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Alcohol and Drug Prevention and Treatment/Therapy

Alcohol and drug prevention programs focus on preventing youths from using substances, whereas alcohol and drug treatment/therapy programs focus on treating youths who have been clinically diagnosed with a substance use problem. Prevention programs are aimed at the general youth population and promote abstinence from substance use. Alternatively, the target population for treatment programs is narrower, specifically targeting youths with existing substance or alcohol dependency issues. A variety of approaches have been developed that work with families, schools, and communities to help children and adolescents develop skills and approaches to prevent substance use, and to treat those who develop substance use problems (National Institute on Drug Abuse 2003).

Scope of the Problem

According to the National Survey on Drug Use and Health (NSDUH), an estimated 8.8 percent of youths aged 12 to 17 used illicit drugs regularly, and 11.6 percent of youths drank alcohol regularly (NSDUH 2014). However, there appears to be a trend showing that alcohol and drug use is declining for youths. In 2014, Monitoring the Future (MTF), an annual survey of 8th, 10th, and 12th graders that asks questions about attitudes and behaviors related to drug use, showed that the number of students reporting any alcohol use in the previous 12 months was 41 percent (for all 3 grades combined). This was a statistically significant drop from 43 percent in previous surveys (Johnson et al. 2015). The number of adolescents using illicit drugs has also decreased. The greatest decline has been seen in the daily use of synthetic marijuana, dropping from 11 percent in 2011 to 6 percent in 2014 (Johnson et al. 2015). The use of most of the other drugs included in the MTF survey (such as ecstasy, LSD, and the illegal use of prescription drugs) has also declined among students (Johnson et al. 2015).

In addition to a decline in alcohol and drug use, there has also been a decline in the juvenile arrest rates for drug law violations. Although the 1980s and 1990s saw a dramatic increase in arrests of juveniles for drug law violations, between 1997 and 2012, the arrest rate fell 40 percent for youths between 15 and 17 years old, compared with a 17 percent drop for adults ages 18–20, and 16 percent for adults ages 21–24 (OJJDP 2014). The number of cases handled by the juvenile courts system saw a similar trend. Between 1985 and 2010 (the most recent year for which data is presented), there was a 111 percent increase in the number of juvenile cases processed through the court system for drug law violations. However, between 2001 and 2010, there has been a downward trend with a 15 percent decline in cases for drug law violations. In 2010, only 12 percent of all cases handled by juvenile courts were for drug law violations (Sickmund and Puzzanchera 2014).

Research has shown that 10 percent of substance-using adolescents will eventually develop a clinical substance abuse disorder (SAMHSA 2008). Unfortunately, the majority (about 90 percent) of adolescents with substance abuse disorders do not perceive themselves as "in need" of treatment

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services, due to difficulty in discerning the transformation from recreational use to a clinical disorder (SAMHSA 2006). In 2013, only 9.1 percent (122,000) of the youths in need of treatment actually *received* treatment (NSDUH 2014).

Rates of drug use, dependency, and unmet treatment needs tend to be more prevalent among justiceinvolved youth than the overall youth population. One study revealed that 77 percent of youths from a juvenile temporary detention center had reported substance use (mostly marijuana) in the past 6 months (McClelland, Teplin, and Abram 2004). Further, nearly half of the juveniles examined met the clinical criteria for a substance abuse disorder, about one-fifth of whom had more than one diagnosable substance-related disorder (McClelland, Teplin, and Abram 2004). Despite high rates of treatment need among the delinquent population, many of these juveniles do not receive adequate services. Many juvenile justice facilities do not screen youths for substance use disorders, leaving treatment needs unidentified (Young, Dembo, and Henderson 2007). However, even when screening does occur, problems are still prevalent; the availability and quality of treatment services within facilities is often lacking (Young, Dembo, and Henderson 2007; Henderson et al. 2007). Furthermore, many delinquents are not referred to community-based treatment upon returning to the community. For example, only 31 percent of juveniles with substance use disorders are referred to treatment upon discharge from a juvenile detention facility (Young et al. 2007). Despite the low referral rates, justice-involved adolescents comprise almost half of adolescent referrals to treatment programs (SAMHSA 2011).

