

# Approaches to Treating Adolescent Substance Use Disorders

## 1. Behavioral Approaches

Behavioral interventions help adolescents to actively participate in their recovery from drug abuse and addiction and enhance their ability to resist drug use. In such approaches, therapists may provide incentives to remain abstinent, modify attitudes and behaviors related to drug abuse, assist families in improving their communication and overall interactions, and increase life skills to handle stressful circumstances and deal with environmental cues that may trigger intense craving for drugs. Below are some behavioral treatments shown to be effective in addressing substance abuse in adolescents (listed in alphabetical order).

### Group Therapy for Adolescents

Adolescents can participate in group therapy and other peer support programs during and following treatment to help them achieve abstinence. When led by well-trained clinicians following well-validated [Cognitive-Behavioral Therapy \(CBT\)](#) protocols, groups can provide positive social reinforcement through peer discussion and help enforce incentives to staying off drugs and living a drug-free lifestyle.

However, group treatment for adolescents carries a risk of unintended adverse effects: Group members may steer conversation toward talk that glorifies or extols drug use, thereby undermining recovery goals. Trained counselors need to be aware of that possibility and direct group activities and discussions in a positive direction.

### Adolescent Community Reinforcement Approach (A-CRA)

A-CRA is an intervention that seeks to help adolescents achieve and maintain abstinence from drugs by replacing influences in their lives that had reinforced substance use with healthier family, social, and educational or vocational reinforcers. After assessing the adolescent's needs and levels of functioning, the therapist chooses from among 17 A-CRA procedures to address problem-solving, coping, and communication skills and to encourage active participation in constructive social and recreational activities.<sup>54</sup>

### Cognitive-Behavioral Therapy (CBT)

CBT strategies are based on the theory that learning processes play a critical role in the development of problem behaviors like drug abuse. A core element of CBT is teaching participants how to anticipate problems and helping them develop effective coping strategies. In CBT, adolescents explore the positive and negative consequences of using drugs. They learn to monitor their feelings and thoughts and recognize distorted thinking patterns and cues that trigger their substance abuse; identify and anticipate high-risk situations; and apply an array of self-control skills, including emotional regulation and anger management, practical problem solving, and substance refusal. CBT may be offered in outpatient settings in either individual or group sessions (see "[Group Therapy for Adolescents](#)") or in residential settings.<sup>55</sup>

## Contingency Management (CM)

Research has demonstrated the effectiveness of treatment using immediate and tangible reinforcements for positive behaviors to modify problem behaviors like substance abuse. This approach, known as Contingency Management (CM), provides adolescents an opportunity to earn low-cost incentives such as prizes or cash vouchers (for food items, movie passes, and other personal goods) in exchange for participating in drug treatment, achieving important goals of treatment, and not using drugs. The goal of CM is to weaken the influence of reinforcement derived from using drugs and to substitute it with reinforcement derived from healthier activities and drug abstinence. For adolescents, CM has been offered in a variety of settings, and parents can be trained to apply this method at home. CM is typically combined either with a psychosocial treatment or a medication (where available). Recent evidence also supports the use of Web-based CM to help adolescents stop smoking.<sup>56</sup>

## Motivational Enhancement Therapy (MET)

MET is a counseling approach that helps adolescents resolve their ambivalence about engaging in treatment and quitting their drug use. This approach, which is based on a technique called motivational interviewing, typically includes an initial assessment of the adolescent's motivation to participate in treatment, followed by one to three individual sessions in which a therapist helps the patient develop a desire to participate in treatment by providing non-confrontational feedback. Being empathic yet directive, the therapist discusses the need for treatment and tries to elicit self-motivational statements from the adolescent to strengthen his or her motivation and build a plan for change. If the adolescent resists, the therapist responds neutrally rather than by contradicting or correcting the patient. MET, while better than no treatment, is typically not used as a stand-alone treatment for adolescents with substance use disorders but is used to motivate them to participate in other types of treatment.<sup>57</sup>

## Twelve-Step Facilitation Therapy

Twelve-Step Facilitation Therapy is designed to increase the likelihood that an adolescent with a drug abuse problem will become affiliated and actively involved in a 12-step program like Alcoholics Anonymous (AA) or Narcotics Anonymous (NA). Such programs stress the participant's acceptance that life has become unmanageable, that abstinence from drug use is needed, and that willpower alone cannot overcome the problem. The benefits of 12-step participation for adults in extending the benefits of addiction treatment appear to apply to adolescent outpatients as well, according to recent research. Research also suggests adolescent-specific 12-step facilitation strategies may help enhance outpatient attendance rates.<sup>58</sup>

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## 2. Family-Based Approaches

Family-based approaches to treating adolescent substance abuse highlight the need to engage the family, including parents, siblings, and sometimes peers, in the adolescent's treatment. Involving the family can be particularly important, as the adolescent will often be living with at least one parent and be subject to the parent's controls, rules, and/or supports. Family-based approaches generally address a wide array of problems in addition to the young person's substance problems, including family communication and conflict; other co-occurring behavioral, mental health, and learning disorders; problems with school or work attendance; and peer networks. Research shows that family-based treatments are highly efficacious; some studies even suggest they are superior to other individual and group treatment approaches.<sup>59</sup> Typically offered in outpatient settings, family treatments have also been tested successfully in higher-intensity settings such as residential and intensive outpatient programs. Below are specific types of family-based treatments shown to be effective in treating adolescent substance abuse.

