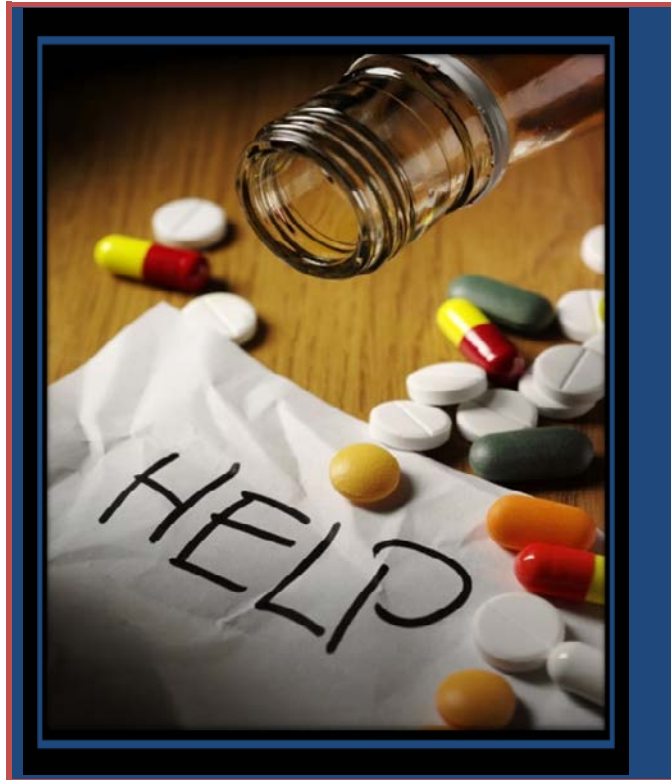




Department of
**Mental Health &
Substance Abuse Services**



8/15/2016

**Substance Use Best Practice Tool
Guide**

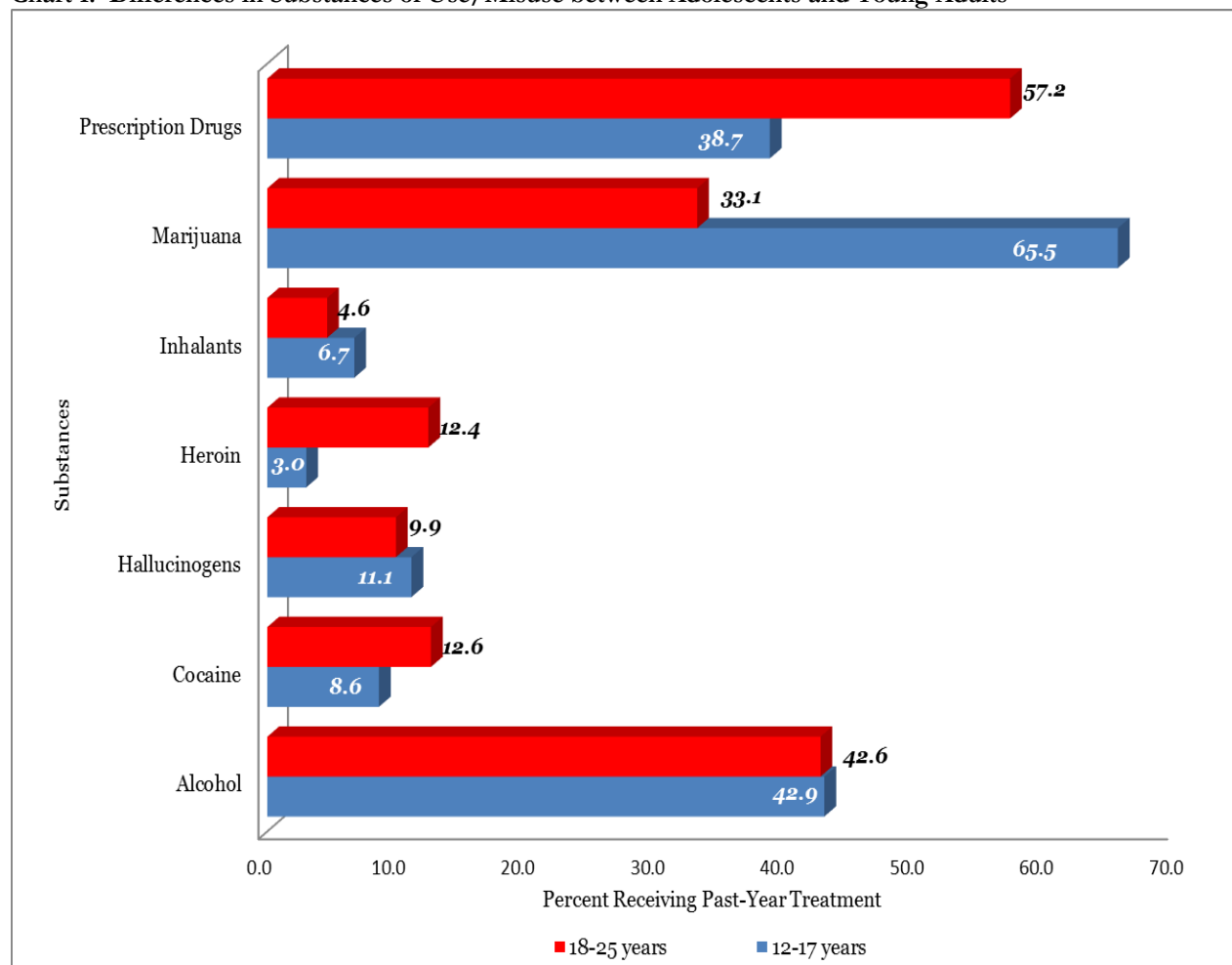
YOUNG PEOPLE

Division of Clinical Leadership in Collaboration with the
Division of Substance Abuse Services

Quick Facts

1 in **3** youth start drinking by the end of Grade 8, of which half report having been drunk (NIAAA, 2011).

Chart 1. Differences in Substances of Use/Misuse between Adolescents and Young Adults



Adolescents differ from young adults in reports about the substances they use and/or misuse. Nearly twice as many young people ages 12-17 received treatment for marijuana use, compared to young adults ages 18-25. The reverse is true involving treatment for prescription drugs. Around one and a half as many young adults ages 18-25 were in treatment for prescription drug use as youth ages 12-17 (NIDA, 2014a).

Young People

This module addresses substance use in youth and young adults. It includes information for adolescents as well as young adults 18-25 years of age.

Adolescents

It should not be surprising that substance use in adolescence has become a public health concern. The adolescent brain is primed for risk taking such as experimenting with substances, and because it is still developing, it is more vulnerable to harmful effects (NCASA at Columbia University, 2011). Adolescence is defined as the developmental stage which begins with the pubescent years (around the age of ten) and continues until physical maturation is reached (around the end of the teenage years). Significant developments happen at differing points in time with regard to cognitive, physical, and sexual development as well as an innate appeal toward self-image of one's physical body, the actual body's shape, and functions within society (Free online psychology dictionary, n.d.). These physical, cognitive, and psychological changes in young people are coupled with greater desires for independence, increased experimentation, and engagement in more risk-taking behaviors (Howlett, Williams, & Subramaniam, 2012). Hence, adolescence is considered a period of conflict, especially between youth and parent/caregiver. During adolescence, young people become increasingly aware