Theoretical Background

The use of alcohol and drugs by youths is grounded in a number of behavioral theories. These theories influence prevention programming and treatment services, by focusing on the possible factors that lead to substance use. Two prevalent theories include social learning theory and social control theory.

The social learning theory offers a theoretical perspective into why youths engage (or don't engage) in substance use. In this case, social learning can be a risk or protective factor for substance use depending on the context in which learning occurs. For example, youths can learn to avoid using alcohol and drugs by emulating the prosocial behavior displayed by positive adult figures in their lives. Conversely, youths can be pressured into experimenting with substances by following the behavior shown by antisocial peers.

The social development model (SDM), a part of the social learning theory, presupposes that children and adolescents learn behavior from four socializing units (1) family, (2) school, (3) peers, and (4) community or religious institutions (Cleveland et al. 2012; Haggerty et al. 2007; Cleveland et al. 2010). This model is broken into two different perspectives: a social perspective and a developmental perspective. The *social* perspective is the action of positive reinforcement; youths who receive positive reinforcement from prosocial activities engage in prosocial activities (Cleveland et al. 2012), while youth who receive positive reinforcement from antisocial activities will engage in antisocial activities (Glasgow Erickson, Crosnoe, and Dornbusch 2000). The *developmental* perspective focuses on the "transitional periods" from toddler to child to adolescent. These periods are shaped by changes experienced in one's social environment that influence behavioral changes over time. For example, the transition from middle to high school is a stressful period for many youths, as they try to fit in with other peer groups, which can cause behavioral changes.

Another theory, the social control theory, suggests that when an adolescent's "conventional ties" are broken, the adolescent is more likely to commit delinquent acts (Vaughn et al. 2009; Church et al. 2009; Glasgow Erickson, Crosnoe, and Dornbusch 2000). Conventional ties include the bonds to (1)

institutions (family or school), (2) beliefs (laws and normative standards), and (3) members (teachers, parents, peers). Family-based risk factors, such as parental substance use, contribute to the weakening of an adolescent's social bonds (Glasgow Erickson, Crosnoe, and Dornbusch 2000), and weak social bonds can influence the occurrence of future delinquency, including substance use. As a result, some prevention programs incorporate interactive components that involve both youths and their parents, in order to improve the family bond. In addition, since poor family functioning and social relations typically precede juvenile substance abuse problems, many effective treatment programs have also focused on improving family functioning and social relationships (Henggeler et al. 2006; Waldron and Turner 2008; Liddle et al. 2009).

Alcohol and Drug Prevention Programs

Prevention programs are used to reduce the number of adolescents experimenting with, and potentially developing an addiction to, alcohol and illicit substances (Milford 2009). Substance abuse prevention programs target various populations and age groups. Below, several different types of prevention programs are described in terms of their target populations and various program components. Specific examples of evidence-based programs are also provided.

Programs for School-Aged Youth

Problem behaviors, such as alcohol or drug use, often begin during the school-age years. Therefore, many researchers believe that implementing prevention programs in a school setting increases the odds of averting problems associated with alcohol, tobacco, and other drug use (Botvin and Botvin 1992; Dusenbury and Falco 1997; Perry et al. 1996; Tobler and Stratton 1997). Most school-based prevention programs are universal and designed for large audiences (Botvin and Griffin 2007); however, curricula delivered in an interactive format with smaller groups of young people have been shown to produce positive, lasting results (Tobler and Stratton 1997). Drug prevention efforts have largely relied on classroom curricula usually designed for primary- and middle-school children (Dusenbury and Falco 1997). According to the National Institute on Drug Abuse (NIDA 2011) prevention programs should focus on key transition periods during adolescence, particularly the transition from middle school to high school, when youths are at high risk of experimenting with alcohol and drugs. Classroom curricula give students the tools to recognize internal pressures (e.g., stress or anxiety) and external pressures (e.g., peer attitudes and advertising) that may influence their decision to use alcohol, tobacco, and other drugs, while also developing skills to resist these influences effectively (Sloboda et al. 2009).

