Juvenile Justice and Substance Use

Laurie Chassin

Summary

Laurie Chassin focuses on the elevated prevalence of substance use disorders among young offenders in the juvenile justice system and on efforts by the justice system to provide treatment for these disorders. She emphasizes the importance of diagnosing and treating these disorders, which are linked both with continued offending and with a broad range of negative effects, such as smoking, risky sexual behavior, violence, and poor educational, occupational, and psychological outcomes.

The high rates of substance use problems among young offenders, says Chassin, suggest a large need for treatment. Although young offenders are usually screened for substance use disorders, Chassin notes the need to improve screening methods and to ensure that screening takes place early enough to allow youths to be diverted out of the justice system into community-based programs when appropriate.

Cautioning that no single treatment approach has been proven most effective, Chassin describes current standards of "best practices" in treating substance use disorders, examines the extent to which they are implemented in the juvenile justice system, and describes some promising models of care. She highlights several treatment challenges, including the need for better methods of engaging adolescents and their families in treatment and the need to better address environmental risk factors, such as family substance use and deviant peer networks, and co-occurring conditions, such as learning disabilities and other mental health disorders.

Chassin advocates policies that encourage wider use of empirically validated therapies and of documented best practices for treating substance use disorders. High relapse rates among youths successfully treated for substance use disorders also point to a greater need for aftercare services and for managing these disorders as chronic illnesses characterized by relapse and remission.

A shortage of aftercare services and a lack of service coordination in the juvenile justice system, says Chassin, suggest the need to develop treatment models that integrate and coordinate multiple services for adolescent offenders, particularly community-based approaches, both during and after their justice system involvement.

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The link between juvenile criminal offending and adolescent substance use and substance use disorders is strong and well established. Among adolescents detained for criminal offending in 2000, 56 percent of boys and 40 percent of girls tested positive for drug use.[1] In 2002, the substance use disorder rate among adolescents aged twelve through seventeen who had ever been in jail or detention was 23.8 percent—almost triple the 8 percent rate among youth in that age range who had never been jailed or detained.[2] National data for primarily publicly funded substance abuse treatment programs show that the criminal justice system accounted for 55 percent of male admissions and 39 percent of female admissions to these programs. The criminal justice system is thus the nation's major referral source for adolescent substance users, causing some observers to conclude that it has become the de facto drug treatment system in the United States.[3]

Research has also linked substance use with continued contact with the justice system and less desistance from criminal offending. In other words, juvenile offenders who continue to use drugs are also more likely to continue their offending careers.[4] This "drug-crime" cycle likely reflects both the mutual causal influences between drug use and crime and the fact that substance use and offending share common risk factors.[5] Drug treatment thus may be one way to reduce recidivism.[6]

Drug treatment offers other obvious benefits. Besides being illegal, substance use has negative consequences for adolescents' physical health and development. Both alcohol and illegal drug use are correlated with cigarette smoking, the negative health consequences of which are well known. But juvenile correctional facilities often fail to enforce nonsmoking policies consistently and completely.[7] And substance use treatment programs often overlook tobacco use because of the (mistaken) fear that tobacco cessation attempts will undermine sobriety.[8] In fact, youths who decrease their smoking after substance use treatment have been reported to decrease their use of other substances.[9]

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Substance use among juvenile offenders is linked with other health risk behaviors. In one sample of detained youth with substance use disorders, 63 percent engaged in five or more sexual risk behaviors, producing heightened vulnerability to HIV and other sexually transmitted diseases.[10] Substance use is also associated with violence and accidents and, among pregnant women, with harm to fetal development.[11] Among adolescents in the general population, substance users, particularly heavy substance users, tend to have less positive educational, occupational, and psychological outcomes.[12]

Given the important consequences of substance use and substance use disorders for juvenile offenders, I focus in this article on how well the juvenile justice system addresses substance use disorders. I survey the prevalence of substance use problems and treatment need among offenders as well as the extent to which treatment needs are unmet. Then I consider the effects of substance use treatment for juvenile offenders.

Although no single treatment approach has been proven most effective, I describe current standards of "best practices" and the extent to which they are implemented in the juvenile justice system and conclude with some promising models of care.