### Brief Strategic Family Therapy (BSFT)

BSFT is based on a family systems approach to treatment, in which one member's problem behaviors are seen to stem from unhealthy family interactions. Over the course of 12–16 sessions, the BSFT counselor establishes a relationship with each family member, observes how the members behave with one another, and assists the family in changing negative interaction patterns. BSFT can be adapted to a broad range of family situations in various settings (mental health clinics, drug abuse treatment programs, social service settings, families' homes) and treatment modalities (as a primary outpatient intervention, in combination with residential or day treatment, or as an aftercare/continuing-care service following residential treatment).<sup>60</sup>

### Family Behavior Therapy (FBT)

FBT, which has demonstrated positive results in both adults and adolescents, combines behavioral contracting with contingency management to address not only substance abuse but other behavioral problems as well. The adolescent and at least one parent participate in treatment planning and choose specific interventions from a menu of evidence-based treatment options. Therapists encourage family members to use behavioral strategies taught in sessions and apply their new skills to improve the home environment. They set behavioral goals for preventing substance use and reducing risk behaviors for sexually transmitted diseases like HIV, which are reinforced through a [contingency management \(CM\)](#) system. Goals are reviewed and rewards provided at each session.<sup>61</sup>

Involving the family can be particularly important in adolescent substance abuse treatment.

### Functional Family Therapy (FFT)

FFT combines a family systems view of family functioning (which asserts that unhealthy family interactions underlie problem behaviors) with behavioral techniques to improve communication, problem-solving, conflict resolution, and parenting skills. Principal treatment strategies include (1) engaging families in the treatment process and enhancing their motivation for change and (2) modifying family members' behavior using CM techniques, communication and problem solving, behavioral contracts, and other methods.<sup>62</sup>

## Multidimensional Family Therapy (MDFT)

MDFT is a comprehensive family- and community-based treatment for substance-abusing adolescents and those at high risk for behavior problems such as conduct disorder and delinquency. The aim is to foster family competency and collaboration with other systems like school or juvenile justice. Sessions may take place in a variety of locations, including in the home, at a clinic, at school, at family court, or in other community locations. MDFT has been shown to be effective even with more severe substance use disorders and can facilitate the reintegration of substance abusing juvenile detainees into the community.<sup>63</sup>

## Multisystemic Therapy (MST)

MST is a comprehensive and intensive family- and community-based treatment that has been shown to be effective even with adolescents whose substance abuse problems are severe and with those who engage in delinquent and/or violent behavior. In MST, the adolescent's substance abuse is viewed in terms of characteristics of the adolescent (e.g., favorable attitudes toward drug use) and those of his or her family (e.g., poor discipline, conflict, parental drug abuse), peers (e.g., positive attitudes toward drug use), school (e.g., dropout, poor performance), and neighborhood (e.g., criminal subculture). The therapist may work with the family as a whole but will also conduct sessions with just the caregivers or the adolescent alone.

# 3. Addiction Medications

Several medications have been found to be effective in treating addiction to opioids, alcohol, or nicotine in adults, although none of these medications have been approved by the FDA to treat adolescents. In most cases, only preliminary evidence exists for the effectiveness and safety of these medications in people under 18, and there is no evidence on the neurobiological impact of these medications on the developing brain. However, despite the relative lack of evidence, some health care providers do use medications “off-label” when treating adolescents (especially older adolescents) who are addicted to opioids, nicotine, or (less commonly) alcohol. Newer compounds continue to be studied for possibly treating substance use disorders in adults and adolescents, but none other than those listed here have shown conclusive results.

Note that there are currently no FDA-approved medications to treat addiction to cannabis, cocaine, or methamphetamine in any age group.

## Opioid Use Disorders

**Buprenorphine** reduces or eliminates opioid withdrawal symptoms, including drug cravings, without producing the “high” or dangerous side effects of heroin and other opioids. It does this by both activating and blocking opioid receptors in the brain (i.e., it is what is known as a partial opioid agonist). It is available for sublingual (under-the-tongue) administration both in a stand-alone formulation (called Subutex<sup>®</sup>) and in combination with another agent called naloxone. The naloxone in the combined formulation (marketed as Suboxone<sup>®</sup>) is included to deter diversion or abuse of the medication by causing a withdrawal reaction if it is intravenously injected.<sup>65</sup> Physicians with special certification may provide office-based buprenorphine treatment for detoxification and/or maintenance therapy.<sup>66</sup> It is sometimes

prescribed to older adolescents on the basis of two research studies indicating its efficacy for this population,<sup>67,68</sup> even though it is not approved by the FDA for pediatric use.\*

Adolescent drug abuse treatment is most commonly offered in outpatient settings.