of how their peers see them and desperately want and try to fit in. Adolescents frequently start to “try on” different identities and looks, which may result in unpleasant episodes with parents/caregivers, in particular (KidsHealth, n.d.). Adolescence is further the critical period for starting to smoke, drink, or use other drugs. Genetics, family history, trauma, mental health and/or behavioral problems place some teens at even greater risk for negative consequences (NCASA at Columbia University, 2011). Drug use compromises the very parts of the brain that would allow youth to “say no” (NIDA, 2014a).

Substance use and/or misuse have become part of the experimentation and/or risky behavior that adolescents engage in, despite ongoing prevention efforts by healthcare practitioners (Howlett et al.,

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2012). For example, more than half of the three million new initiators of substance use in 2011 were adolescents (Meyers, Cacciola, Ward, Kaynak, & Woodworth, 2014). In 2012, 52 percent of the 2.8 million new

users were under the age of 18 (NIDA, 2014a). As many as 44 percent of teenagers reported using marijuana at least once within their lifetime, with 36 percent reporting use in the past year, nearly 25 percent reporting use within the past month, and seven percent reporting use 20 or more times within the past month (Feliz, 2014). Research indicates that one of every 11 user of marijuana that is at least 15 years of age becomes dependent on the substance. It has further been shown that there is an inverse relationship between use and perceived risk of harm. Lower marijuana use is associated with a perceived high risk of harm from use (SAMHSA/CBHSQ, 2016). Analyses by ethnic group have shown Hispanic and African-American/Black teens as more likely to report using or misusing prescription substances compared to their White counterparts (27 percent, 29 percent, and 20

percent respectively (Feliz, 2014). In our state, the top three substances of use for young people ages 12-17 admitted to treatment facilities funded by the Tennessee Department of Mental Health and Substance Abuse Services (TDMHSAS) in fiscal year 2015 were marijuana, alcohol, and opioids, respectively (TDMHSAS Office of Research, 2016).