The Prevalence of Substance Use Disorders among Juvenile Offenders

It is important to distinguish between substance use and clinical substance use disorders (SUDs), which reflect a more problematic pattern of use and are associated with impaired functioning. Rates of substance use disorders among juvenile offenders vary substantially depending both on the criteria used to define the disorder and on the settings—such as juvenile detention, secure confinement, and entry into the system—that are sampled. Detained adolescents show high rates of substance use disorders. According to one study, half of males, and almost half of females, in juvenile detention had an SUD, the most common being marijuana use disorder.[13] Another study estimated that two-thirds of adolescents entering the Illinois juvenile corrections system met clinical diagnostic criteria for substance use disorder.[14] Rates as low as 25 percent, however, have been reported at juvenile intake.[15] Thus, although juvenile offenders have higher rates of substance use disorders than the general adolescent population, in most samples, the majority of offenders do not have a clinical diagnosis. Nevertheless, with rates varying from 25 percent to 67 percent, the prevalence of substance abuse disorder is substantial, suggesting significant treatment need.

One study found that substance use disorder rates among incarcerated, detained, or secured youth vary by race and ethnicity, with non-Hispanic Caucasians showing the highest rates and African Americans the lowest.[16] The same study found no gender differences in the prevalence of alcohol or marijuana disorders but did find that females were more likely to have other forms of substance use disorders and to have a co-occurring (comorbid) mental health disorder as well. Other studies have also found that females with substance use disorder are more likely than males to have co-occurring mental health disorders.[17]

Treating substance use disorders among juvenile offenders is complicated because youths in the juvenile justice system also face a range of other serious problems, including mental health disorders such as anxiety and depression (especially in girls), academic failure, learning disabilities, and parental substance use disorders.[18] To be successful, treatment must thus address these co-occurring problems. Youths with co-occurring mental health disorders tend to have more severe substance use disorders, greater family dysfunction, and poorer treatment outcomes.[19]

Screening and Diagnostic Assessment for SUDs among Juvenile Offenders

Although the negative consequences of substance use (including an elevated risk for continued offending) suggest the utility of substance abuse treatment, not every adolescent who uses alcohol or drugs needs treatment. Attempting to treat all substance-using juvenile offenders would be both impractical and a waste of costly and much-needed resources.[20] Rather, treatment is more appropriate for adolescents with clinical substance use disorders.[21] Identifying juvenile offenders with such disorders requires screening and, then, for those who screen positive, more thorough diagnostic evaluations. These evaluations help determine how intensive treatment should be (for example,

whether detoxification is necessary) and whether treatment should take place in the community or in a residential or secure setting. Current "best practices" for treating adolescent SUDs also require a diagnostic assessment to learn whether the juvenile suffers from common co-occurring disorders (see the article in this volume by Thomas Grisso for further discussion).[22]

Adolescents held in juvenile justice system facilities are commonly screened for substance use problems. Among facilities reporting data on screening in the Office of Juvenile Justice and Delinquency Prevention's (OJJDP) 2002 Juvenile Residential Facility Census, 61 percent (holding 67 percent of juvenile offenders) screened all of the youth, with the highest screening rates reported by reception and diagnostic centers and by long-term secure facilities.[23] Between 6 and 22 percent of facilities reported no screening at all. But although the facilities commonly did some screening, they less commonly used standardized screening instruments; 55 percent of programs in the OJJDP Census data and 48 percent in another national sample used such instruments.[24] Thus, it is unclear whether programs are screening effectively enough and early enough to be maximally useful. Sixty percent of facilities (holding 64 percent of offenders) that reported on screening in the 2002 OJJDP Census did their screening within the first week.[25] But if youths can be screened even before they are admitted to the facilities, they may be able to enter diversion programs instead, which may allow them the opportunity for community treatment. One review has suggested that a lack of case management and initial intake evaluation has led diversion programs to be under-used.[26]

