomes for children with mental health problems remain suboptimal because of poor access to care and the failure of systems and providers to adopt established quality improvement strategies and interventions with proven effectiveness. This review had three goals: (1) assess the effectiveness of quality improvement, implementation, and dissemination strategies intended to improve the mental health care of children and adolescents; (2) examine harms associated with these strategies; and (3) determine whether effectiveness or harms differ for subgroups based on system, organizational, practitioner, or patient characteristics.

Methods

Sources included MEDLINE®, the Cochrane Library, PsycINFO, and CINAHL, from database inception through February 17, 2017. Additional sources included gray literature, additional studies from reference

lists, and technical experts. Two reviewers selected relevant randomized controlled trials (RCTs) and observational studies, extracted data, and assessed risk of bias. Dual analysis, synthesis, and grading of the strength of evidence for each outcome followed for studies meeting inclusion criteria. We also used qualitative comparative analysis to examine relationships between combinations of strategy components and improvements in outcomes.

Results

We identified 18 strategies described in 19 studies. Eleven strategies significantly improved at least one measure of intermediate outcomes, final health outcomes, or resource use. Moderate strength of evidence (from one RCT) supported using provider financial incentives such as pay for performance to improve the competence with which practitioners can implement evidence-based practices (EBPs). We found inconsistent evidence involving strategies with educational meetings, materials, and outreach; programs appeared to be successful in combination with reminders or providing practitioners with newly collected clinical information. We also found low strength of evidence for no benefit for initiatives that included only educational materials or meetings (or both), or only educational materials and outreach components. Evidence was insufficient to draw conclusions on harms and moderators of interventions.

Conclusions

Several strategies can improve both intermediate and final health outcomes and resource use. This complex and heterogeneous body of evidence does not permit us to have a high degree of confidence about the efficacy of any one strategy because we generally found only a single study testing each strategy.

Garner, B. R., Hunter, S. B., Slaughter, M. E., Han, B., & Godley, S. H. (2017). Factors associated with an evidence-based measure of implementation for the Adolescent Community Reinforcement Approach. *Drug and Alcohol Dependence, 180*, 144-150. <https://doi.org/10.1016/j.drugalcdep.2017.08.011>

Background

An evidence-based measure of implementation (EBMI) is an implementation outcome measure shown to have predictive validity with one or more future-measured constructs of importance. The current study sought to identify correlates and predictors of an EBMI called procedure exposure. Garner et al. (2016) found procedure exposure to be an EBMI for the Adolescent Community Reinforcement Approach (A-CRA).

Methods

The dataset included 76 community-based substance use treatment organizations located across the United States. Organizational-level regression analyses, which were framed within the context of Chaudoir et al. (2013) framework for predicting implementation outcomes, were used to examine predictors of A-CRA procedure exposure

Results

The Washington Circle's treatment initiation performance measure ($B = 5.05$ [$SE = 1.60$], $p = 0.002$), as well as session exposure ($B = 0.18$ [$SE = 0.06$], $p = 0.003$), were significant predictors of A-CRA procedure exposure in the backward stepwise regression analysis (Adjusted R-square = 0.55). The Washington Circle's treatment engagement performance measure ($B = 7.93$ [$SE = 0.77$], $p < 0.001$), as well as time-to-proficiency ($B = -0.04$ [$SE = 0.02$], $p = 0.02$), each had significant bivariate relationships with A-CRA procedure exposure but were not retained in the final model.

Conclusions

Organizations implementing A-CRA are encouraged to make the following high priorities: (a) scheduling and completing a subsequent treatment session within 14 days of their index session (treatment initiation) and (b) providing a targeted number of treatment sessions to each client (session exposure). To the extent organizations do this, they may be more likely to achieve higher levels of A-CRA procedure exposure.

Godley, M. D., Passetti, L. L., Subramaniam, G. A., Funk, R. R., Smith, J. E., & Meyers, R. J. (2017). Adolescent Community Reinforcement Approach implementation and treatment outcomes for youth with

opioid problem use. *Drug and Alcohol Dependence*, 174, 9-16.
<https://doi.org/10.1016/j.drugalcdep.2016.12.029>

Background

This paper compares adolescents with primary opioid problem use (OPU) to those with primary marijuana or alcohol problem use (MAPU) who received up to six months of Adolescent Community Reinforcement Approach (A-CRA), an empirically supported treatment.

Methods

Intake clinical characteristics, treatment implementation measures, and clinical outcomes of two substance problem groups (OPU and MAPU) were compared using data from 1712 adolescents receiving A-CRA treatment. Data were collected at intake and 3, 6, and 12 months post-intake.

Results

At intake, adolescents in the OPU group were more likely than those in the MAPU group to be Caucasian, older, female, and not attending school; report greater substance and mental health problems; and engage in social and health risk behaviors. There was statistical equivalence between groups in rates of A-CRA treatment initiation, engagement, retention, and satisfaction. Both groups decreased significantly on most substance use outcomes, with the OPU group showing greater improvement; however, the OPU group had more severe problems at intake and continued to report higher frequency of opioid use and more days of emotional problems and residential treatment over 12 months.

Conclusions

The feasibility and acceptability of A-CRA for OPUs was demonstrated. Despite significantly greater improvement by the OPU group, they did not improve to the level of the MAPU group over 12 months, suggesting that they may benefit from A-CRA continuing care up to 12 months, medication to address opioid withdrawal and craving, and the inclusion of opioid-focused A-CRA procedures.