**Methadone** also prevents withdrawal symptoms and reduces craving in opioid-addicted individuals by activating opioid receptors in the brain (i.e., a full opioid agonist). It has a long history of use in treatment of opioid dependence in adults, and is available in specially licensed methadone treatment programs. In select cases and in some States, opioid-dependent adolescents between the ages of 16 and 18 may be eligible for methadone treatment, provided they have two documented failed treatments of opioid detoxification or drug-free treatment and have a written consent for methadone signed by a parent or legal guardian.<sup>69</sup>

**Naltrexone** is approved for the prevention of relapse in adult patients following complete detoxification from opioids. It acts by blocking the brain's opioid receptors (i.e., an opioid antagonist), preventing opioid drugs from acting on them and thus blocking the high the user would normally feel and/or causing withdrawal if recent opioid use has occurred. It can be taken orally in tablets or as a once-monthly injection given in a doctor's office (a preparation called Vivitrol®).<sup>70</sup>

## Alcohol Use Disorders<sup>‡</sup>

**Acamprosate** (Campral®) reduces withdrawal symptoms by normalizing brain systems disrupted by chronic alcohol consumption in adults.

**Disulfiram** (Antabuse®) inhibits an enzyme involved in the metabolism of alcohol, causing an unpleasant reaction if alcohol is consumed after taking the medication.<sup>71</sup>

**Naltrexone** decreases alcohol-induced euphoria and is available in both oral tablets and long-acting injectable preparations (as in its use for the treatment of opioid addiction, above).

## Nicotine Use Disorders

**Bupropion**, commonly prescribed for depression, also reduces nicotine cravings and withdrawal symptoms in adult smokers.<sup>72</sup>

**Nicotine Replacement Therapies (NRTs)** help smokers wean off cigarettes by activating nicotine receptors in the brain. They are available in the form of a patch, gum, lozenge, nasal spray, or inhaler.<sup>73</sup>

**Varenicline** reduces nicotine cravings and withdrawal in adult smokers by mildly stimulating nicotine receptors in the brain.<sup>74</sup>

## 4. Recovery Support Services

To reinforce gains made in treatment and to improve their quality of life more generally, recovering adolescents may benefit from recovery support services, which include continuing care, mutual help groups (such as 12-step programs), peer recovery support services, and recovery high schools. Such programs provide a community setting where fellow recovering persons can share their experiences, provide mutual support to each other's struggles with drug or alcohol problems, and in other ways support a substance-free lifestyle. Note that recovery support services are not substitutes for treatment. Also, the existing research evidence for these approaches (with the exception of Assertive Continuing Care) is preliminary; anecdotal evidence supports the effectiveness of peer recovery support services and recovery high schools, for example, but their efficacy has not been established through controlled trials.

### Assertive Continuing Care (ACC)

ACC is a home-based continuing-care approach delivered by trained clinicians to prevent relapse, and is typically used after an adolescent completes therapy utilizing the [Adolescent Community Reinforcement Approach \(A-CRA\)](#). Using positive and negative reinforcement to shape behaviors, along with training in problem-solving and communication skills, ACC combines A-CRA and assertive case management services (e.g., use of a multidisciplinary team of professionals, round-the-clock coverage, assertive outreach) to help adolescents and their caregivers acquire the skills to engage in positive social activities.<sup>75</sup>

### Mutual Help Groups

Mutual help groups such as the 12-step programs Alcoholics Anonymous (AA) and Narcotics Anonymous (NA) provide ongoing support for people with addictions to alcohol or drugs, respectively, free of charge and in a community setting. Participants meet in a group with others in recovery, once a week or more, sharing their experiences and offering mutual encouragement. Twelve-step groups are guided by a set of fundamental principles that participants are encouraged to adopt—including acknowledging that willpower alone cannot achieve sustained sobriety, that surrender to the group conscience must replace self-centeredness, and that long-term recovery involves a process of spiritual renewal.<sup>76</sup>

### Peer Recovery Support Services

Peer recovery support services, such as recovery community centers, help individuals remain engaged in treatment and/or the recovery process by linking them together both in groups and in one-on-one relationships with peer leaders who have direct experience with addiction and recovery. Depending on the needs of the adolescent, peer leaders may provide mentorship and coaching and help connect individuals to treatment, 12-step groups, or other resources. Peer leaders may also facilitate or lead community-building activities, helping recovering adolescents build alternative social networks and have drug- and alcohol-free social options.

## Recovery High Schools

Recovery high schools are schools specifically designed for students recovering from substance abuse issues. They are typically part of another school or set of alternative school programs within the public school system, but recovery school students are generally separated from other students by means of scheduling and physical barriers. Such programs allow adolescents newly in recovery to be surrounded by a peer group supportive of recovery efforts and attitudes. Recovery schools can serve as an adjunct to formal substance abuse treatment, with students often referred by treatment providers and enrolled in concurrent treatment for other mental health problems.