Even if standardized screening and diagnostic evaluation services can be promptly delivered, assessing adolescent substance use and substance use disorders poses multiple challenges. Most standardized measures and structured interviews rely on self-report data, which require youths not only to comprehend complex questions, but also to provide accurate and honest reports. Because substance use is illegal, adolescents may be unwilling to disclose their use. Indeed, one study of juvenile detainees found that at least half of adolescent cocaine users (as detected by bioassay) denied recently using cocaine; self-reports may thus be more accurate for past use than for current use.[27] Several guidelines on drug abuse treatment recommend monitoring drug use through urinalysis or other objective methods.[28] In the 2002 OJJDP data, 73 percent of facilities (holding 77 percent of adolescent offenders) reported conducting urinalysis and 37 percent reported random drug testing. But even biological analysis has its limits, and different analyses (for example, of urine, saliva, and hair) vary in terms of their expense, the time it takes to receive results, and the time window of use that is detectable. Thus, a combination of self-reports and biological measures is probably necessary to evaluate thoroughly the substance use disorders of young offenders.

Assessing substance use disorders (using standard American Psychiatric Association criteria) requires characterizing substance use–related social consequences, dependence symptoms, and the associated impairment. Current psychiatric practice is to diagnose adolescents using the same criteria as adults, although the developmental appropriateness of this practice has been questioned.[29] Many adolescents have been labeled "diagnostic orphans" because they show symptoms of a disorder that fall just short of diagnostic thresholds, making treatment decisions difficult.[30] Moreover, the current taxonomy

distinguishes between substance abuse and substance dependence disorders. Substance dependence is presumed to be more severe than substance abuse and to require treatment. However, recent research suggests that some symptoms of dependence are less severe than those of abuse, making it difficult to base treatment decisions on the distinction between abuse and dependence diagnoses.[31]

Finally, diagnosing and assessing adolescent substance use disorders is particularly complicated for juvenile offenders. For example, being confined in a correctional facility can influence the likelihood that particular substance use–related negative consequences can occur (such as negative effects on romantic relationships). Thus, for youths in secure confinement, assessing only current symptoms (rather than past symptoms) may be misleading. Moreover, there is some evidence that juvenile offenders under-report their own substance use–related impairment and that they may not have the judgment and maturity to appraise accurately such impairment.[32]

Unmet Need for Treatment in Juvenile Justice Settings

Getting precise figures for the extent of "unmet need" for substance use disorder treatment in the juvenile justice system is difficult. One study, based on 1999 data, estimated that 30 percent of juveniles arrested, or a total of 840,000 adolescents, needed treatment. That figure is six times the number of publicly funded treatment slots.[33] Like the data presented earlier—that 25 percent to 65 percent of adolescents in various justice system settings meet diagnostic criteria for a substance use disorder—the figure suggests that many youths who need treatment go untreated. A similar unmet need has been reported among adolescents more generally.[34]

Another estimate of unmet need was based on a sample of youths entering the Juvenile Division of the Illinois Department of Corrections.[35] Of all the youths who had a substance use disorder and thus needed treatment, only 48 percent reported ever having been treated. (There were no gender, racial and ethnic, or educational differences.) The level of unmet need here too was substantial, but because these youths were just entering the justice system, their lack of treatment does not necessarily reflect their experience in the system. In fact, youths with prior arrests and with a history of childhood neglect were more likely than others to have been treated, suggesting that the juvenile justice and child welfare systems provided treatment.

One study, using the 2002 OJJDP data, estimated that 66 percent of juvenile justice system facilities provide treatment services, the most common being drug education (97 percent).[36] Approximately two-thirds of the facilities provide group counseling by a professional, and 20 percent provide all youth in the facility with onsite counseling. Because these figures exclude facilities that did not provide data on substance use treatment, however, they may over-estimate the treatment provided.

A study by Dennis Young, Richard Dembo, and Craig Henderson found that most facilities (75 percent) provided drug and alcohol education classes, which were attended (on average) by 21 percent of residents.[37] Education alone, however, is not enough for youth with substance use disorders, and only 44.6 percent of programs provided some other form of treatment. Treatment varied widely by type of setting, with low rates of treatment in jails and detention centers. Of course, assessing unmet need requires knowing not

only the rates of services provided by particular settings but also the individual treatment needs of the adolescents in these settings. All current available estimates, however, suggest substantial unmet treatment need among juvenile offenders.

