

# Multidimensional Family Therapy for Adolescent Drug Abuse Offers Broad, Lasting Benefits

An approach that integrates individual, family, and community interventions outperformed other treatments.

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A therapy that engages substance abusing teens and their parents individually while building the relationship between them has lasting benefits that extend beyond reduced drug use, according to two NIDA-sponsored, randomized trials. A year after treatment, teenage participants treated with Multidimensional Family Therapy (MDFT) had fewer drug-related problems and had improved more on general measures of behavior and mental health than teens treated with cognitive-behavioral therapy (CBT).

## TEENS AND PARENTS, ALONE AND TOGETHER

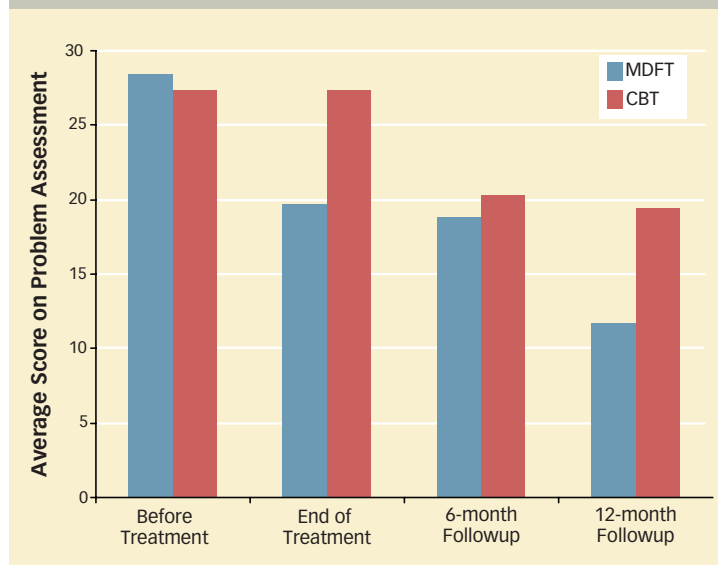
In MDFT, adolescent drug abuse is viewed as a complex phenomenon in which personal issues, interpersonal relationships, overall family functioning, and social forces must all be addressed to effect enduring change. Some MDFT sessions involve both generations, some only the adolescent, and some just the parent or parents. In joint sessions, the therapist guides parents and teens through discussions of family problems and introduces methods that build family strengths, improve communication, and reduce conflict. Counselors also help families negotiate school, work, justice systems, and community service agencies.

Sessions held exclusively with individual teens aim to establish meaningful therapeutic goals, foster motivation, and help the adolescents develop concrete strategies to solve problems and find alternatives to drug taking and delinquency.

Sessions with parents include such topics as family management, the parent-adolescent relationship, and parenting skills, including monitoring and setting limits. These sessions also provide opportunities to provide emotional support. “We connect with parents in a way that recognizes their stress and the anger, hopelessness, and even despair they may feel about their child,” notes Dr. Howard Liddle of the University of Miami, who led the two studies. “Then we help parents reconnect emotionally to their child. This renewed caring is instrumental in changing parenting practices.

“MDFT is a flexible and individualized treatment system rather than a one-size-

**THE STAYING POWER OF MULTIDIMENSIONAL FAMILY THERAPY** Differences between Multidimensional Family Therapy (MDFT) and cognitive-behavioral therapy (CBT) in reducing teens’ social and behavioral consequences of drug abuse, as measured by the Personal Experience Inventory, were most pronounced a year after the end of treatment.



fits-all approach,” says Dr. Liddle. MDFT has been used for young (11 to 15 years old) and older adolescents and juvenile offenders. It has been applied in clients’ homes, community-based clinics, residential treatment centers, and correctional facilities.

## ADVANTAGES EMERGE OVER TIME

The setting for the first of the two studies was a community-based drug abuse clinic. Two hundred and twenty-four youths—predominantly African-American males, averaging 15 years of age, from low-income, single-parent homes—

participated. Cannabis was the most commonly abused drug; 75 percent of participants were diagnosed as cannabis dependent, 20 percent alcohol dependent, and 13 percent dependent on other substances. The researchers randomly assigned half to receive MDFT and half, CBT.

The CBT intervention, like MDFT, aimed to equip patients with skills not only to reduce drug abuse but also to cope with problems in many areas of life. However, unlike MDFT, it focused on individual, rather than family, development. Parents attended only the first two sessions, during which they helped their children assess their problems and prioritize goals. To ensure high-quality delivery of both interventions, counselors trained extensively with manuals, and research assistants rated videotapes of the therapy sessions.

“CBT is an evidence-based treatment that everybody knows about and likes, for good reason,” Dr. Liddle says. He notes that the empirical evidence supporting CBT for adults is strong and that similar evidence is emerging for adolescent populations as well. “Clinicians find it intuitive, logical, and if they have proper training, easy to do,” he explains.

At the conclusion of therapy in Dr. Liddle’s trial, CBT and MDFT seemed similarly effective. Youths in the CBT group reported that they had used cannabis 10 times, on average, in the month before they started treatment; those in the MDFT group reported 12 days of such usage. By the last month of treatment, both groups’ use of cannabis had dropped, to 7.5 days and 6 days, respectively. A similar pattern held for use of any drugs or alcohol. At intake, 94 percent of the CBT group and 92 percent of the MDFT youths reported using drugs or alcohol more than once in the previous month; these percentages had dropped to 77 and 73 percent, respectively, at discharge.

