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An Overview of Outpatient Treatment of Adolescent Substance Abuse

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ABSTRACT. This paper reviews the literature on ambulatory substance abuse treatment for adolescents, including brief intervention, Twelve-Step-based outpatient treatment, family-based treatment, cognitive behavioral therapy, and pharmacologic treatment. An overview of socially and culturally specific strategies is also included. The diversity of settings and approaches and combinations of approaches in the treatment of adolescents is emphasized as are adaptations of Twelve-Step and other group based interventions. Family-based and multisystem therapy, adapted for substance using adolescents, is highlighted as a promising future direction of effective treatment. doi:10.1300/J465v28n02_07 [Article copies available for a fee from The Haworth Document Delivery Service: 1-800-HAWORTH. E-mail address: <docdelivery@haworthpress.com> Website: <http://www.HaworthPress.com> © 2007 by The Haworth Press, Inc. All rights reserved.]

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Outpatient treatment for adolescent substance abuse takes numerous forms. This is a product of the extent and perceived importance of the problem, the many theoretical positions within psychiatry and psychology, and the numerous adult treatment approaches that can be adapted for use with adolescents. Other factors include the lack of a robust research base clearly establishing what works, the fact that no treatment approach can prove overwhelming success, pressure from health insurers, and the considerable federal money available for developing and evaluating new treatments. Although there is a paucity of information on the

number and structure of the adolescent substance abuse treatment system, in 1994 781,000 adult and other patients were seen in outpatient specialty settings; this represented 88% of all patients seen in these settings (1). This large number did not include those in self help groups, and those seen by mental health specialists, general medical or social service providers. In 1995, 52% of outpatient substance abuse treatment units for all age groups were owned by not-for-profit entities, 31% were publicly owned, and 17% were part of the investor-owned sector (2). Yet it is estimated that only one in ten adolescents with a substance

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abuse problem receives treatment (3). This overview highlights some of the characteristics of major treatment approaches in different settings.

BRIEF INTERVENTION

Brief intervention is a treatment approach that may be delivered in community settings such as primary care physicians' offices or schools (4,5). It is often delivered by staff members with a range of professional qualifications in the field of substance abuse treatment, and can bridge some of the gaps between the community, the primary care system, and the specialized addiction treatment world. Brief interventions may include screening, transmission of information, involvement of family members, and, if appropriate, referral to a community-based program, or, if necessary, to a specialized treatment provider. Particularly prominent is a short course of treatment using motivational enhancement techniques emphasizing accepting and understanding by the adolescent with the goal of enhancing self-efficacy and motivation to change (5). Brief intervention by someone such as a substance abuse counselor or family physician can help to provide motivation for both the adolescent and the family to seek more extensive professional help. Adolescents are monitored and provided referrals if the situation changes to warrant a more intensive approach. Brief intervention may dispense with personal contact altogether, as in an experimental program utilizing a written feedback motivational intervention at a university substance abuse assistance program (6).

LONG TERM RECOVERY-ORIENTED TREATMENT

Once in the system of outpatient treatment for adolescents, the family may be faced with a bewildering variety of approaches, as many, if not most, programs offer an eclectic mixture that they promise to tailor to the individual needs of the client. For example, Hazelden, perhaps the best known program nationally, promises that "each client's treatment plan is developed and administered by a multidisciplinary

care team, including chemical dependency counselors, family specialists, psychiatrists, and psychologists, doctors, nurses, spiritual care professionals and recreational specialists" (7). This team is responsible for individualized treatment plans that include a mixture of group therapy, one-to-one counseling, educational lectures and bibliotherapy, planned recreation and spiritual care events, a Twelve-Step program, and continuing care planning. For participants in its outpatient program, Hazelden promises access to all components of its inpatient program, including participation in daily activities with inpatients. Settings with fewer resources may also offer an eclectic mix of therapeutic approaches.

Also exhibiting this mix are the manual-guided treatment models tested in a CSAT-funded large scale randomized study of outpatient community-based treatment programs for cannabis addicted adolescents (8). A six-week program of individual motivational therapy and group cognitive behavioral therapy was compared with a 12-week program with similar modalities. Other models-evaluated were a multifaceted family support network added to the former 12-week program, another 12-week program based on adolescent community reinforcement theory, and a multi-dimensional family therapy model focusing on individual, family and social systems. As is common in this field of study, these approaches were adapted for adolescents from adult treatment models. Thus, each treatment program in the community is likely to offer and make use of a variety of treatment approaches applied in various combinations and for various lengths of time. The complexity of their real world applications must be considered when reviewing the main treatment approaches.