Alcohol continues to be the substance most frequently used by adolescents, followed by marijuana and tobacco. Nearly four in ten high school seniors reported drinking alcohol, about one in four reported using marijuana, and slightly more than 15 percent reported smoking cigarettes in the past month (Community Anti-Drug Coalitions of America [CADCA], 2015; DHHS/OAH, 2015). Young people 12 to 17 years of age that consume alcohol tend to engage in binge drinking (i.e., consume five or more drinks in a row on a single occasion) compared to adults (NIDA, 2014a).

Marijuana remains the most commonly used illicit drug for adolescents, though nearly half of adolescents have used an illicit drug at least once by Grade 12 (Community Anti-Drug Coalitions of America [CADCA], 2015; DHHS/OAH, 2015). The percent of teens who perceive marijuana use as harmful has remained relatively stable from 2009 to 2013. In 2009, 42 percent saw moderate to great risk in trying marijuana once or twice versus 39 percent in 2013. Perceptions of moderate to great risk in 2009 were 74 percent when use was considered regular, compared to 70 percent in 2013. Furthermore, 34 percent of teens surveyed in 2013 said they would be less likely to use the substance if it were legalized, compared to 38 percent in 2012 (Partnership for Drug-Free Kids, 2013).

Findings from the 2014 National Survey on Drug Use and Health (NSDUH) reflected declines in use of certain substances by youth. Decreases in substance use were evident for alcohol, cigarettes, and nonmedical use of prescription pain relievers (CADCA, 2015) which, of course, is encouraging news about youth drug use. However, marijuana use by adolescents remained stable (CADCA, 2015). Moreover, a Partnership Attitude Tracking Study (PATS), conducted by the Partnership for Drug-Free Kids, has indicated an increase in use of over-the-counter (OTC) cough medicines by youth. From 2012 to 2013, teens reported an increase in lifetime (“ever tried”) use of OTC cough medicine to get high, increasing from 12 percent to 15 percent (Feliz, 2014). Additionally, results from the PATS survey confirmed a significant increase in reported lifetime use of synthetic human growth hormone (HGH) among teens. Statistics for 2013 doubled over 2012, with 11 percent of teens in grades 9-12 reporting “ever having used” HGH without a prescription versus five percent the previous year. The findings around performance-enhancing substances have prompted recommendations of tighter regulation and more accurate labeling of “fitness-enhancing” OTC products (Feliz, 2014).

The Partnership for Drug-Free Kids has initiated efforts to deal with the issue of performance-enhancing substance use by young people. In conjunction with Major League Baseball Charities, the organization developed the *Play Healthy* program to give coaches and parents a better understanding of the risks of using performance-enhancing substances. Further, this program equips significant adults in helping youth athletes make safer, healthier decisions. *Play Healthy* features a Web site that educates families on the risks of steroids and performance-enhancing substances. There are also *Play Healthy Awards* to recognize coaches that work with young people as well as student athletes who embody the spirit of teamwork and healthy, drug-free competition (Feliz, 2014).

Per student self-report, heroin use by students in grades 8, 10, and 12 has remained relatively low (NIDA, 2014b). However, three in 100 high school students in the United States have used heroin.

Furthermore, the drug appears to be attracting young, White people in the suburbs (Aleccia, 2014). The heroin of today is more lethal than that of earlier years because it is:

- **Purer** – At least 40 percent pure, with some reports indicating much higher purity rates.
- **Stronger** – A high can be attained merely by smoking or snorting it.
- **More addictive** – Being stronger and purer makes the drug much more addictive (Himmelstein, 2013).

A 2014 Youth Risk Behavior Surveillance (YRBSS) Report indicated that young people in our state were using heroin and shooting up drugs at twice the national average (Wilemon, 2014; CDC, 2014). The percentage of Tennessee young people who reported ever injecting illicit substances was 4.7 percent, compared to 1.7 percent nationwide. The YRBSS monitors six types of health-risk behaviors contributing to the leading causes of disability and death in young people and adults. Alcohol and other substance use as well as tobacco use are among the health risk behaviors that are monitored (CDC, 2014).