Hunter, S. B., Han, B., Slaughter, M. E., Godley, S. H., & Garner, B. R. (2017). Predicting evidence-based treatment sustainment: Results from a longitudinal study of the Adolescent-Community Reinforcement Approach. *Implementation Science*, 12, 75. <https://doi.org/10.1186/s13012-017-0606-8>

Background

Implementation support models are increasingly being used to enhance the delivery of evidence-based treatments (EBTs) in routine care settings. Little is known about the extent to which these models lead to continued EBT use after implementation support ends. Moreover, few empirical studies longitudinally examine the hypothesized factors associated with long-term psychosocial EBT use (i.e., sustainment). In an effort to address this gap, the current study examined sustainment of an EBT called the Adolescent-Community Reinforcement Approach (A-CRA) following the end of implementation support.

Methods

Between 2006 and 2010, the Substance Abuse and Mental Health Services Administration awarded 3 years of A-CRA implementation support to 82 community-based organizations around the USA. The extent to which A-CRA was sustained following grant end and the hypothesized factors associated with EBT sustainment were collected using both retrospective and prospective data. We examined the extent to which 10 core treatment elements of A-CRA were sustained and the associations between the extent of A-CRA sustainment and hypothesized factors using a pattern-mixture longitudinal modeling approach.

Results

Staff from 76 organizations participated in data collection for a 92.86% response rate. On average, about half of the 10 core treatment elements were sustained following the loss of implementation support. Factors that appeared most important to A-CRA sustainment included characteristics that were related to the outer setting (communication, funding, and partnerships), inner setting (political support, organizational capacity, and supervisor turnover rate), implementation support period (number of clinicians and supervisors certified and employed at support end and number of youth served), and staff perceptions of the intervention (implementation difficulty, relative advantage, and perceived success).

Conclusions

Even with multiple years of implementation support, community-based organizations face challenges in sustaining EBT delivery over time. Consistent with implementation theories, multiple factors appear related with EBT sustainment, including the degree of implementation during the initial support period, as well as adequate funding, infrastructure support, and staff support following the end of funding.

Hogue, A., Henderson, C. E., Becker, S. J., & Knight, D. K. (2018). Evidence base on outpatient behavioral treatments for adolescent substance use, 2014-2017: Outcomes, treatment delivery, and promising horizons. *Journal of Clinical Child and Adolescent Psychology*, 47, 499-526.
<https://doi.org/10.1080/15374416.2018.1466307>

This article updates the evidence base on outpatient behavioral treatments for adolescent substance use (ASU) since publication of the previous review completed for this journal by Hogue, Henderson, Ozechowski, and Robbins (2014). It first summarizes the Hogue et al. findings along with those from recent literature reviews and meta-analytic studies of ASU treatments. It then presents study design and methods criteria used to select 11 comparative studies subjected to *Journal of Clinical Child and Adolescent Psychology* level of support evaluation. These 11 studies are detailed in terms of their sample characteristics, methodological quality, and substance use outcomes. Cumulative level of support designations are then made for each identified treatment approach. These cumulative designations are virtually identical to those of the previous review: ecological family-based treatment, individual cognitive-behavioral therapy, and group cognitive-behavioral therapy remain well-established; behavioral family-based treatment and motivational interviewing remain probably efficacious; drug counseling remains possibly efficacious; and an updated total of 5 multicomponent treatments combining more than 1 approach (3 of which include contingency management) are deemed well-established or probably efficacious. Treatment delivery issues associated with evidence-based approaches are then reviewed, focusing on client engagement, fidelity and mediator, and predictor and moderator effects. Finally, to help accelerate innovation in ASU treatment science and practice, the article outlines promising horizons in improving youth identification and access, specifying and implementing pragmatic treatment in community settings, and leveraging emerging lessons from implementation science.

Davis, J. P., Prindle, J. J., Eddie, D., Pedersen, E. R., Dumas, T. M., & Christie, N. C. (2019). Addressing the opioid epidemic with behavioral interventions for adolescents and young adults: A quasi-experimental design. *Journal of Consulting and Clinical Psychology*, 87(10), 941-951.
<https://doi.org/10.1037/ccp0000406>

Objective: While several behavioral interventions have shown efficacy in opioid use disorder treatment, little is known regarding which behavioral interventions work best for youth, and if treatment responses vary by developmental age or sex. We explored latency to first episode of opioid use among adolescents and young adults following opioid use disorder treatment initiation with: (a) adolescent community reinforcement approach (A-CRA), (b) motivational enhancement therapy (MET) combined with cognitive-behavioral therapy (CBT) or CBT alone (MET/CBT or CBT alone), or (c) treatment as usual (TAU; 12-step facilitation, supportive therapy). **Method:** Adolescents and young adults (N = 785) entering treatment for opioid use disorder were followed for 1 year. Survival analysis was used to assess variation in latency to first episode of opioid use by treatment received, as well as moderation by age group and sex. **Results:** Those receiving MET/CBT or CBT alone, and TAU fared better than those receiving A-CRA. For adolescent males, those receiving TAU or A-CRA had poorer outcomes compared with those receiving MET/CBT or CBT alone, while no differences were found between treatments for female adolescents. Female young adults receiving TAU had lower hazard of opioid use compared with those receiving A-CRA, and MET/CBT or CBT alone, and male young adults receiving A-CRA had higher hazard than those receiving TAU, and MET/CBT or CBT alone. **Conclusions:** Findings highlight different treatments may be more efficacious for youth based on developmental age and sex. Clinicians working with young people with opioid use disorder should consider patients' developmental stage and sex when considering treatment approaches.