Williams and Chang (9) in a comprehensive review of adolescent ambulatory substance abuse treatment report that outpatient programs are the second most frequently studied in the outcomes literature. More studies focus on short term inpatient programs, fewer on therapeutic communities or "Outward Bound" programs. The research base in 2000 permitted only the following equivocal conclusion on the relative merits of different settings: "Regarding treatment setting (outpatient, residential, inpatient), adult substance abuse research has found

a slight advantage for inpatient over outpatient treatment in some circumstances."

TWELVE-STEP-BASED OUTPATIENT CARE

Group-based ambulatory programs are an important element of the treatments being developed and tested today. Hazelden uses a modified version of the Minnesota Model, with a 12-Step-based group approach at its core. Although inpatient versions of the Minnesota Model dominated the treatment field for many years, they are presently just one among many approaches. Managed care, with its emphasis on demonstrated cost-effective ambulatory treatment modes, has made proven outpatient adaptations of 12-Step-based and other group approaches more attractive than costlier inpatient treatment. Attempts are being made to develop therapeutic groups more compatible with the needs of adolescents and to modify the 12 steps to fit this population (4,10). Although adolescents may be particularly open to influence from their peers, some may be reluctant to become part of such a group and thus might benefit from individualized counseling, addressing this resistance. Group-based approaches range from adolescent participation in AA and NA groups, AA and NA meetings specifically for teenagers and young adults, to the incorporation of group treatment in a multifaceted treatment program, as in the Minnesota Model.

Although there are few well-conducted studies of ambulatory adaptations of 12-Step-based groups, some are beginning to be reported. In a controlled study of the Minnesota Model in ambulatory and residential settings, each participant received 12-Step-based treatment, concentrating on the first five steps, along with family and individual counseling and other modalities (11). The group in the ambulatory setting received 30 treatment sessions over six consecutive weeks. The study found superior outcomes for those completing each type of treatment compared with a waiting list control group. Although the investigators expected the inpatient program, with one third more contact hours, to outperform the ambulatory program, this did not occur. Their finding that the benefits of each modality were almost equivalent led to

an important conclusion: "Extra costs associated with residential care are not supported by the data given that we found favorable results from the outpatient regimen." If confirmed by other research, the study by Winters and colleagues would provide a powerful incentive to establishing the cost-effectiveness of ambulatory treatment using adaptations of the Minnesota Model.

Twelve-Step-based groups may also become part of aftercare programs following inpatient care for adolescents. Adolescents with severe substance abuse problems are more likely than others to be motivated and thus to develop an affiliation with a 12-Step-based program, which leads to more regular attendance and favorable outcomes (12). Thus, tailoring 12-Step-based programs to focus on elements of the experience that might enhance affiliation for adolescents who, because of their shorter duration of substance abuse, if so motivated may be better able than adults to self-regulate their behavior. Similarly, a well-conducted study of a program combining group treatment with individual counseling, family therapy, and patient education, found this worked well for adolescents with moderately severe marijuana problems, but had no impact on alcohol use or criminal activities (13). The benefits of ambulatory group-based treatment are now being specified by research which is helping to refine programs to target particular subgroups of substance abusing adolescents.

FAMILY-BASED TREATMENTS

Numerous types of family-based therapies have become increasingly prominent in recent years and there is a research base documenting their efficacy (10). In turn, therapeutic approaches that involve more extensive elements of an adolescent substance abuser's social world, such as peers, school, and neighborhood, are being developed, tested, and modified. All flow from the basic premise that family and other social relationships are often involved in substance abuse disorders among adolescents, and that these disorders may be treated effectively through therapeutic approaches working at the level of networks of such relationships (14). These therapies aim not

only to modify the behavior of the substance-using adolescent, but also to address the harmful effects this behavior has upon family members and others. In their review article Williams and Chang (9) asserted that the limited well-designed studies then available supported the conclusion that "family therapy may be superior to other outpatient treatments." Subsequent research reinforces this conclusion. Liddle concluded that family-based treatment is "the most thoroughly studied treatment modality for adolescent substance misuse" (15). A study comparing different treatment modalities found that while all forms demonstrated some efficacy, family-based treatments were more effective than the others in effecting shorter and longer term change (16). As with other approaches there are many variants including programs that combine family-based therapy with other forms, such as cognitive-based therapy (17).