Research has shown us that an individual's chance of more serious substance use and addiction increases when there has been drug use early in life (NIDA, 2010). In fact, 90 percent of substance use disorders (SUDs) begin

between the ages of 12 and 20 (Meyers et al., 2014). By the time young people are seniors in high school, almost seven in ten will have tried alcohol, more than one fifth will have used a prescription

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drug for a nonmedical purpose, and 50 percent will have taken an illegal drug (Johnston, O'Malley, Miech, Bachman, & Schulenberg, 2015; NIDA, 2014a). Of the young people that begin abusing prescription drugs at age 13 or younger, at least one fourth will develop a substance use disorder (SUD) at some time in their lives (McCabe, West, Morales, Cranford, & Boyd, 2007; NIDA, 2014a). Using substances before age 15 makes it five times more likely that a person will develop an SUD in

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More than four in ten teens who have used marijuana reported starting use before the age of 15, a fact that is considerably troublesome (Feliz, 2014).

Research estimates show that about 75 percent of adolescents with substance use disorders have co-occurring psychiatric conditions. This fact places adolescents at risk for a wide range of problems such as high-risk sexual behavior (Lichtenstein, Spirito, & Zimmermann, 2010).

Youth tend not to report withdrawal symptoms around drug misuse or use. Instead 12 to 17 year olds typically report getting complaints from other people about their substance use, continuing to use in spite of legal trouble or fights, and hiding their substance use (NIDA, 2014a).

Screening

Standardized screening tools are available to help clinicians determine an adolescent's level of involvement, if any, in alcohol, tobacco, illicit drugs, and/or nonmedical prescription drug use. When reported, the health care provider can assess severity and either provide an on-site brief intervention or refer the youth to a substance use treatment program (NIDA, 2014a). Screening is conducted to identify adolescents who need a more comprehensive assessment for substance use disorders. This is accomplished by uncovering “red flags,” or indicators of serious substance-related problems (SAMHSA/CSAT, 1998).

While 10-15 minutes is the ideal duration of the screening process, efforts should be made to ensure a process lasting no more than 30 minutes. The screening instrument should be simple enough that a wide range of clinicians can administer it. The tool should focus on the severity of the adolescent's substance use (primarily consumption patterns) along with a core group of associated factors such as mental health status, educational functioning, legal problems, and living situation. The content of the screener must be appropriate for a diverse group of clients, including those from a variety of background and cultural experiences as well as for clients of differing ages and experiences (SAMHSA/CSAT, 1998).

This document includes various screening tools in a separate module. Among them is the CRAFFT, a screening instrument that has been validated as appropriate for use with adolescents to screen for substance use. Screening tools are further available through American Academy of Pediatrics (AAP) publications: *Tobacco, Alcohol, and Other Drugs: The Role of the Pediatrician in Prevention, Identification, and Management of Substance Abuse*. In addition, the *Alcohol Screening and Brief Intervention for Youth: A Practitioner's Guide*, available through the National Institute on Alcohol Abuse and Alcoholism (NIAAA), provides information on identifying adolescents at high risk for alcohol use (2011). A copy of the latter resource can be downloaded from <http://pubs.niaaa.nih.gov/publications/Practitioner/YouthGuide/YouthGuide.pdf>.

The American Academy of Pediatrics has recommended that health care providers routinely screen all adolescents for substance use as part of preventive care. Because adherence to the recommendation is low, Harris et al. (2012) conducted a quasi-experimental, asynchronous study to test the efficacy of computer-facilitated screening along with brief advice in reducing substance use among adolescents. Screening along with an educational component was provided before the physician office visit. Provider advice was supplied during the visit. Results revealed this strategy as a promising practice in reducing adolescent substance use (Harris et al., 2012).

Schools are a logical location to use screenings and implement SBIRT- (Screening, Brief Intervention, and Referral to Treatment-) type protocols. If the school has a School-Based Health Center (SBHC), proactive screening of large numbers of adolescents for alcohol and other drug (AOD) risks, AOD use, and substance use disorders can take place during routine appointments and care. Many schools will not have a SBHC, but pilot studies have demonstrated how incorporating educational-SBIRT programs through an AOD counselor from a local treatment provider can lead to similar results as found for schools with SBHCs. Of students randomly approached to participate, 100 percent accepted screening and 42 percent reported substance use. Only 28 percent

reported substance use when provided anonymous surveys in non-participating schools. Moreover, 99 percent of the positive screeners voluntarily accepted one motivational counseling session, with 68 percent returning for additional sessions. All sessions were held outside of academic class times (Meyer et al., 2014).

Prevention

Substance use disorders (SUDs) in adolescents must be treated in the same way as other chronic illnesses. SUDs have biological, behavioral, and social components and, like other chronic medical conditions, are best managed with the appropriate combination of clinically-proven approaches that address prevention and early intervention, as well as treatment and continuing care. Prevention and early intervention are especially helpful when adolescents are engaged in emerging “risky” substance use behaviors (Meyers et al., 2014).