Welsh, J. W., Passetti, L. L., Funk, R. R., Smith, J. E., Meyers, R. J., & Godley, M. D. (2019). Treatment retention and outcomes with the Adolescent Community Reinforcement Approach in emerging adults with opioid use. *Journal of Psychoactive Drugs*, 51(5), 431-440.
<https://doi.org/10.1089/92791072.2019.1613585>

Treatment retention and engagement of emerging adults with opioid use disorders can be particularly challenging. This study compares treatment outcomes of young adults with primary opioid use (OU) to those with primary marijuana or alcohol use (MAU), who received the Adolescent Community Reinforcement Approach (A-CRA), an evidence-based therapy for the treatment of substance use. The MAU and OU groups were comprised of an outcome sample of 419 young adults ages 18–25. Groups were compared on intake demographics, clinical characteristics and measures of treatment retention and other associated factors, including treatment initiation and engagement. Outcome measures were administered at A-CRA intake and at 3, 6, and 12 months post-intake. Both groups were similar on treatment retention, initiation, and engagement. Both groups showed a similar decrease in alcohol ($p < .001$) and marijuana use ($p < .001$). The OU group had significantly less opioid use at 3 months ($p < .001$) and maintained this decrease, but did not improve to the level observed in the MAU group at the 12-month follow up. The Adolescent Community Reinforcement Approach merits further study as a behavioral treatment for young adults with opioid use.

Assertive Continuing Care (ACC)

Godley, S. H., Godley, M. D., & Dennis, M. L. (2001). The Assertive Aftercare Protocol for adolescent substance abusers. In E. F. Wagner, & H. B. Waldron (Eds.), *Innovations in adolescent substance abuse interventions* (pp. 313-331). Pergamon. Available at <http://store.elsevier.com/product.jsp?isbn=9780080508771>

Innovations in Adolescent Substance Abuse Interventions focuses on developmentally appropriate approaches to the assessment, prevention, or treatment of substance use problems among adolescents. Organized into 16 chapters, this book begins with an assessment of adolescent substance use; theory, methods, and effectiveness of a drug abuse prevention approach; and problem behavior prevention programming for schools and community groups. Some chapters follow on the community-, family- and school-based interventions for adolescents with substance use problems. Other chapters explain psychopharmacological therapy; the assertive aftercare protocol for adolescent substance abusers; and twelve-step-based interventions for adolescents.

Godley, M. D., Godley, S. H., Dennis, M. L., Funk, R. R., & Passetti, L. L. (2002). Preliminary outcomes from the assertive continuing care experiment for adolescents discharged from residential treatment. *Journal of Substance Abuse Treatment*, 23, 21-32. [https://doi.org/10.1016/S0740-5472\(02\)00230-1](https://doi.org/10.1016/S0740-5472(02)00230-1)

In many treatment systems, adolescents referred to residential treatment have the most serious alcohol or other substance use disorders and are at high risk of relapse. Upon discharge, these adolescents are typically referred to continuing care services, however, linkage to these services is often problematic. In this study, 114 adolescents (76% male) who stayed at least 7 days in residential treatment were randomly assigned to receive either usual continuing care (UCC) or UCC plus an assertive continuing care protocol (ACC) involving case management and the adolescent community reinforcement approach. ACC participants were significantly more likely to initiate and receive more continuing care services, to be abstinent from marijuana at 3 months postdischarge, and to reduce their 3-month postdischarge days of alcohol use. Preliminary findings demonstrate an ACC approach designed for adolescents can increase linkage and retention in continuing care and improve short-term substance use outcomes.

Godley, S. H., Godley, M. D., Karvinen, T., Slown, L. L., & Wright, K. L. (2006). *The Assertive Continuing Care (ACC) protocol: A clinician's manual for working with adolescents after residential treatment of alcohol and other substance use disorders* (2nd ed.). Chestnut Health Systems, Lighthouse Institute. Available at <https://www.chestnut.org/store/products/28/the-assertive-continuing-care-protocol-a-clinicianss-manual-for-working-with-adolescents-after-res/product-details/>

The Assertive Continuing Care Protocol (ACC) is a continuing care intervention specifically designed for adolescents following a period of residential treatment. Substance abuse treatment systems for adolescents vary across the United States; however, many communities offer a period of residential treatment followed by a period of outpatient treatment that is commonly referred to as aftercare or continuing care. A strong continuing care intervention is particularly relevant in those states or communities that have adopted the use of the American Society of Addiction Medicine (ASAM; 2001) placement criteria because they require that those who have the most severe problems are placed in residential treatment. ASAM outlines five levels of substance abuse treatment services for adolescents: 1) early intervention; 2) outpatient treatment; 3) intensive outpatient treatment; 4) medically-monitored inpatient treatment; and 5) medically managed intensive inpatient treatment. Recent analyses have validated that when substance abuse treatment professionals make treatment placement decisions based on these criteria that the adolescents with the most severe problems are placed in the most restrictive environments (Godley, Godley, & Dennis, 2001). Those adolescents that are placed in residential treatment are, therefore, among the most severely impaired and are at great risk for relapse when they are discharged.

Godley, M. D., Godley, S. H., Dennis, M. L., Funk, R. R., & Passetti, L. L. (2007). The effectiveness of assertive continuing care on continuing care linkage, adherence, and abstinence following residential treatment for substance use disorders in adolescents. *Addiction*, *102*, 81-93. <https://doi.org/10.1111/j.1360-0443.2006.01648.x>

Aims This study compared assertive continuing care (ACC) to usual continuing care (UCC) on linkage, retention and a measure of continuing care adherence. Outcome analyses tested the direct and indirect effects of both conditions and level of adherence on early (months 1–3) and longer-term (months 4–9) abstinence.

Design Two-group randomized design.

Setting Eleven counties surrounding a community-based residential treatment program in the Midwestern section of the United States.

Participants A total of 183 adolescents, ages 12–17 years, with one or more *Diagnostic and Statistical Manual* version IV (DSM-IV) substance use dependence disorder and met American Society for Addiction Medicine (ASAM) placement criteria for non-medical residential treatment.