Family-based outpatient treatment approaches range from brief interventions to longer, e.g., six month, multidimensional programs (10,18). Prominent among the latter is multisystem therapy, adapted for substance users from a treatment approach developed for adolescents with other types of serious antisocial behavior (19). Multisystem therapy, in turn, draws upon various forms of family therapy, behavioral parent training, and cognitive-behavioral therapies. Other variations combine similar related theories and practices. All include an assessment focused on locating the adolescent within multiple social systems and interventions within, and possibly outside of the family. Multidimensional approaches seek to combine commitment to a set of theoretical principles with the flexibility to adapt numerous modalities to the complex array of circumstances presented by substance abusing adolescents.

Development of family-based approaches has been facilitated by an infusion of private foundation and federal research money that, in turn, has stimulated expansion of adolescent substance abuse treatment (15). Advocates of this approach are attempting to fill in the research gap concerning impediments to the diffusion of empirically supported treatment modalities. Important considerations include developing manuals for the therapies and addressing manpower needs for suitably trained

clinicians. Moreover, many service providers still regard family members as "adjuncts" rather than as central components of addiction treatment (14). Yet family-based therapies have entered the treatment mainstream, combining with other approaches in adaptations to the exigencies of service-delivery.

COGNITIVE BEHAVIORAL THERAPY

Another promising approach is cognitive-behavioral therapy (CBT). Drawing upon a mixture of cognitive and behavioral psychological theories, cognitive-behavioral is not a single approach, but rather a collection of methods united by the idea that since substance abuse among adolescents is a learned behavior it can be unlearned as well. As with many other approaches with adolescents, this approach is an adaptation from successful cognitive-behavioral substance abuse treatment programs with adults (4,20). Cognitive-behavioral therapy focuses on altering the adolescent's beliefs that contribute to substance usage and providing training in coping and skills development that might contribute to a successful recovery. Elements such as a didactic multi-session course in substance abuse, training in anger management, alcohol and drug refusal skills, training in sober fun/natural highs, and training in skills conducive to success in school are representative of the broad array of possible training modules.

With its individual focus, cognitive-behavioral therapy is often combined with a network-based family-oriented approach to address both elements. Their complementarity has led to development of integrated family and cognitive-behavioral therapy combinations, part of the growth in multisystem approaches (17). Within such programs, the cognitive-behavioral element can be delivered in a group as well as in individual counseling. Goals such as improvement in problem-solving skills can be addressed at both the individual and family levels, with each reinforcing the other. A related treatment approach under the rubric of contingency management uses reinforcement and punishment contingencies to enhance motivational and other elements of the treatment process for adolescents and family members (21). Within

such programs, substance use may lead to a loss of reinforcement, while abstinence leads to positive reinforcement, including forms of monetary reward. This scheme may be embedded in a contract agreed upon and signed by the parents and therapist.

As with other treatment approaches, a current emphasis is on evaluating effectiveness through well-designed studies. In their review, Williams and Chang (9) stated that there is "preliminary evidence that behavioral or cognitive-based treatment may be superior to supportive counseling." A more recent review by Waldron and Kaminer found consistent empirical evidence that group and individual CBT are associated with significant clinically meaningful reductions in adolescent substance use (22). Countering the view that group treatment might have iatrogenic effects upon suggestive adolescents, this review suggested that because teens are often influenced to use substances, and do use them, in group settings, group treatment seems to provide the benefit of mirroring the types of social relationships and situations adolescents will encounter in their recovery, and thus help prevent relapse. Although family-oriented approaches alone may work somewhat better than cognitive-behavioral approaches alone, the future treatment of choice appears to be multisystem combinations informed by research as to which approaches are likely to work best with particular problems, individuals, and family configurations.