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Genetic factors and life stressors can influence adolescents’ use of substances. However, parents and other caregivers can still play a critical preventative role. Research has shown that strong positive connections with parents can help adolescents stay drug free. Moreover, parents should monitor the activities of their adolescents and keep the channels of communication open. Other protective factors include positive

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connections with other family members, school, religion, reduced access to illicit substances in the home, and having parents present in the home at key times of the day (DHHS/OAH, 2015). Studies have shown that teens with parents and/or teachers who talk with them regularly about the dangers of substance use

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An NIAAA (2013) publication promulgates the value of parents and parenting in preventing substance use. It deals specifically with the prevention of alcohol use, but has significant implications for prevention involving other substance use. This document emphasizes the fact that adolescents listen to their parents about issues such as substance use, particularly if the messages are conveyed with authority and

consistently. While no more than one in four teenagers thinks their parents should have a say about what they should wear or the type of music they

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should listen to, around four in five believe that parents should have a say whether they engage in substance use. It is recommended that parents talk with their youth early and often, in developmentally appropriate ways. Youth who know the opinions of their parents on the issue of substance use are more likely to fall in line with the expectations of their parents.

The publication provides actions parents can take to minimize the likelihood of their youth using substances. Among them are:

- Be aware of the laws in our state about providing substances to one's own children.
- Be consistent in setting expectations and enforcing rules with the young person.
- Be involved in the lives of your young person.
- Conduct open, respectful communication with youth and explain boundaries and expectations.
- Establish policies regarding substance use early on.
- Never provide substances to someone else's young person.
- Work in and with the community to promote dialogue about substance use and the creation and implementation of action steps to address the issue.
- Work with other parents to monitor where youth are gathering and what they are doing (NIAAA, 2013).

In addition, the NIAAA publication discusses Baumrind's parenting styles and which works best in preventing youth substance use. Baumrind says that the way parents interact with their children/youth tends to fall into one of the following categories:

- **Authoritarian** – These parents tend to exert high control and discipline, coupled with low warmth and responsiveness. For example, they respond to poor grades through punishment but let improved or good grades go unnoticed.
- **Permissive** – Parents in this category typically exert low control and discipline with high warmth and responsiveness. These parents will accept any grades and fail to correct behaviors that may lead to poor grades.
- **Neglectful** – These parents exert low control and discipline in conjunction with low warmth and responsiveness. For example, they would not show any interest in their youth's school performance.

- **Authoritative**— Parents in this category tend to exert high control and discipline as well as high warmth and responsiveness. They would offer praise for good grades and use thoughtful guidance and discipline to help improve poor grades.

The literature continues to validate that young people reared in homes with authoritative parents tend to fare better than their peers, regardless the outcome of focus (NIDA, 2015). These findings

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are explained, in part, by the fact that authoritative parents use approaches to problem solving and emotional expression that help protect their youth against the psychological dysfunction that often precedes substance use/misuse.

Research supported by NIDA further supports the important role of parents in preventing their youth from starting to use substances (NIDA, 2015). The Child and Family Center at the University of Oregon produced a publication highlighting parenting skills that are critical in preventing the initiation and progression of substance use among young people. The publication also provides access to video clips that can help parents practice positive parenting skills. The publication can be accessed at https://d14rmgtrwzf5a.cloudfront.net/sites/default/files/familycheckup_8_15.pdf.

Parents, on the other hand, are failing to have these crucial conversations with their youth. A SAMHSA report indicated that more than 20 percent of parents of young people ages 12-17 think what they say has little to no influence on whether or not their youth will engage in substance use, including alcohol and tobacco. The report also showed that 10 percent of parents said they did not talk to their adolescents about the dangers of using alcohol, tobacco, or other substances. Ironically two thirds of the parents who had not talked with their youth thought they could influence whether their youth used substances if they had the conversations with them (Science Daily, 2013b).

Parents are failing to have these crucial conversations with their youth (Science Daily, 2013b).

Findings are mixed about whether parents should talk to their youth about their past substance use. One of the first studies to examine this issue (conducted by Kam and Middleton) found that youth whose parents did not disclose substance use but delivered a strong anti-drug message, were more likely to exhibit anti-drug attitudes (Science Daily, 2013a). However, a Partnership for Drug-Free Kids (2014) brochure suggests that parents use their judgment. However, the key words are “being developmentally appropriate” in your conversation. Former SAMHSA Administrator Pamela Hyde has expressed that parents need to initiate age-appropriate conversations about substance use with their children at all stages of their development in order to help ensure that their youth make the right decisions (Science Daily, 2013b).