Intervention Prior to discharge from residential treatment, participants were assigned randomly to receive either UCC, available at outpatient clinics in the 11-county study area, or ACC via home visits.

Measurements Self-reported interview data were collected at intake, 3, 6 and 9 months post-residential discharge. Urine test data and interviews with a caregiver were conducted at baseline and 3 months.

Findings ACC led to significantly greater continuing care linkage and retention and longer-term abstinence from marijuana. ACC resulted in significantly better adherence to continuing care criteria which, in turn, predicted superior early abstinence. Superior early abstinence outcomes for both conditions predicted longer-term abstinence.

Conclusions ACC appears to be an effective alternative to UCC for linking, retaining and increasing adherence to continuing care. Replication with larger samples is needed to investigate further the direct and indirect effects of ACC found in this study.

Godley, S. H., Godley, M. D., Wright, K. L., Funk, R. R., & Petry, N. (2008). Contingent reinforcement of personal goal activities for adolescents with substance use disorders during post-residential continuing care. *American Journal on Addictions*, *17*(4), 278-286. <https://doi.org/10.1080/10550490802138798>

Contingency management (CM) is efficacious in improving outcomes of substance-abusing patients, but CM studies are relatively rare in adolescents. CM approaches can reinforce both abstinence and adherence to treatment-related goal areas. This paper describes 1,739 different activities in 10 goal areas (e.g., education, family/friends, and social/recreational) chosen by 86 adolescents who were participating in a multiple week CM study that reinforced both abstinence and adherence with goal-related activities. The mean activities selected was 20, and the mean completed was 13. Overall, 1,114 or 64% of chosen activities were completed. The clinical feasibility of activity incentive programs for adolescents is discussed.

Hupp, C. L., Mertig, K., Krall (Malek), K. L., Godley, M. D., & Godley, S. H. (2009). *Adolescent Community Reinforcement Approach (A-CRA) and Assertive Continuing Care (ACC) supervisor rating manual*. Chestnut Health Systems.

No abstract available.

Godley, S. H., Garner, B. R., Passetti, L. L., Funk, R. R., Dennis, M. L., & Godley, M. D. (2010). Adolescent outpatient treatment and continuing care: Main findings from a randomized clinical trial. *Drug and Alcohol Dependence*, *110*, 44-54. <https://doi.org/10.1016/j.drugalcdep.2010.02.003>

This study evaluated the effectiveness and cost-effectiveness of two types of outpatient treatment with and without Assertive Continuing Care (ACC) for 320 adolescents with substance use disorders. Study participants were randomly assigned to one of four conditions: (a) Chestnut's Bloomington Outpatient

Treatment (CBOP) without ACC; (b) CBOP with ACC; (c) Motivational Enhancement Therapy/Cognitive Behavior Therapy-7 session model (MET/CBT7) without ACC; and (d) MET/CBT7 with ACC. All study conditions attained high rates of participant engagement and retention. Follow-up interviews were completed with over 90% of the adolescents at three, six, nine, and 12 months after treatment admission. There was a significant time by condition effect over 12 months, with CBOP having a slight advantage for average percentage of days abstinent. Unlike previous findings that ACC provided incremental effectiveness following residential treatment, there were no statistically significant findings with regard to the incremental effectiveness of ACC following outpatient treatment. Analysis of the costs of each intervention combined with its outcomes revealed that the most cost-effective condition was MET/CBT7 without ACC.

Godley, M. D., & Godley, S. H. (2011). Assertive Continuing Care for adolescents. In J. Kelly, & W. White (Eds.), *Addiction recovery management: Theory, science, and practice* (pp. 103-126). Springer Science. <https://doi.org/10.1007/978-1-60327-960-4>

Addiction Recovery Management: Theory, Research, and Practice is the first book on the recovery management approach to addiction treatment and post-treatment support services. Distinctive in combining theory, research, and practice within the same text, this ground-breaking title includes authors who are the major theoreticians, researchers, systems administrators, clinicians and recovery advocates who have developed the model. State-of-the art and the definitive text on the topic, Addiction Recovery Management: Theory, Research, and Practice is mandatory reading for clinicians and all professionals who work with patients in recovery or who are interested in the field.

Godley, M. D., & Godley, S. H. (2012). Continuing care following residential treatment: History, current practice, critical issues, and emerging approaches. In N. Jainchill (Ed.), *Understanding and treating adolescent substance use disorders* (pp. 14-2–14-20). Civic Research Institute. Available at <http://www.civresearchinstitute.com/tasud.html>

This important new book is an essential resource for every professional working with young people at risk for substance abuse or suffering from a serious use disorder. It brings together, in a single authoritative volume, the most significant research findings on adolescent substance use, and expansive presentations on effective therapeutic interventions with examples of successful implementation.

With contributions from the field's foremost experts, this book:

- Explains why adolescents abuse drugs and alcohol, and how substance use differs among different social and cultural groups
- Identifies the environmental, intrapersonal, and interpersonal factors that influence adolescent drug using behaviors and explains how to address these factors in developing a treatment plan
- Provides a comprehensive "tool kit" of evidence-based intervention options along with expert guidance on when and how to use different treatment approaches for different clients

Tobin, T., Huntington, N., Lang, D., Carpenter, J., Centerbar, D., & Fulmore, D. (2012). *Program evaluation for Assertive Adolescent and Family Treatment (AAFT) final report*. Advocates for Human Potential.