SOCIALLY AND CULTURALLY SPECIFIC TREATMENT STRATEGIES

Developing socially and culturally specific treatment strategies is another important trend flowing from other areas into research and practice in outpatient adolescent substance abuse treatment. Culturally informed treatment is not a particular therapeutic orientation, but rather an element that may be incorporated into any treatment program. For example, a program for American Indian youth incorporates a cultural-spiritual element utilizing Navajo beliefs and Native American healing practitioners (23). Within the Hispanic community, research about the impact of acculturation on substance abuse and treatment can help inform treatment

programs (24). Research findings regarding the relationship of factors such as ethnic mistrust to treatment resistance can also influence treatment. Cultural themes are informing and facilitating multidimensional family-oriented therapy. Thus, population specific elements for African American youth might include a mix of in-home sessions, facilitating dialogue through utilizing rap music, emphasizing the theme of the journey from boyhood to manhood, and mentoring (25). Another such strategy emphasizes bicultural competence in which teenagers learn not to bring behaviors and attitudes from the street or drug culture into other aspects of their life. There is evidence that this culturally informed approach can enhance adolescents' engagement with family-based therapy; however, little is known about whether it improves clinical outcomes.

As with the adolescent substance abuse treatment literature generally, the literature on cultural competence focuses on minority youth involved with the juvenile justice system or other similar mandated programs. Almost none of this literature mentions the issue of social class; and the scientific literature does not include an explicit discussion of the needs or experience of voluntary, middle class adolescents of varying ethnic backgrounds requiring outpatient treatment, as illustrated by the absence of such concerns in the recent comprehensive volume edited by Liddle and Rowe (25). A research base is needed leading to programs of proven effectiveness for this large segment of the substance abusing adolescent population. The large investor-owned sector, with many patients placed there by their parents, remains little understood. By contrast, the emerging systems of school-based treatment for secondary school students and mandated disciplinary treatment for alcohol-abusing college students have received more attention (26,27). In addition, more needs to be known about the quality of treatment in the adolescent substance abuse treatment system. A study of adolescent substance abuse treatment programs, almost sixty per cent with an outpatient component, found that both accredited and unaccredited programs lacked key components associated with effective treatment (28).

PHARMACOLOGIC TREATMENT

The use of pharmacotherapy for treatment of substance abuse among adolescents in ambulatory settings lags behind developments for adults and largely consists of efforts to adapt adult treatment modalities. Referring to pharmacologic treatment for adolescents, Bukstein and Cornelius (29) conclude that "the field of adolescent psychopharmacology is generally a nascent area . . . few empirically based pharmacological treatments exist for adolescents." These authors note that although data on utilization is limited, the use of psychopharmacotherapy for adolescents with substance abuse disorders "appears to be widespread," much of it "off label" use of medications approved for adults but unproven, with inadequate safety and efficacy information, for adolescents. Methadone maintenance provides a striking case of the disjuncture between adolescent and adult treatment. State and local laws often restrict adolescents' access to methadone programs; even if allowed adolescents must often receive written parental consent. Yet methadone maintenance has been a key component of a successful outpatient program in New York for heroin addicted patients ages 15 through 22, among the key ages for risk (30).

Much of the interest in utilizing pharmacotherapy among substance abusing adolescents stems from consistent findings that 50% or more of those in treatment exhibit comorbid psychiatric conditions, most commonly conduct disorder (31-33). Small scale studies are beginning to suggest that such treatment has the potential to play a useful role in this population. A small placebo-controlled study of acamprostate among alcohol dependent adolescents reported no adverse health effects and some success in reducing relapse within three months (34). A three-year follow-up of 13 adolescents with comorbid major depression and alcohol use disorder treated with fluoxetine, the first FDA approved drug for treatment of major depression in children and adolescents, found no significant adverse side effects. Although the study group exhibited somewhat reduced depressive symptoms and alcohol dependence, overall these conditions remained prominent in this hard to treat population (35). A small study of adolescents with comorbid bipolar disorder

and substance dependency in an outpatient treatment program found that lithium was an effective treatment for both disorders (36). As such studies accumulate, leading to larger clinical trials, the beginning of an evidence-based set of proven outpatient pharmacologic treatments for adolescents with comorbid substance abuse and psychiatric disorders will become available.

CONCLUSION

In conclusion, this review emphasizes several related points. First, the diversity of settings and approaches, and combinations of approaches, currently involved in treating adolescent substance abuse on an outpatient basis. Adaptations of Twelve-Step and other group based approaches are both compatible with the needs of adolescents and provide cost-effective treatment. Finally, family-based and particularly multisystem therapy, adapted for substance using adolescents, show great promise and appear to be the future direction for the most effective treatment of adolescents.

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