Many prevention programs have been implemented and evaluated in school settings across the country. One example is the LifeSkills Training (LST) program, which is a classroom-based drug prevention program for upper elementary and junior high school students. LST's curriculum centers on the development of personal self-management skills, social skills, and drug-resistance skills. Trudeau and colleagues (2003) found that the LST intervention significantly reduced the increase of substance initiation among the treatment group when compared with the control group.

Not all classroom-based programs have had the desired effect on students. One program that showed limited impact on students is D.A.R.E. (Drug Abuse Resistance Education). The core curriculum of D.A.R.E. consists of 17 lessons, one given each week. The lessons are taught by police officers, and cover topics such as drug use and misuse, resistance techniques, and drug use alternatives. Although shown to be a popular prevention program in schools and still implemented across the country (Birkeland et al. 2005), D.A.R.E. has been found in a number of studies to have no significant effects on students' substance use, in the short- and long-term (Birkeland et al. 2005; Berman 2009; Rosenbaum 2007; Clayton 1996; Ennett 1994).

For more information on the program, please click on the links below.

<u>LifeSkills Training (LST)</u> <u>Drug Abuse Resistance Education (D.A.R.E.)</u>

Programs for Young Children

More recently, there has been an increased focus on younger children and the link between the early presence of conduct disorder and future substance use (Shaw et al. 2006; Webster-Stratton et al. 2008). Evidence suggests that programs implemented at earlier stages in a child's life may be more effective in prevention efforts and behavior adjustments than programs implemented in later adolescent years, especially for high-risk populations (Webster-Stratton et al. 2008). Programs implemented in preschool and kindergarten classes are designed to specifically improve the social competence of children and establish skills for prevention. One particular aspect of prevention programs for younger children is the incorporation of both the family and the teacher/caregiver in program services. During this developmental period, children require proactive involvement and monitoring from parents, as a parent's response to a child's behavior is a predictor of future substance use (Shaw et al. 2006). Responses from teachers/caregivers to child behavior are also important during this time. As a result, many programs now include motivational interviewing for parents as well as emotional and educational training for teachers (Shaw et al. 2006; Webster-Stratton 2004).

One specific program, the Incredible Years (Webster-Stratton 2011) has been shown to reduce the occurrence of problem behavior in young children, while also improving parenting skills. The Incredible Years program focuses on children ages 2 to 8, and aims to reduce challenging behaviors and increase social and self-control skills. This program involves teachers, parents, and children who have not yet formally entered school but who may already be demonstrating conduct problems or oppositional defiant disorders (Webster-Stratton 2004). Webster-Stratton and colleagues (2008) found that children in the program demonstrated improvements in both conduct problems and problem solving at the follow-up, and parents were reported to be more involved in both children's and school activities. It should be noted that although programs targeting younger children attempt to change problem behaviors that may lead to future substance use, these programs are rarely evaluated in the long term to measure their ability to impact measures of actual substance use.

For more information on the program, please click on the link below.

The Incredible Years

Family-Based Programs

Family-based programs focus on parental influence, parenting skills, and family cohesion as major factors in substance abuse prevention (Cleveland, Feinberg, and Jones 2010). Prevention programs aim to provide accurate information to both parents and children about alcohol and drugs, and encourage parents to clarify their views about substance use with their children (Cleveland et al. 2010). During the developmental period from child to adolescent, parental influence has a large impact on youths' behaviors: therefore, present, motivational parents can greatly impact prevention efforts (Haggerty et al. 2007; Cleveland et al. 2010; Shaw et al. 2006). Family-based programs are implemented to prepare parents and children for the changes they will experience during the transition from child to adolescent, and offer youths tools to assist in resisting drugs and alcohol. Factors such as family functioning, communication, involvement, and supervision are fundamentally important to many programs for adolescents (Riesch et al. 2012).