Teenagers report that the greatest deterrent to marijuana use is getting into trouble with the law, followed by upsetting parents (Partnership for Drug-Free Kids, 2013). Hence, the evidence is

overwhelming that parents continue to be an important factor in whether or not young people engage in substance use.

Treatment Issues

Research suggests that providers focus more strategically on targeted intervention points because the key risk periods for substance use occur during major transitions in young people's lives. The first significant transition for youth takes place when they leave the security of the family to enter school for the first time. Another major transition is when the youth move from elementary school to middle school. It is this transition where they typically experience new academic and social situations that include learning to interact and get along with a wider group of peers. It is also at this

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transition point that the youth, who are in early adolescence, are likely to encounter drugs for the first time. The next pivotal transition occurs when young people enter high school. Now there are additional educational, social, and emotional, challenges to face. Simultaneously, the youth may be exposed to greater availability of substances, substance users, and social

activities where substances involving substances. Of course, these challenges may increase the risk that the youth will use and/or misuse substances. Graduating high school and leaving home for college, entering the workforce, or just being on their own for the first time is another critical transition point that may dramatically increase the risk of substance use for young people (Howlett et al., 2012; NIDA, 2010). Thus, parents/caregivers as well as treatment providers need to be aware of these risk factors so that appropriate protective factors can be put in place and/or incorporated into treatment planning and implementation (Howlett et al., 2012).

Research suggests programs such as AA and NA hold promise for adolescents, especially as an adjunct service. They are easily accessible at no cost and provide flexible support at times of high relapse risk. There are still questions related to the developmental level of adolescents for AA or similar program participation and existing research is based on a few small studies. Nevertheless incorporating 12-step concepts in adolescent treatment programs is encouraged (Kelly & Myers, 2007).

Current research says that we need to do a better job of providing substance use treatment for adolescents (Meyers et al., 2014). Certainly clinicians should guide and warn adolescents about safe management of their medications as well as safe storage (Chambers, Lopez, & Ernst, 2013). Since some studies have observed that parents or other relatives actually drive young people to AA and NA meetings, it may also be beneficial to include these supports in twelve-step facilitation sessions, thereby bolstering the youth's participation (Kelly & Myers, 2007).

Special care has to be taken in treating adolescents for opioid use with opioid substitution therapy as with pregnant women. They cannot be viewed simply as 'little adults'. Further, there is evidence of a high rate of psychiatric disorders in adolescents that have an addiction to opioids. Those who seek

treatment for opiate use disorder tend to have greater impairment in their substance use, depressive symptoms, and injection drug use-related HIV-risk behaviors than adolescents who seek treatment for alcohol or cannabis use (Chalk, Alanis-Hirsch, Woodworth, Kemp, & McLellan, 2013).

Compared to substance use, only a small percentage of young people actually receive substance use treatment. Contributing to this treatment gap is the fact that adolescents who use/misuse substances tend not to perceive the need for treatment. Moreover, their parents frequently underestimate the extent of their use/misuse (Chambers et al., 2013). Youth ages 12 to 17 years are more likely to receive treatment for marijuana use than for alcohol use, unlike adults (NIDA, 2014a).

Young people do not receive the treatment they need for substance use disorders. Many youth simply feel they do not need help because they do not believe that they have a problem involving substance use (Chambers et al., 2013; NIDA, 2014a). The largest percentage of adolescents aged 12 to 17 years admitted to publicly funded substance use treatment facilities are referred from the juvenile justice system (NIDA, 2014a).

Teenagers in need of substance use treatment services additionally should be connected to wraparound services (SAMHSA, 2014a). The use of substances in adolescence affects the youth's

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school performance, physical health, family interactions, and relationships in general. Hence youth seeking substance use treatment services will further benefit from help that gets them back on track in school, improves their interactions with friends and family members, addresses their physical health needs, and generally improves their ability to get along with others.

Level of Care.

Prior to determining the appropriate evidence-based practice to use with adolescents in the treatment of their substance use/misuse, most providers will utilize the expert consensus-driven Patient Placement Criteria (PPC) developed by the American Society of Addiction Medicine (ASAM) to determine levels of treatment care. The levels of care options are as follow:

1. Early intervention services;
2. Outpatient treatment; services;
3. Intensive outpatient services;
4. Residential/inpatient treatment services; and
5. Medically managed intensive inpatient (Howlett et al., 2012).

Psychosocial Treatments.

Evidence-Based Approaches.