The Role of Drug Courts

Juvenile drug courts first appeared during the 1990s based on the premise that more intensive assessment, monitoring, and treatment would reduce offending for adolescents with alcohol and drug problems. By 2006, 350 of these drug courts were in session, with another 160 being planned.[38] These courts monitor drug use (including drug testing) and offer a team of professionals who can refer or provide services including education, vocational training, recreation, mentoring, community service, health care, and drug and mental health treatment. Compared with typical courts, juvenile drug courts provide earlier assessments, better integration between assessments and court decisions, more emphasis on families, more continuous supervision, and more immediate use of sanctions and rewards.[39] A recent review suggests that the adolescents in these courts are demographically similar to other juvenile offenders: most typically use alcohol or marijuana, typically have past justice system involvement (but limited past treatment), and often have co-occurring mental health problems as well as family histories of substance use or criminal justice involvement, or both.[40]

Relatively few researchers have examined the effectiveness of juvenile drug courts. In one study, of only six evaluations of the courts that included both a control or comparison group and data on post-program recidivism, five found significantly lower recidivism for drug court clients.[41] A recent meta-analysis found that both adult and adolescent drug courts significantly reduced subsequent arrests, though adult courts reduced arrests by an average of 9 percent, as against only 5 percent for adolescent courts.[42] Moreover, the positive effects of drug courts decline when court supervision ends.[43]

One limitation of drug court services is that often they do not use empirically validated treatments.[44] Some researchers have tried to address this problem by introducing treatments such as multidimensional family therapy and Multisystemic Therapy (MST).[45] Both these therapies target social environmental factors that maintain adolescents' antisocial behavior. Their aim is to improve family relationships and disciplinary practices, increase youths' associations with prosocial peers, and improve school or vocational outcomes (see the article in this volume by Peter Greenwood for further discussion of these therapies).

One recent clinical trial randomly assigned juvenile offenders with substance use disorders to four groups: family court and usual community services, drug court and usual community services, drug court plus MST, or drug court plus MST plus vouchers for "clean" urine samples.[46] The trial found that juveniles in the drug court (as well as the drug court plus MST) significantly reduced substance use, as measured by urine drug screens during the first four months. However, drug courts were not found to improve rates of re-arrest or re-incarceration, probably because of the heightened surveillance in the courts.

Available evidence thus suggests that drug courts have reduced adolescents' substance use, at least while the youths are under supervision. The data base, however, is small, and more evidence is needed, particularly

about long-term outcomes and whether greater use of empirically validated treatments can improve outcomes in the drug courts. Research is also needed to determine the effect of matching the intensity of supervision and intervention to the individual needs of the adolescent offender.[47]

The Effects of Treatment on Substance Use and Criminal Offending

A small but rapidly growing empirical literature demonstrates that treatment can reduce substance use among adolescents in general and among juvenile offenders in particular. Conducting research in this area is challenging, and methodological problems include having to take into account the case-mix of adolescents who are treated, the length of the follow-up period, the time during the follow-up that adolescents spend in institutional placement or controlled environments, whether the treatment is delivered as intended, the need to verify self-reported substance use, and the ability to retain the adolescents to measure substance use during the follow-up period. Despite these formidable obstacles, however, adolescent substance use treatment appears to reduce substance use, at least to some extent and at least in the short term.

Yih-Ing Hser and colleagues analyzed the DATOS-A data collected on adolescents (58 percent of whom were involved with the criminal justice system) from residential or outpatient drug treatment programs in four U.S. cities.[48] After treatment, the youths significantly reduced frequent marijuana use, heavy drinking, other illegal drug use, criminal activities, and arrests; the longer they were in treatment, the better the outcome. Moreover, the reductions in substance use were linked with reductions in offending.[49] Cocaine use, however, significantly increased. And because the study lacked an untreated control group, its findings are not conclusive.