There have been many family-based prevention programs that have shown effectiveness in improving family functioning and reducing youth substance use. For example, the Positive Family Support (PFS)

program, formerly known as Adolescent Transitions Program (ATP), is a multilevel, family-centered intervention targeting children at risk for problem behaviors or substance use, and their families. Designed to address family dynamics related to the risk of adolescent problem behavior, the program is delivered to parents and their children in a middle-school setting. Connell and colleagues (2007) examined PFS's effect on substance use and antisocial behavior in students ages 11 to 17. The PFS intervention group reported significantly less use of tobacco, alcohol, and marijuana compared with the control group. In addition, the intervention group exhibited significantly less antisocial behavior.

For more information on the program, please click on the link below.

Positive Family Support (PFS)

Programs for High-Risk Families

Another type of prevention program focuses on high-risk families or families that need additional oneon-one assistance, therapy, or skills enhancement. High-risk families include single-parent homes, early/first-time mothers, and parents with a history of substance abuse (Hemovich and Crano 2009). According to NIDA (2011), prevention programs should be tailored to address specific characteristics of particular populations to improve program effectiveness. For example, urban communities with lowsocioeconomic status and strong acceptance of drug use have benefited from more focused, community prevention efforts (Cleveland et al. 2012). At-risk adolescents who have parents with a history of substance abuse or limited concern for their children's behavior benefit from programs that incorporate interactive family components (Hemovich and Crano 2009).

One example of a program that targets high-risk families is Strong African American Families (SAAF). The SAAF program is a parental training and family therapy program that works to strengthen the attachment between the parent and child to reduce the likelihood of youth involvement in various problem behaviors, particularly alcohol and substance abuse. Brody and colleagues (2006) found that mothers in the SAAF treatment group reported more communicative parenting, and children in the treatment group demonstrated both negative attitudes about drinking and effective resistance skills. Most important, children in the treatment group were also less likely to use alcohol compared with the control group.

Nurse-Family Partnership (NFP) is another program that focuses on high-risk families. The NFP focuses specifically on first-time mothers and young children from birth to 3 years old, who are at risk for conduct problems and possible substance use. The program provides low-income, first-time mothers of any age with home-visitation services from public health nurses. The nurses work intensively with the mothers to improve maternal, prenatal, and early childhood health and well-being, with the expectation that this intervention will help achieve long-term improvements in the lives of atrisk families. A number of studies (Olds 2004; Kitzman 2010) examining NFP found significant impacts on the targeted populations, showing reductions in children's substance use and increases in parental involvement in the long term. For example, a 12-year, follow-up study found that children in the NFP program were significantly less likely to have used cigarettes, alcohol, or marijuana compared with children in the control group (Kitzman et al. 2010).

For more information on the programs, please click on the links below.

Strong African American Families (SAAF) Nurse-Family Partnership

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Limitations of Prevention Programs

Although prevention programs have been shown to decrease the number of youths that experiment with substances, there are still many limitations to prevention efforts. One challenge in prevention is identifying and overcoming the barriers to program fidelity (Midford 2009). For instance, with regard to family-based programs, many studies focus on the parents and adolescents who choose to be involved in those programs. There are few studies that analyze the factors that lead to participation or the decision not to participate, and even fewer that recommend specific alternatives to increase participation.