Evidence-based approaches to treatment for substance use in adolescents capture methods or interventions that have been scientifically tested and found to be effective. Among the evidence-based programs (EBPs) that have been found to be effective in reducing substance use/misuse among teenagers include:

- Adolescent Community Reinforcement Approach
- Matrix Program
- Motivational Enhancement Therapy (MET)
- Multidimensional Family Therapy (MDFT)
- Multisystemic Therapy (MST)
- Parenting with Love and Limits (PLL)
- Phoenix House Academy (1st opened in 1983)
- Relapse Prevention Therapy
- Residential Student Assistance Program (RSAP)
- Seeking Safety
- Seven Challenges
- Adolescent Portable Therapy
- Teen Intervene
- Trauma-Informed CBT
- Brief Strategic Family Therapy (BSFT)
- Cognitive Behavioral Therapy (CBT)
- Dialectical Behavior Therapy

- Family Behavior Therapy
- Family Empowerment Intervention (FEI)
- Family Support Network
- Functional Family Therapy (FFT) (Meyer et al., 2014).

Family-Based Approaches.

Research has shown that family-based therapies work well for adolescent substance use. Additionally, there are a handful of combination therapies that have shown promise with young people who use/misuse substances (Chambers et al., 2013; Howlett et al., 2012). These therapies take an indirect approach to the treatment of substance use by improving family functioning and a direct approach by affecting each system in which the youth functions such as school, family, and the type of activities the young person participates in outside of the normal school day (Chambers et al., 2013). Several more familiar approaches are described below.

Multisystemic therapy (MST) is an evidence-based, family-based therapy that has been shown to work well for adolescent substance use. The therapy decreases violent behaviors, criminal arrests, and the number of days in out-of-home placements in addition to decreasing the youth's substance use. MST is an intensive, individualized, home-based treatment program that focuses on the social network factors that contribute to antisocial behavior. In conjunction with drug court, it has been shown that MST may enhance substance use outcomes for marijuana and alcohol (Chambers et al., 2013).

Another successful, evidence-based, family-based therapy is ***multidimensional family therapy*** (MDFT). This approach targets four domains: 1) the young person alone and with family/peer group; 2) The parent/caregiver alone and within the family context; 3) family functioning; and 4) Interactions between family members and key social systems. MDFT has been shown to reduce substance use and improve family functioning and school performance in polydrug users as well as in alcohol-only or marijuana-only users. Moreover, MDFT is linked to reductions in substance use for up to one year following treatment for young people involved in the juvenile justice system and high-risk early initiators. There is further emerging evidence that MDFT may be particularly useful in treating individuals with high frequency of use and severity and persons with comorbidity (Chambers et al., 2013).

Brief Strategic Family Therapy (BSFT) has also been shown to have proven efficacy in adolescent substance use treatment. BSFT is further linked with improving family functioning, conduct problems and delinquency and promoting high levels of engagement of family members (Chambers et al., 2013).

A family-based approach involving both the adolescent and their families in sessions is the comprehensive ***Adolescent Community Reinforcement Approach*** (A-CRA). This approach

seeks to increase family, educational, vocational, and social reinforcers of the adolescent to encourage prosocial activities and support recovery. It is typically delivered in conjunction with **Assertive Continuing Care** (ACC), a home-based intervention that adds case management to A-CRA for the duration of the 12-14 week treatment. This combination helps to maintain the progress achieved during active treatment following discharge from outpatient or residential treatment (Howlett et al., 2012).

The Adolescent Community Reinforcement Approach (A-CRA) recognizes that recovery has to be fun as well as developmentally appropriate if it is to become a real possibility for young people. It focuses on skill building that teaches how to have fun without the use of alcohol or other substances (Meyers et al., 2014). A-CRA is designed for young people between the ages of 12 and 22 years. It is an outpatient, behavioral intervention for utilization after completion of a residential care program for substance use. The goal of the intervention is to encourage recovery and abstinence from substance use, as well as to enhance linkage to, and participation in, continuing care services (Child Trends, 2008).

The Tennessee Department of Mental Health and Substance Abuse Services (TDMHSAS) received a Treatment and Recovery for Youth (TRY) grant from the Substance Abuse and Mental Health Services Administration (SAMHSA) to improve substance use treatment and recovery services through August 2017. This project will service youth in Madison and Maury counties and employ A-CRA, along with Assertive Continuing Care (ACC), as the primary interventions (L. McCorkle, personal communication, February 21, 2014).