The Cannabis Youth Treatment Study included two randomized trials with 600 marijuana users, a majority of whom were under the supervision of the criminal justice system. The studies compared the effects of motivational enhancement therapy plus cognitive-behavioral therapy, both with and without family support and with and without either community reinforcement or multidimensional family therapy.[50] All the treatments increased significantly the days the youths abstained from using marijuana, but no single treatment proved more effective than another. One year later, the share of adolescents who were in recovery—that is, living in the community without current substance use or substance use problems—ranged from 17 percent to 34 percent, but, again, did not differ across different treatments. The subgroup of adolescents involved with the justice system also reduced substance use.[51] However, because results were the same for different types and intensities of treatment, only limited claims can be made for treatment effects.

Studies of residential programs have also shown some positive but mixed effects. In one study, adolescents on probation who received nine to twelve months of residential treatment and professional counseling showed better substance use outcomes at one-year follow-up than did those on probation who did not receive residential treatment.[52] However, the study found no effects on criminal offending. Another study examined a therapeutic community that had been developed specifically for adolescents in the justice system and that used cognitive-behavioral techniques, contingency management, and education.[53]

The study found no significant self-reported decreases in substance use, although it did find significant self-reported decreases in criminal behaviors. The lack of a comparison group, the need to rely on self-report data, and the failure of many in the group to participate in the follow-up make the findings less than conclusive.

Finally, family-based and multisystemic drug treatments have also produced positive findings. Because both these forms of therapy are also used to reduce antisocial behavior, they could reduce offending and recidivism as well as substance use (again, see the article by Peter Greenwood in this volume). A review of research showed that Multisystemic Therapy (MST, described earlier) significantly reduced substance use among juvenile offenders.[54] One study of MST also found long-term effects on criminal activity: the re-arrest rate for the MST-treated group was 50 percent, as against 81 percent for the individual therapy-treated group.[55] These adolescent offenders, however, were not referred for substance use disorders. One long-term (four-year) follow-up of Multisystemic Therapy with adolescent offenders diagnosed with substance use disorders found mixed results. Biological measures of marijuana use declined but other substance use measures did not.[56]

These findings are consistent with research on substance use treatment generally, which shows statistically significant short-term effects, but inconsistent findings across different outcomes and also substantial relapse. Thus, it is unrealistic to think that any one episode of treatment will produce a permanent "cure." This pattern of short-term moderate success but long-term relapse after treatment has led to a re-conceptualization of substance use disorders as chronic disorders, characterized by remission and relapse, rather than as acute disorders. The new view brings with it a corresponding emphasis on aftercare and long-term management.[57] Analysts now see substance use disorders as being similar to other chronic conditions such as diabetes or hypertension, for which outcomes are positive as long as patients adhere to prescribed treatment, but not when treatment stops.

These findings suggest that a substantial proportion of adolescent offenders is released into the community without appropriate aftercare to manage their substance use disorders.

Successful treatment must also meet other challenges. One is the broad array of co-occurring conditions, including poor educational and vocational achievement, mental health disorders, and physical and legal problems, among adolescents with substance use disorder. Achieving positive outcomes takes comprehensive interventions (see the article by Thomas Grisso in this volume for a fuller discussion) that require collaboration by, and financing from, multiple service delivery systems, such as juvenile justice, mental health, child welfare, and education.[58] It is also challenging to implement treatment in real-world settings, where treatment may not always be delivered as intended.

Another difficulty is that adolescents rarely perceive a need for treatment, making it hard to engage and retain them in treatment.

Drop-out and failure to take advantage of aftercare services is a problem, even for adolescents in the justice system. One possible solution to this problem is to use strategies such as motivational interviewing techniques. Another is to help families to facilitate their adolescent's entry into treatment.[59] However, although family involvement may be advantageous, families of adolescents in the juvenile justice system are themselves more likely to be involved in substance use or criminal activity. And including these families in treatment is particularly difficult if treatment takes place in geographically distant residential settings. One final challenge to treatment is that placing antisocial adolescents together in a group setting can worsen outcomes as these adolescents negatively influence each other's behavior.[60] Although no evidence of this phenomenon was found in the Cannabis Youth Study, any group-based substance use disorder interventions must be vigilant in guarding against potential iatrogenic effects.[61]