Another limitation concerns the targeted population of school-based programs. As mentioned earlier, the majority of prevention programs are classroom curriculum programs, administered in a school setting (Botvin and Griffin 2007). Students who do not attend school are left out of these types of programs, and the findings from program evaluations may not depict the substance use habits of all school-aged adolescents—just those who attend school and participate in prevention efforts. Strategies to target youths who do not attend school and are at high risk for substance use should be considered.

Third, programs are designed to focus on "substance use prevention," yet program evaluations often do not measure the actual substance use among adolescents. Rather, programs identify and measure behaviors, attitudes, and perceptions related to substance use (Webster-Stratton et al. 2008). Therefore, it is difficult to determine whether prevention programs specifically affect youths' actual use of drugs and alcohol.

Lastly, further research is required to understand long-term implications of prevention programs. Often, program evaluation research focuses on measuring outcomes in the short term. Few studies examine the effects of prevention programs in the long term (Shaw et al. 2006). There is a need to understand if prevention skills will continue through both the transition to high school and the transition to college, which are periods of development when youths are most at risk for experimenting with drugs and alcohol (Shaw et al. 2006).

Alcohol and Drug Treatment/Therapy Programs

For youths currently experiencing drug or alcohol problems, particularly those involved in the juvenile justice system, more intensive treatment services are a need. Treatment services are typically more comprehensive than prevention programs due to their retroactive (rather than proactive) focus. Specifically, treatment programs include components related to prosocial development as a means to combat existing antisocial behaviors and negative peer relations.

It is important to note that programs that are effective in reducing adult drug use may not translate well to juveniles. Substance-abusing adolescents seldom are addicted to alcohol and other drugs in the traditional sense that adults experience addiction. Adolescents and adults may misuse drugs for different reasons and there are differences in the psychology of juvenile and adult addiction (Bureau of Justice Assistance 2003). Specifically, youths are still developing cognitive, emotional, and social skills necessary for a productive life and are influenced by important relationships, such as those with family, friends/peers, school, and the community. Various types of juvenile drug and alcohol treatment programs are discussed below. Specific examples of evidence-based programs are also provided.

Motivational Interviewing

Motivational interviewing (MI) is a counseling method that can be implemented as a standalone program or can be incorporated as an element of a larger program. MI uses collaborative, client-centered, goal-oriented communication to address hesitancy toward behavioral change by encouraging and evoking personal desires for transformation (Stein et al. 2006). A youth's subtle desires for change

are uncovered through a series of selective interviews guiding the adolescent to concentrate on his or her behaviors and explore overarching goals in regard to personal motivations and reasons to change (Stein et al. 2006). The goal of MI is to help create a change strategy and solidify the adolescent's commitment to change (Stein et al. 2006).

Stein and colleagues (2006a) examined the effects of a standalone MI program on youth engagement using a sample of juveniles from a postadjudication facility. Researchers compared juveniles receiving MI with a comparison group receiving Relaxation Therapy (RT). The researchers found that the RT comparison group experienced more negative engagement with substance use therapy than the MI group (Stein et al 2006a). However, the effectiveness of MI treatment appeared to be mediated by depressive symptoms. Results showed that MI treatment significantly improved driving-under-theinfluence (DUI) outcomes only for adolescents with low depressive symptoms. When examining adolescents with high depressive symptoms, the RT group had significantly better outcomes compared with the MI group (Stein et al. 2006b).

For more information on the program, please click on the link below.

Motivational Interviewing for Juvenile Substance Abuse

Juvenile Drug Courts

Juvenile drug courts (JDCs) are specialized juvenile court dockets for substance-abusing youths in need of specialized treatment services, allowing for intensive judicial supervision that is not ordinarily available in traditional juvenile courts (Latimer, Morton-Bourgon, and Chrétien 2006; Mitchell, Wilson, Eggers, and MacKenzie 2012; Shaffer 2006; Drake 2012). Courts work conjointly with treatment providers, social services, school and vocational programs, law enforcement, probation, and other agencies (Latimer, Morton-Bourgon, and Chrétien 2006; Mitchell et al. 2012; Shaffer 2006; Drake 2012). Core elements of JDCs include drug testing and treatment services, regular judicial contact, and meetings with a case manager and/or probation officer. Additionally, most JDCs make referrals for educational programs, job training, and mental health services. Since the major goal of JDCs is to reduce recidivism, many studies use recidivism to evaluate program effectiveness, and may only measure the impact of the program on substance use as a secondary outcome (or not at all). For more information, see the MPG literature review on <u>Juvenile Drug Courts</u>.