Article unavailable

Godley, M. D., Godley, S. H., Dennis, M. L., Funk, R. R., Passeti, L. L., & Petry, N. (2014). A randomized trial of Assertive Continuing Care and contingency management for adolescents with substance use disorders. *Journal of Consulting and Clinical Psychology*, 82, 40-51. <https://doi.org/10.1037/a0035264>

Objective: Most adolescents relapse within 90 days of discharge from residential substance use treatment. We hypothesized that contingency management (CM), assertive continuing care (ACC), and their combination (CM + ACC) would each be more effective than usual continuing care (UCC). Method: Following residential treatment, 337 adolescents were randomized to 4 continuing care conditions: UCC alone, CM,

ACC, or CM + ACC. UCC was available across all conditions. Outcome measures over 12 months included percentage of days abstinent from alcohol, heavy alcohol, marijuana, and any alcohol or other drugs (AOD) using self-reports and toxicology testing and remission status at 12 months. Results: CM had significantly higher rates of abstinence than UCC for heavy alcohol use, $t_{(297)} = 2.50$, $p < .01$, $d = 0.34$; any alcohol use, $t_{(297)} = 2.58$, $p < .01$, $d = 0.36$; or any AOD use, $t_{(297)} = 2.12$, $p = .01$, $d = 0.41$; and had a higher rate in remission, odds ratio (OR) = 2.45, 90% confidence interval (CI) [1.18, 5.08], $p = .02$. ACC had significantly higher rates of abstinence than UCC from heavy alcohol use, $t_{(297)} = 2.66$, $p < .01$, $d = 0.31$; any alcohol use, $t_{(297)} = 2.63$, $p < .01$, $d = 0.30$; any marijuana use, $t_{(297)} = 1.95$, $p = .02$, $d = 0.28$; or any AOD use, $t_{(297)} = 1.88$, $p = .02$, $d = 0.30$; and had higher rates in remission, OR = 2.31, 90% CI [1.10, 4.85], $p = .03$. The ACC + CM condition was not significantly different from UCC on any outcomes. Conclusions: CM and ACC are promising continuing care approaches after residential treatment. Future research should seek to further improve their effectiveness.

McGarvey, E. L., Leon-Verdin, M., Bloomfield, K., Wood, S., Winters, E., & Smith, J. (2014). Effectiveness of A-CRA/ACC in treating adolescents with cannabis-use disorders. *Community Mental Health Journal*, 50(2), 150-157. <https://doi.org/10.1007/s10597-012-9566-2>

An evidence-based treatment for adolescent cannabis users, Adolescent Community Reinforcement Approach with Assertive Continuing Care, was implemented in a rural county and small city in the USA. A total of 147 adolescents, ages 12–18, were enrolled and assessed at baseline and three time points: 3, 6, and 12 months using the Global Appraisal of Individual Needs and related measures. Program effectiveness was confirmed. The treatment was equally effective for youth from the city versus the county. More than two-thirds (68.7 %) of the adolescents reported quitting use of cannabis by 12 months. The days of cannabis use in the last 90 days decreased significantly from the first follow-up, controlling for age (p value $< .01$), and shows consistent decline until the end of the treatment. In addition to reduction in substance use, the average number of days missing school and expelled from school decreased significantly from baseline to the end of the treatment.

Strunz, E., Jungerman, J., Kinyua, J., & Frew, P. M. (2015). Evaluation of an assertive continuing care program for Hispanic adolescents. *Global Journal of Health Science*, 7(5). <https://doi.org/10.5539/gjhs.v7n5p106>

PURPOSE: This study evaluated an Adolescent Community Reinforcement Approach (A-CRA) and Assertive Continuing Care (ACC) program targeting Hispanic adolescents at risk for substance abuse.

METHOD: The Clinic for Education, Treatment, and Prevention of Addiction (CETPA, Inc.), a behavioral health provider offering culturally appropriate substance use and mental health services, carried out the intervention. We examined longitudinal substance use data in relation to time spent in the program and possible confounders.

RESULTS: We analyzed data from 72 adolescent clients collected between 2010 and 2012. Self-reported data were evaluated to determine if time spent in the program was associated with substance use reduction. The data were correlated, zero-inflated, and overdispersed; consequently, we employed a mixed-effects zero-inflated negative-binomial model. Time spent in CETPA's program was significantly associated with reductions in the number of days of substance use ($p = .039$), but not with the likelihood of fully abstaining from use ($p = .290$). For non-abstinent participants who spend a year in the program, our models revealed an average decline of 46% in reported days of substance use.

CONCLUSIONS: A culturally tailored and age-appropriate substance abuse program for Hispanic adolescents resulted in a significant reduction of the numbers of days using alcohol, drugs, or other illicit substances. The A-CRA/ACC approach can yield successful results in culturally diverse settings.

Community Reinforcement and Family Training (CRAFT)

Meyers, R. J., Dominguez, T. P., & Smith, J. E. (1996). Community reinforcement training with concerned others. In V. B. Van Hasselt, & M. Hersen (Eds.), *Sourcebook of psychological treatment manuals for adult disorders* (pp. 257-294). Springer. https://doi.org/10.1007/978-1-4899-1528-3_8

It is widely acknowledged that problems related to alcohol misuse can seriously affect the lives of family members, friends, and close associates of the drinker (Collins, Leonard, & Searles, 1990; Orford & Harwin, 1982; Paolino & McCrady, 1977). Very often those individuals closest to the drinker are the first to feel the negative effects of problematic drinking. In the past, self-help programs advised individuals who were concerned about someone else's drinking to disengage or "detach" from the problems of the user and to concentrate on taking care of themselves. In recent years counseling approaches have been developed that include procedures for training concerned others (COs) in more active strategies for dealing with someone else's drinking. Furthermore, they help COs address areas of their own lives, such that they are better able to recognize and cope with the problems and stresses associated with being close to a problem drinker.