Aftercare and Substance Use in Juvenile Justice

Given the short-term effects of treatment and the concomitant importance placed on aftercare, it is striking that a recent national survey of program directors providing treatment for juvenile offenders found that only 26 percent of secure institutions and 25 percent of community-based programs included aftercare services.[62] An analysis of the same data set found that only 51 percent of substance-abusing youth in residential facilities and 31 percent in jails were referred to a community-based treatment provider when they were discharged.[63] These findings suggest that a substantial proportion of adolescent offenders is released into the community without appropriate aftercare to manage their substance use disorders.

The need to improve aftercare has led researchers to test innovative models of aftercare services. One study examined "assertive aftercare," in which a case manager linked multiple services.[64] Among a sample of adolescents in residential drug treatment, most of whom were involved with the criminal justice system, assertive aftercare increased both linkages to treatment services and adherence to continuing care. But although assertive aftercare reduced marijuana use at nine-month follow-up, it had no effects on other substance use.

Because environmental risk, including family substance use and deviant peer networks, affects aftercare outcomes, aftercare services might benefit from using family-based interventions (or multisystemic interventions) to help target these risk factors and maintain positive treatment outcomes.[65] At the time of this writing, researchers are testing a family-based intervention to help young offenders in juvenile detention rejoin the community.[66] Another approach involves training probation officers to provide adolescent probationers with cognitive interventions (that is, strategies to change reasoning processes and beliefs about substance use and offending).[67] One final promising strategy, recently implemented in general substance abuse treatment, is adaptive interventions, which adjust the type and intensity of the treatment over time to the changing needs of the individual.[68] Given the difficulty of retaining adolescents in substance abuse treatment, aftercare treatments that likewise vary in their intensity may improve long-term adherence to treatment. Two important policy questions are how to implement (and fund) continuing aftercare when an adolescent leaves justice system supervision and which, if any, formal system of care would be responsible for providing such services.

Does Treatment in Juvenile Justice Settings Use "Best Practices?"

Researchers who have examined substance use treatment have found that no single treatment produces the best outcome. Instead, several treatments, including Multisystemic Therapy, cognitive-behavioral therapy, contingency management, family therapy, motivational enhancement, and residential therapeutic communities, have shown some (although mixed) success. Because no one method of treatment is clearly superior, recommendations for "best practices" have focused on the treatment dimensions associated with more favorable outcomes. These "best practices" have been derived from a combination of empirical evidence and professional consensus.

In 2006 the National Institute on Drug Abuse (NIDA) issued thirteen principles of drug abuse treatment for criminal justice populations, including both adults and adolescents.[69] These principles begin with the premise that drug addiction is a brain disease because drug use changes neural mechanisms associated with reward and self-regulation, and these changes in turn increase the likelihood of relapse. The NIDA principles also state that recovery from addiction requires effective treatment followed by management of the problem over time (often including multiple treatments). Treatment must last long enough to produce stable behavioral changes, and individuals with severe drug problems and co-occurring disorders may require longer treatment (three months or more) as well as requiring more comprehensive services. The NIDA principles propose that assessment of the problem (including mental health evaluation) should be the first step in treatment planning and that treatment must then be tailored to the needs of the individual (including differences in age, gender, ethnicity, culture, problem severity, recovery stage, and level of supervision that is required by the justice system). Drug use during treatment should be carefully monitored. Drug treatment in the justice system should target factors that are associated with criminal behavior (including beliefs and attitudes that promote criminal offending), and criminal justice supervision should incorporate treatment planning. The NIDA principles recognize the importance of continuity of care during community re-entry and the use of a balanced mix of rewards and sanctions to encourage treatment participation and prosocial behavior. Medications are thought to be an important part of treatment for many offenders, and those with co-occurring mental health problems require an integrated treatment approach. Finally, because of the link between substance use and broader risk behaviors, treatment planning should include strategies to prevent and treat medical conditions such as HIV/AIDS, hepatitis B and C, and tuberculosis.