A number of meta-analyses examining the effectiveness of JDCs have found mixed effects. Drake (2012) found a modest decrease in recidivism associated with participation in a JDC, whereas Shaffer (2010) found a significant decrease in the recidivism of JDC participants compared with nonparticipants. Similarly, Mitchell and colleagues (2012a) and Shaffer (2010) found a small-to-medium decrease in recidivism rates for juvenile drug court participants. Conversely, Latimer and colleagues (2006) did not find a significant impact of JDCs on recidivism measures.

At the individual program level, some courts have had promising results. Maine's juvenile justice system successfully implemented six JDCs that appear to reduce recidivism and substance use (Anspach and Ferguson 2005). Juveniles receive individual and group therapy, family counseling, intensive outpatient services, and residential services when necessary. Researchers found that JDC participants were more likely to successfully complete drug treatment and had a lower rate of in-program positive drug tests than other adolescents in Maine's juvenile justice system (Anspach and Ferguson 2005).

Utah JDCs also operate with basic drug court components, including screening and assessment, individualized treatment plans, judicial supervision, community-based treatment, regular court hearings, accountability and compliance monitoring, comprehensive services, and a nonadversarial team approach (Hickert et al. 2011). Although results showed no significant differences for JDC participants and the comparison group in regard to alcohol or drug recidivism, JDC participants had significantly fewer subsequent criminal offenses than their non-JDC counterparts (Hickert et al. 2011). For more information on the programs, please click on the links below.

Maine Juvenile Drug Treatment Courts Utah Juvenile Drug Courts

Family-Inclusive Therapy

Evidence shows that family dynamics often contribute to the development of a substance abuse disorder (Chen et al. 2012). The integral role of family relationships in the recovery of substance-abusing juveniles is constantly reiterated throughout literature (Chen et al. 2012). Other studies have shown family-based treatments to have higher retention rates, which may be related to positive outcomes (Liddle et al. 2008).

There are a number of specific therapeutic models that focus on including the family in treatment services for youths. Multidimensional family therapy (MDFT) and group cognitive behavioral therapy (CBT) are both well-established approaches for adolescent substance abuse treatment (Waldron and Turner 2008). The MDFT intervention promotes effective communication among family members, targeting social competence and parental involvement/relationships. The MDFT approach is individualized, family-based, and comprehensive, requiring collaboration across many social systems (Liddle et al. 2009). Overall goals are to decrease family conflict and improve family attachments, both of which should have positive effects on substance use outcomes.

Liddle and colleagues (2008) compared MDFT with an individual CBT intervention and found both to be moderately effective in reducing juvenile substance use. Although both CBT and MDFT significantly reduced substance and alcohol use among juveniles, effects were more pronounced for the MDFT group (Liddle et al. 2008). Specifically, individuals receiving the MDFT treatment experienced a greater reduction in "other" drug use (i.e., all drugs excluding cannabis and alcohol). MDFT-treated adolescents were also more successful in maintaining abstinence over the long term.