Kirby, K. C., Marlowe, D. B., Festinger, D. S., Garvey, K. A., & LaMonaca, V. (1999). Community reinforcement training for family and significant others of drug abusers: A unilateral intervention to increase treatment entry of drug users. *Drug and Alcohol Dependence*, 56, 85-96. [https://doi.org/10.1016/S0376-8716\(99\)00022-8](https://doi.org/10.1016/S0376-8716(99)00022-8)

We randomly assigned 32 concerned family members and significant others (FSOs) of drug users (DUs) to a community reinforcement training intervention or a popular 12-step self-help group. We measured problems arising from the DU's behavior, social functioning of the DU and FSO, and mood of the FSO at baseline and 10 weeks later. We also monitored the FSOs' treatment attendance and treatment entry of the DUs. The treatment groups showed equal reductions from baseline to follow-up in problems and improvements in social functioning and mood of the FSO. However the community reinforcement intervention was significantly better at retaining FSOs in treatment and inducing treatment entry of the DUs.

Meyers, R. J., Miller, W. R., Hill, D. E., & Tonigan, J. S. (1999). Community reinforcement and family training (CRAFT): Engaging unmotivated drug users in treatment. *Journal of Substance Abuse*, 10, 291-308. [https://doi.org/10.1016/S0899-3289\(99\)00003-6](https://doi.org/10.1016/S0899-3289(99)00003-6)

Although motivation for drug abuse treatment is a substantial problem, unilateral intervention through concerned significant others (CSOs) represents a promising method for engaging unmotivated individuals. The Community Reinforcement and Family Training (CRAFT) program, based on principles of reinforcement, was developed for this specific purpose. In Phase I, CSOs received the CRAFT intervention, whereby they were taught skills for modifying a loved one's drug-using [behavior](#) and for enhancing treatment engagement. CSOs were evaluated at 3 and 6 months. In Phase II, engaged drug users received treatment using the Community Reinforcement Approach (CRA). A total of 62 CSOs participated in this evaluation of the effectiveness of CRAFT. CSOs completed, on average, 87% of offered treatment sessions. During the 6-month study period, 74% succeeded in engaging their resistant loved one in treatment. Reported abstinence both from [illicit drugs](#) and alcohol increased significantly for drug users engaged in treatment, but not for unengaged cases. All CSOs showed significant reductions in depression, anxiety, anger, and physical symptoms, with average scores dropping into the normal range on all measures. CRAFT provides a promising alternative to confrontational and detachment approaches in counseling CSOs to help their loved ones.

Meyers, R. J., Miller, W. R., Smith, J. E., & Tonigan, J. S. (2002). A randomized trial of two methods for engaging treatment-refusing drug users through concerned significant others. *Journal of Consulting and Clinical Psychology*, 70, 1182-1185. <https://doi.org/10.1037//0022-006X.70.5.1182>

In a randomized clinical trial, 90 concerned significant others (CSOs) of treatment-refusing illicit drug users were assigned to either (a) community reinforcement and family training (CRAFT), which teaches

behavior change skills; (b) CRAFT with additional group aftercare sessions after the completion of the individual sessions; or (c) Al-Anon and Nar-Anon facilitation therapy (Al-Nar FT). All protocols received 12 hr of manual-guided individual treatment, Follow-up rates for the CSOs were consistently at least 96%. The CRAFT conditions were significantly more effective than Al-Nar FT in engaging initially unmotivated drug users into treatment. CRAFT alone engaged 58.6%, CRAFT + aftercare engaged 76.7%, and Al-Nar FT engaged 29.0%. No CSO engaged a treatment-refusing loved one once individual sessions had been completed.

Meyers, R. J., & Wolfe, B. L. (2004). *Get your loved one sober: Alternatives to nagging, pleading, and threatening*. Hazelden. Available at <https://www.hazelden.org/store/item/653?Get-Your-Loved-One-Sober>

Co-author Dr. Robert Meyers spent ten years developing a treatment program that helps Concerned Significant Others (CSOs) both improve the quality of their lives and to learn how to make treatment an attractive option for their partners who are substance abusers. *Get Your Loved One Sober* describes this multi-faceted program that uses supportive, non-confrontational methods to engage substance abusers into treatment. Called Community Reinforcement and Family Training (CRAFT), this evidence-based program uses scientifically validated behavioral principles to reduce the loved one's substance use and to encourage him or her to seek treatment. Equally important, CRAFT also helps loved ones reduce personal stress and introduce meaningful, new sources of satisfaction into their life.

Smith, J. E., & Meyers, R. J. (2005). *Motivating substance abusers to enter treatment: Working with family members*. Guilford Press. Available at <http://www.guilford.com/books/Motivating-Substance-Abusers-to-Enter-Treatment/Smith-Meyers/9781593856465>.

Filling a crucial need, this book presents Community Reinforcement and Family Training (CRAFT), a time- and cost-effective therapy program oriented to individuals who want to motivate a loved one to seek help. The authors' nonconfrontational approach teaches concerned significant others (CSOs) how to change their own behavior in order to reward sobriety, discourage substance use, and ultimately to help get the substance abuser into treatment. The CSO also gains valuable skills for problem solving and self-care. Step-by-step instructions for implementing CRAFT are accompanied by helpful case examples and reproducibles.