These NIDA principles apply to criminal justice populations, but are not specific to adolescents. For example, little is known about the use of medications to treat adolescent substance use disorders, and medications are less commonly used in adolescent than in adult treatment.

The American Academy of Child and Adolescent Psychiatry (AACAP) has also issued a set of minimum standards of care for the treatment of adolescent substance use disorders, which include: an appropriate level of confidentiality, screening older children and adolescents for substance use, formal evaluation (including biological measures) for those with positive screens, specific treatment for disorders of those who meet diagnostic criteria, treatment in the least restrictive setting that is safe and effective, family

involvement in treatment, and assessment and treatment of co-occurring disorders.[70] Although not required as minimal standards, the AACAP also suggests that treatment programs develop procedures to minimize dropout and maximize compliance, encourage and develop peer support for not using substances, use twelve-step programs as an adjunct to professional treatment, provide services in associated areas like education, vocational training, and medical and legal issues, and, finally, arrange for aftercare. These guidelines overlap substantially, but not completely, with the NIDA principles. For example, they do not mention the role of medications. The standards are meant to apply to adolescents, but are not specific to adolescents in the justice system, for whom such issues as maintaining confidentiality are more complex.

Recently a set of quality elements that constitute "best practices" in adolescent substance abuse treatment has been developed for services specifically within the juvenile justice system.[71] The recommendations, which emerged from a review of empirical research and the consensus of an expert panel, converge substantially with the NIDA and AACAP principles. These quality elements include: assessment and treatment matching; a comprehensive, integrated treatment approach; family involvement in treatment; developmentally appropriate programming; engagement and retention of adolescents in treatment; qualified staff; gender and cultural competence; continuing care; and measurement of treatment outcomes. A subset of quality elements based on empirical evidence (rather than professional consensus) has also been identified. It includes treatment orientation (for example, cognitive-behavioral or standardized evidence-based intervention, or therapeutic community), use of a standardized risk assessment tool, continuing care, engagement techniques (for example, motivational interviewing), ninety-day duration, and family involvement.[72]

Drug treatment in the justice system should target factors that are associated with criminal behavior (including beliefs and attitudes that promote criminal offending), and criminal justice supervision should incorporate treatment planning.

Do the services now delivered within the juvenile justice system incorporate these best practices? A study by Craig Henderson and several colleagues considered both secure confinement settings and community-based non-residential programs and found that, on average, the programs scored 5.5 out of a possible 10 in the use of effective practices.[73] Although the program response rates were low and were limited to self-reports of program directors, they do provide one estimate of the extent to which the juvenile correctional system is implementing effective practices. Moreover, the level of implementation found by the study is quite similar to that found in a survey of 144 "highly regarded" adolescent treatment programs, which were not specific to the juvenile justice system, and which scored an average of 23.8 out of a possible 45 in the use of these elements.[74] Thus, adolescent treatment programs, whether inside or outside the justice system, do not routinely incorporate a majority of "best practices."

Many justice system programs reported using several of the quality indicators. In the study by Henderson and colleagues cited above, more than two-thirds of programs reported having systems integration, qualified staff, standardized assessment, family involvement in treatment, treatment to address co-occurring disorders, and use of engagement techniques to motivate treatment retention. Only 10.7 percent of programs used developmentally appropriate treatment, 25.4 percent made use of continuing care, 41.8 percent used comprehensive services, and 59 percent used assessment of treatment outcomes.

Program features that have been associated with greater use of "best practices" include community programs (compared to institutions), network connectedness (having connections both with other criminal justice and with non-justice system facilities), and the level of program resources and training environment.[75]

These findings pinpoint several ways in which treatment within the juvenile justice system is failing to incorporate "best practices." Particularly striking are the low levels of continuing care services and comprehensive services. Henderson and colleagues interpret these findings to mean that agencies use effective practices that they can implement within their own setting, but that they have difficulty using best practices that require working jointly with other agencies. The finding of very low levels of developmentally appropriate services is somewhat surprising, and warrants replication. However, consistent with a relative neglect of developmental appropriateness of services, it has been reported that (as of 2002) no state in the United States had provisions for adolescent-specific provider certification, and the National Association of Alcoholism and Drug Abuse Counselors had no adolescent-specific requirements as of 2004.[76] Finally, no study to date has assessed the use of "best practices" concerning gender or cultural competence, probably because little is yet known about how to tailor treatment of adolescent substance use disorders with respect to cultural competence or gender or about the results of such tailoring.[77]