In the months after treatment, youths who had received MDFT fared better than those in the CBT group. Using a statistical technique called latent growth curve modeling, which compares rates of change over time, the researchers concluded that by 6 months after the start of treatment, the benefits of MDFT had begun to outpace those of CBT. One year after starting treatment:

- Youths assigned to MDFT had lower scores on the Personal Experience Inventory, which assesses impairment due to personal, social, educational, and legal problems tied to drug abuse.
- MDFT recipients were using drugs other than cannabis less frequently than before treatment, while such drug use by CBT recipients increased over pre-treatment levels.
- 47 percent of youth treated with MDFT had used alcohol or drugs no more than once in the prior month, compared with 28 percent in the CBT group.

#### **MDFT ALSO BENEFITS YOUNGER TEENS**

The second study tested MDFT versus CBT-based peer-group therapy in a younger group of adolescent substance abusers—a population that is at particularly high risk of worsening developmental problems, severe and chronic substance use disorders, depression, school failure, and unemployment in adulthood. Eighty-three teens, average age 13.5 years old, participated. Most had been referred to a substance abuse treatment program by either their schools or the juvenile justice system after using alcohol or a drug during the 30 days prior to an initial assessment or demonstrating imminent risk for substance use—for example, by getting caught with drugs in their possession.

As in the study with older youths, MDFT therapists counseled families as well as teens, but those conducting the

alternate therapy did not work at all with families. Both treatments lasted 12–16 weeks and addressed substance abuse together with associated problems, such as low self-esteem and school and social difficulties.

As in the earlier study, both treatments were effective at discharge, but once again MDFT recipients experienced longer lasting gains. At a followup assessment 12 months after the adolescents started treatment, only 7 percent of the MDFT sample reported substance use in the previous 30 days, compared with 45 percent of youths who had received the CBT-based group therapy. Remarkably, the MDFT recipients’ prevalence of drug use at this juncture also compared favorably with the rate of 8.5 percent reported by a nationally representative sample of eighth graders in the Monitoring the Future study.

In addition, during the followup year, MDFT recipients:

- improved their academic performance, while the grades of youths who had had the CBT-based group therapy worsened;
- had fewer arrests and placements on probation;
- suffered fewer psychiatric symptoms, such as those related to depression and anxiety;
- reduced self-reported delinquency and associations with delinquent peers, while youths receiving the group CBT increased delinquent peer involvement.

“Consistent with results from our other trials, outcomes of MDFT appeared to improve even after therapists completed their work with teens and families,” Dr. Liddle says.

The young teens demonstrated another MDFT benefit: Participants were more likely to remain in treatment—an important challenge in substance use interventions. In the MDFT group, 97 percent of the participants completed treatment,

# Therapy Powers HIV/STD Risk Reduction

In addition to reducing drug use, Multidimensional Family Therapy (MDFT) may also ameliorate a serious associated problem: behaviors that increase risk of human immunodeficiency virus (HIV) infection and other sexually transmitted diseases (STD). Interim data from a trial sponsored by NIDA's criminal justice-drug abuse treatment studies (CJ-DATS) program support that suggestion. Participants were recently released juvenile offenders who were abusing drugs, a population in which risky sexual behaviors, such as unprotected sex, are especially widespread.

In the trial, 154 adolescents were randomly assigned to receive MDFT or usual services. While in detention, adolescents in both treatment groups had received a standard educational, one-session Centers for Disease Control HIV/STD risk-reduction program. After release and 1 to 2 months of therapy, adolescents in the MDFT group and their parents participated in three 2-hour multifamily group sessions designed to raise awareness of HIV/STD risks and encourage behavior changes to reduce them.

Data collected 6 and 9 months after release from detention were "generally promising," Dr. Liddle says. Most impres-

sively, according to Dr. Liddle, the rate of new infections declined over this period in the MDFT group. The researchers plan to track the teens for 42 months.

Dr. Liddle speculates that to the extent the intervention proves effective, it will reflect the power of family involvement. "Attending to and reducing high-risk sexual behavior is framed in the same way we approach adolescent drug taking," he says.

Dr. Akiva Liberman, formerly of NIDA's Division of Epidemiology, Services and Prevention, describes MDFT as "very relevant and appropriate for adolescents involved in juvenile justice. These youths face an array of problems—individual, social, and family. MDFT seems to be a natural fit."

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compared with 72 percent of those who had CBT-based group therapy. Dr. Liddle notes that these engagement rates are far superior to the average rate of only 27 percent among those who completed 90 days of standard outpatient treatment in the NIDA-sponsored Drug Abuse Treatment Outcome Study (DATOS), a national study of adolescent drug problems.

In both of Dr. Liddle's studies, MDFT was administered by therapists from community-based drug-treatment agencies. "This suggests that the approach may be readily generalized to a serve a broad population," says Dr. Liddle.

"MDFT treatment outcomes are among the best there are for adolescents," says Dr. Lisa Onken, chief of the Behavioral and Integrative Branch of NIDA's

Division of Neuroscience and Behavioral Research. "Not only does it work, but it joins the category of behavioral interventions whose effects seem to endure after treatment ends."

Sustainability of treatment effects, as indicated by 12-month outcomes, was "the most important finding" of the studies, she says. "This is important particularly for younger adolescents, who would be on a very negative developmental trajectory without effective treatment."

Dr. Onken would like to see further research to identify what aspects of MDFT make it effective. "This is a very complex treatment, and the more we can figure out the essential ingredients—what is critically important and what is of lesser importance—the better we will be able to

implement it in the community," she says.

Dr. Liddle notes his team and others have begun work along these lines. ■

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