Dutcher, L. W., Anderson, R., Moore, M., Luna-Anderson, C., Meyers, R. J., Delaney, H. D., & Smith, J. E. (2009). Community reinforcement and family training: An effectiveness study. *Journal of Behavior Analysis in Health, Sports, Fitness, and Medicine*, 2, 80-90. <https://doi.org/10.1037/h0100376>

Community Reinforcement and Family Training (CRAFT) is a cognitive-behavioral program designed to get treatment-refusing substance-abusing individuals to enter treatment by teaching family members how to support a clean/sober lifestyle. Additionally, CRAFT teaches family members how to improve their own lives, regardless of whether their loved one enters treatment. The Santa Fe County CRAFT Project examined whether CRAFT could be successfully transferred from a controlled research setting to a community treatment center. Although the liberal client selection procedures allowed for the recruitment of a heterogeneous sample of interested family members, engagement results obtained in this effectiveness study (55%–65% engaged) were roughly comparable to the controlled research findings. This study demonstrated that CRAFT could be successfully transferred to a community treatment agency.

Brigham, G. S., Slesnick, N., Winhusen, T. M., Lewis, D. F., Guo, X., & Somoza, E. (2014). A randomized pilot clinical trial to evaluate the efficacy of Community Reinforcement and Family Training for Treatment Retention (CRAFT-T) for improving outcomes for patients completing opioid detoxification. *Drug and Alcohol Dependence*, 138, 240-243. <https://doi.org/10.1016/j.drugalcdep.2014.02.013>

Background

[Detoxification](#) with psychosocial counseling remains a standard opioid-use disorder treatment practice but is associated with poor outcomes. This study tested the efficacy of a newly developed [psychosocial](#)

[intervention](#), Community Reinforcement Approach and Family Training for Treatment Retention (CRAFT-T), relative to [psychosocial treatment](#) as usual (TAU), for improving treatment outcomes.

Methods

A randomized, 14-week trial with follow-up visits at 6 and 9 months post-randomization conducted at two substance use disorder (SUD) treatment programs. Opioid-dependent adults (i.e., identified patient – IP) enrolled in a residential buprenorphine-detoxification program and their identified concerned significant other (CSO) was randomized to CRAFT-T ($n = 28$ dyads) or TAU ($n = 24$ dyads). CRAFT-T consisted of two sessions with the IP and CSO together and 10 with the CSO alone, over 14 weeks. TAU for the CSOs was primarily educational and referral to self-help. All IPs received treatment as usually provided by the SUD program in which they were enrolled. The primary outcome was time to first IP drop from treatment lasting 30 days or more. Opioid and other drug use were key secondary outcomes.

Results

CRAFT-T resulted in a moderate but non-significant effect on treatment retention ($p = 0.058$, hazard ratio = 0.57). When the CSO was parental family, CRAFT-T had a large and significant effect on treatment retention ($p < 0.01$, hazard ratio = .040). CRAFT-T had a significant positive effect on IP opioid and other drug use ($p < 0.0001$).

Conclusion

CRAFT-T is a promising treatment for opioid use disorder but replication is needed to confirm these results.

McLellan, A. T., Kirby, K. C., & Meyers, R. J. (2015). Parent CRAFT: Help for parents now [online course]. Available at <https://www.cadenceonline.com>.

Parent CRAFT provides immediate online access for all parents to the proven CRAFT training. A fast-paced and engaging video-based course that teaches parents the skills they need to meet the challenge of substance abuse.

Bischof, G., Iwen, J., Freyer-Adam, J., & Rumpf, H. J. (2016). Efficacy of the Community Reinforcement and Family Training for concerned significant others of treatment-refusing individuals with alcohol dependence: A randomized controlled trial. *Drug and Alcohol Dependence*, 163, 179-185. <https://doi.org/10.1016/j.drugalcdep.2016.04.015>

Background

The Community Reinforcement and Family Training (CRAFT) is a promising approach for Concerned Significant Others (CSOs) of alcohol-dependent individuals (ADI) that aims to engage treatment-refusing patients in alcohol treatment and to improve CSO functioning. To date, only two randomized controlled trials (RCTs) of CRAFT-based treatment for CSOs of ADI are available, both conducted in the U.S. For the first time, this study analyses the efficacy of CRAFT in a sample of CSOs outside of the U.S.

Methods

Participants were recruited through the treatment system (general practitioners, psychotherapists, addiction counselling services) and through media solicitation. After brief screening, 94CSOs were randomly allocated to an immediate intervention condition (II) or a wait list condition (WL) that received the CRAFT intervention after 3 months. Data for the follow-up assessments at 3 and 6 months was provided by 78CSOs (II $N = 42$; WL $N = 36$). In addition, a follow-up assessment (f-u) was conducted after 12 months (Response rate 92%).

Results

At 3-month f-u, II revealed significant higher ADI engagement rates (40.5%) compared to WL (13.9%); after WL received the CRAFT intervention, engagement rates did not differ between both groups at 6- and 12-month f-u. CSOs in both groups reported significant improvements in terms of [mental health](#) and family cohesion after having received the intervention, i.e. II at 3-months f-u and WL at 6-month f-u.

Conclusions

Data show that CRAFT is effective for treating CSOs of alcohol dependent individuals in terms of treatment engagement and improvement of CSOs mental health and family cohesion.

Archer, M., Harwood, H., Stevelink, S., Rafferty, L., & Greenberg, N. (2020). Community reinforcement and family training and rates of treatment entry: A systematic review. *Addiction*, 115(6), 1024-1037. <https://doi.org/10.1111/add.14901>

Background and Aims

Adaptations with different modes of delivery and target addictions have found highly divergent rates of success for Community Reinforcement Approach and Family Training (CRAFT). This study aims to clarify which (1) treatment components and (2) participant characteristics contribute to rates of identified patient (IP) treatment entry.

Method

Systematic review of CRAFT evaluation studies of all designs (controlled and uncontrolled) with data synthesis and narrative analysis of addiction treatment services and university research departments in North America and Europe.