Systems of Care: Some Recent Models

As is evident from the research, effective intervention for adolescent offenders with substance use disorders requires coordinating multiple service systems. Providers who screen and assess substance use and related risk and protective factors must work with providers who plan treatment to address these factors, and both must work with those who provide aftercare and long-term management. As the data show, failure to integrate these systems results in less than ideal rates of delivering comprehensive care and aftercare services.

Although the justice system is a major source of treatment referral for adolescent offenders, the unmet need for treatment remains substantial.

Efforts are now thus being made to create systems of care that can deliver coordinated (and non-duplicative) services within the juvenile justice system. One model for an integrated system of care, the juvenile drug court model, has shown some initial promise. Curtis VanderWaal and several colleagues

have also called for an integrated system with a single point of entry for screening and comprehensive assessment (to avoid duplication of services) and a case manager to recommend services.[78] At the point of entry, an adolescent might be diverted into a service system other than the justice system or might move into judicial decision making. If the adolescent stays in the justice system, judicial decision making should include the use of graduated sanctions within the least restrictive supervision option that is consistent with protection of the community and that includes treatment programming (if appropriate) as well as provisions for aftercare. A similar emphasis on community-based intervention is seen in recent justice system reform in Missouri (known as the "Missouri model") that focuses on small residential and non-residential programs. These programs provide developmentally appropriate comprehensive services including family involvement and have shown promising results in reducing recidivism.[79]

Another integrated system of care is the Robert Wood Johnson Foundation's 2002 Reclaiming Futures Initiative. This comprehensive community intervention for juvenile offenders with substance use problems coordinates care by providers in many sectors—juvenile justice, substance abuse, mental health, physical health care, education, employment, recreation, faith communities, and youth development—during a youth's transition from an institutional placement to the community. Comprehensive case management links all these different systems, an information management system ensures that each system has the information it needs, and a quality assurance system ensures the quality of care. This model provides for quick screening of adolescents on entry into the system, a full assessment (as needed), and the development of a coordinated service plan, with one person in charge of coordinating services. Although adolescent outcome data have not been reported, there is evidence of systems improvement on measures such as access to services, data sharing, and agency collaboration as reported by key informants.[80]

Summary and Policy Recommendations

Adolescent offenders show high rates of substance use and substance use disorders, which are associated both with continued offending and with a broader range of negative outcomes. Although the justice system commonly screens juvenile offenders for substance use disorders, new policies are needed to increase the use of standardized screening methods and to ensure the screening takes place early enough in the process to allow juveniles to be diverted out of the justice system into community-based programs when appropriate. Drug courts are one promising model, but they should make greater use of empirically validated interventions and conduct follow-ups to measure longer-term outcomes.

Although the justice system is a major source of treatment referral for adolescent offenders, the unmet need for treatment remains substantial. To allocate scarce resources most effectively, new policies must increase the availability of high-quality, evidence-based treatment targeted at the subgroup of juvenile offenders with substance use disorders. The promising but mixed success of current treatment approaches highlights several challenges, including the need for better methods of engaging adolescents and their families in treatment, the need to better address environmental risk factors and comorbid conditions, and the lack of data concerning cultural and gender-tailored

interventions. More research in these areas is necessary before it is possible to advocate any one particular treatment approach. For the present, policy should encourage wider use of empirically validated therapies and of "best practices" within existing programs. Moreover, substantial relapse rates point to a greater need for aftercare services and to a need to manage substance use disorders as chronic disorders characterized by relapse and remission. The shortage of aftercare services and the lack of service coordination point to a need to develop service system models that better integrate and coordinate multiple services for adolescent offenders, particularly community-based approaches. Thus, policy should support the integration, continuity, and financing of these services for youthful offenders both during and after their justice system involvement.

Endnotes

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