There are also a number of interventions that have incorporated family into programming services. For example, the Multisystemic Therapy-Family Integrated Transitions (MST–FIT) program provides integrated and family services to juvenile offenders who have co-occurring mental health and chemical dependency disorders (Trupin et al. 2011). Services are provided during a juvenile's transition from incarceration back into the community. The overall goal of MST–FIT is to provide necessary treatment to youth, thereby reducing recidivism. The program also seeks to connect youths and families to appropriate community supports, increase youth abstinence from alcohol and drugs, improve youth mental health, and increase youth prosocial behavior. Trupin and colleagues (2011) found that the MST–FIT program significantly reduced *felony* recidivism at 36 months postrelease; however, it did not have a significant effect on overall recidivism (i.e., felony *and* misdemeanors), misdemeanor recidivism, or violent felony recidivism (Trupin et al. 2011).

For more information on the program, please click on the links below.

Multidimensional Family Therapy (MDFT)

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Multisystemic Therapy-Family Integrated Transitions (MST-FIT)

Limitations of Treatment/Therapy Programs

The research on juvenile drug treatment programs has some limitations. A majority of drug programs evaluated within the juvenile justice system typically examine recidivism-based outcomes and often neglect to fully examine substance abuse outcomes (Trupin et al. 2011; Anspach and Ferguson 2005; Hickert et al. 2011). Also, because these programs are so closely linked with the juvenile justice system, they usually rely on one measure of drug use, such as one or more positive drug screen results (Anspach and Ferguson 2005; Hickert et al. 2011). While instances of positive drug screens may be one way to measure drug use, this measure fails to incorporate undocumented instances of drug or alcohol use (Mitchell et al. 2012b, 2012c).

Other limitations exist when attempting to examine the specific components that make a program effective. There is some overlap between the various juvenile drug treatment programs, with some programs incorporating a similar element, which makes it difficult to discern which program components successfully impact substance use (Bauman et al. 2002; Trupin et al. 2011; Henggeler et al. 2006). For example, motivational interviewing can be implemented as a standalone program (Stein et al. 2006a, 2006b) or may be used as a component in a juvenile drug court or multidimensional family therapy. Similarly, juvenile drug court programs and multidimensional family therapy programs both incorporate some kind of family-based treatment (Waldron and Turner 2008; Liddle et al. 2008; Liddle et al. 2009; Hickert et al. 2011; Anspach and Ferguson 2005). Additional meta-analyses on juvenile drug treatment programs could provide some insight into components of treatment programs that have been shown to positively impact substance use.

Additionally, the majority of juveniles relapse within the first year posttreatment. This has encouraged the development of aftercare programs (Godley et al. 2006). Research shows that early-sustained abstinence is predictive of long-term abstinence, suggesting that even a short period of continuing care posttreatment can significantly improve long-term abstinence rates (Godley et al. 2006). However, many juvenile treatment programs still lack this component, with youths returning to the community without the continued support needed to promote continued abstinence (Godley et al. 2006).

Conclusions

There are large investments by federal and local governments every year on alcohol and drug prevention and treatment programs. For example, the federal budget in FY2011 on treatment services was almost \$9 billion, while close to \$1.5 billion was spent on prevention programming (Office of National Drug Control Policy 2012). Although youths' self-reported use of alcohol and drugs has declined over the last few years (Johnson et al. 2015), current research still demonstrates a need for prevention programs. It is also important to increase available treatment services, as there continues to be a wide gap between the number of youths diagnosed with substance abuse problems and the number of youths that actually receive necessary treatment (McClelland, Teplin, and Abram 2004).

Selecting appropriate evidence-based prevention and treatment programs should be based on a number of factors, such as the targeted population, the setting, the extent of the alcohol and drug problem in the community, and available resources. For example, as mentioned earlier, universal alcohol and drug prevention programs are widely used to target large audiences of school-aged youths (Botvin and Griffin 2007). However, a prevention program that targets a more specific population, such as high-risk families, may be more appropriate for jurisdictions where limited resources are available. Similarly, when examining and selecting appropriate treatment and therapy options for juveniles with

substance abuse problems, it is essential to consider the importance of family involvement in treatment services, and to remember that programs that have demonstrated significant effects on adult substance users may not be effective for juveniles (Stein et al. 2006).

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