Results

A total of 691 concerned significant others (CSOs), predominately female spouses/parents, participating in 20 distinct treatment conditions from 14 studies. The main outcome of IP treatment entry rate reported by CSOs up to 12 months after starting CRAFT with key predictors/correlates including IP addiction, IP-CSO relationship, CRAFT modality and integration of treatment for IP. Meta-analysis found CRAFT to be twice as effective as controls/comparison groups. Multi-modality treatment, including both individual and group sessions, yielded the highest IP treatment entry rates (77 and 86%), with progressively lower rates for individual (12.5–71%), group (60%) and self-directed workbook (13.3–40%) modalities. While all five studies targeting gambling addiction had consistently low rates (12.5–23%), other treatment components, including therapist training, treatment fidelity and integrating treatment for the IP, were implicated.

Conclusions

Adaptations of Community Reinforcement Approach and Family Training for different delivery modalities and addictions have yielded widely varying rates of treatment engagement for the identified patient, with those offering the most comprehensive support to the concerned significant other, including individual and group sessions, having highest levels of engagement success.

Eék, N., Romberg, K., Siljeholm, O., Johansson, M., Andreasson, S., Lundgren, T., Fahlke, C., Ingesson, S., Bäckman, L., & Hammarberg, A. (2020). Efficacy of an internet-based Community Reinforcement and Family Training program to increase treatment engagement for AUD and to improve psychiatric health for CSOs: A randomized controlled trial. *Alcohol and Alcoholism*, 55(2), 187-195. <https://doi.org/10.1093/alcalc/agz095>

Aims

Community Reinforcement Approach and Family Training (CRAFT) is a support program for concerned significant others (CSOs) to identified persons (IPs) with alcohol use disorders, with the purpose of engaging IPs to treatment and to improve CSO functioning. The purpose of the present study was to investigate the efficacy of an internet-based version of CRAFT (iCRAFT).

Methods

Randomized controlled trial comparing iCRAFT with a wait-list (WL) condition with a nation-wide uptake in Sweden. A total of 94 CSOs to a treatment refusing IP, who described the IP according to DSM-IV criteria for alcohol dependence or abuse, were included in the study. iCRAFT consisted of five weekly administered therapist-guided modules with the following content: (a) improve CSOs' own mental health, (b) improve the CSOs skills in asking the IP to seek treatment, (c) positive communication skills training, (d) contingency management of IP drinking behavior. Main outcome measure was IPs initiative to seek treatment measured at 24 weeks. Secondary outcomes were IP's daily alcohol consumption, CSOs mental health, quality of life and relational satisfaction.

Results

Of 94 participants, 15 CSOs reported IP treatment initiative during the study period. Of these, 10 belonged to the iCRAFT condition and five to the WL condition. The difference between conditions was nonsignificant, and the results were inconclusive. Participants in iCRAFT showed short-term improvements regarding depressive symptoms, quality of life and relational happiness.

Conclusion

This study was unable to demonstrate substantial changes in the iCRAFT program regarding IP treatment seeking or CSO mental health.

Roizen, H. G., & Smith, J. E. (2021). CRA and CRAFT: Behavioral treatments for both motivated and unmotivated substance-abusing individuals and their family members. In N. el-Guebaly, G. Carra, M. Galanter, & A. M. Baldacchino (Eds.), *Textbook of addiction treatment* (pp. 475-192). Springer, Cham. https://doi.org/10.1007/978-3-030-36391-8_33

The Community Reinforcement Approach (CRA) is a behavioral treatment for individuals with substance-use problems. It is predicated upon the belief that a non-drinking/non-using lifestyle must be experienced by individuals as rewarding in order for them to choose it consistently over substance use. As part of CRA, the client's "community" (e.g., family, friends, colleagues, organizations, work) is explored to find new areas of potential reinforcement that can compete with substance use. CRA therapists work with clients to decide on which goals they want to pursue in life, and they then teach these clients the skills required to achieve these goals. An adaptation of CRA is the Adolescent Community Reinforcement Approach (A-CRA), which is geared specifically toward the treatment of adolescents, young adults, and their parents or caregivers. Community Reinforcement and Family Training (CRAFT) is a treatment for the family members or close friends (Concerned Significant Others, CSOs) of unmotivated, treatment-refusing substance abusers (Identified Patients, IPs). CRAFT therapists work with CSOs in an attempt to change the home environment of the unmotivated IPs such that a healthy and enjoyable lifestyle is supported over one dominated by substance use. CRAFT goals include getting IPs to seek treatment and reducing IP substance use, and also having CSOs increase their own happiness regardless. CRA, A-CRA, and CRAFT have solid empirical support, and each has been used successfully with diverse populations and various drugs of choice.

Websites

California Evidence-Based Clearinghouse for Child Welfare. (2021). *Adolescent Community Reinforcement Approach (A-CRA)*. Available at <https://www.cebc4cw.org/program/adolescent-community-reinforcement-approach/>

National Institute of Justice (NIJ) Crime Solutions. (2020). *Program profile: Adolescent Community Reinforcement Approach (A-CRA)*. Available at <https://www.crimesolutions.gov/ProgramDetails.aspx?ID=137>

Title IV-E Prevention Services Clearinghouse. (2020). *Adolescent Community Reinforcement Approach (A-CRA)*. Available at <https://preventionservices.abtsites.com/programs/233/show>

Washington State Institute for Public Policy. (2018). *Adolescent Community Reinforcement Approach (A-CRA)*. Available at <https://www.wsipp.wa.gov/BenefitCost/Program/261>

Youth.gov. (n.d.) *Adolescent Community Reinforcement Approach*. Available at <https://youth.gov/content/adolescent-community-reinforcement-approach>