ACC is a continuing care intervention specifically designed for adolescents after a period of residential treatment. Adoption of a strong continuing care intervention is particularly relevant in our state because of our adoption of the use of ASAM placement criteria. ASAM requires that those who have the most severe problems be placed in residential treatment, outlining five levels of substance use treatment services for youth. These services include: 1) early intervention; 2) outpatient treatment; 3) intensive outpatient treatment; 4) medically-monitored inpatient treatment; and 5) medically managed intensive inpatient treatment. Thus, these adolescents are the most severely impaired and at greatest risk for relapse following discharge. Delivered primarily through home visits, ACC clinicians are assertive in their attempts to engage youth in participation of continuing care. A-CRA procedures are incorporated, including functional analyses of substance use and prosocial behaviors, encouragement of prosocial behaviors, and other relapse prevention skill training tools (Godley, Godley, Karvinen, Slown, & Wright, 2006).

Researchers evaluated the impact of ACC with an A-CRA component on adolescents in Central Illinois following their discharge from residential treatment. A control group received usual continuing care. Results indicated that adolescents in the ACC/A-CRA condition experienced significantly better adherence to continuing care criteria, significantly greater continuing care linkage and retention, and longer abstinence from marijuana than adolescents receiving usual care (Godley, Godley, Dennis, Funk, & Passetti, 2007).

Behavioral Approaches.

Behavioral therapies have also been identified as effective treatments, whether treatment is delivered in outpatient, inpatient, or residential settings. A few of the more prominent approaches are mentioned below.

Cognitive Behavioral Therapy (CBT) has been used successfully in adolescent substance use treatment. It is a manual-guided approach where the therapist assists the young person in acquiring cognitive skills, such as identifying/addressing distorted thought patterns. This strategy is combined with behavioral strategies, e.g., anger management, dealing with substance cravings, to address the substance use (Howlett et al., 2012).

Another efficacious strategy in adolescent substance use treatment is **contingency management** (CM). Based on the principle of operant conditioning, consequences are used to reduce substance use. The ultimate goal of CM is to weaken the influence of the reinforcement provided by the substance use. Positive reinforcement is typically delivered by the therapist but evidence is emerging that supports successful delivery of CM by parents as well as web-based delivery with adolescents (Howlett et al., 2012).

A successful combined treatment package for adolescent substance use treatment is **motivational enhancement therapy** (MET)/ **cognitive-behavioral therapy** (CBT). Initial sessions employ MET in an effort to elicit intrinsic motivation to change substance use/misuse by resolving the adolescent's ambivalence. The CBT component follows, focusing on helping the adolescent to become abstinent (Chambers et al., 2013). Based on the notion that thoughts cause behaviors and determine the way in which people perceive, interpret, and assign meaning to their environment, the CBT component encourages adolescents to examine the pros and cons of their use/use and to create goals that will help them achieve a healthier lifestyle (Winters, Botzet, & Fahnhors, 2011).

Twelve-Step Programs.

These are self-help programs such as Alcoholics Anonymous (AA), Narcotics Anonymous (NA), and Cocaine Anonymous (CA). They operate within the context of reciprocal support and have been employed successfully with adolescents. Organized around the basic tenets of AA, these programs are a commonly used strategy in outpatient and inpatient treatment programs and may be provided as stand-alone approaches. Statistics show that only a very small percentage (around two percent) of the AA membership in the United States and Canada is younger than 21 years of age (Winters et al., 2011).

Continuing Care.

Step-Down Opportunities.

The literature supports the benefits of step-down services for adolescents who have completed substance use treatment before they seek to resume their regular academic program (Meyers et al., 2014). As a result, some states now operate "recovery high schools" (also referenced as sober

schools) for students diagnosed with a substance use disorder (SUD). A good number of recovery high schools require treatment completion for admission while others allow students to receive treatment during their enrollment. Recovery high schools were designed to mitigate the factors that often lead to relapse for the adolescent with SUD. Thus, the schools target multiple life-health domains; provide cognitive behavior and problem solving skill training; focus on relapse prevention; encourage family involvement; increase prosocial leisure opportunities; offer the necessary intensity and duration of contact; are sensitive to the socioeconomic and cultural realities of the youth; and encourage adherence to a wide range of social services for additional support. Students in recovery schools tend to be White, with about half from two-parent homes, and have a broad and complex range of mental health issues, substance use patterns, traumatic experiences, criminal justice involvement, and educational backgrounds. Referral is often made by treatment providers. Participation in a mutual-support group like AA is generally a requirement as well (Moberg & Finch, 2008).

Enrollment in recovery high schools is similar to any other school, requiring transcripts and all the typical paperwork. However, staff are further interested in where the young person is in his/her recovery and how committed he or she is in becoming sober. In some recovery high schools, students are asked to take responsibility for themselves and their school as part of recovery, so they engage in activities like preparing their own lunch, cleaning up after themselves following lunch, and performing custodial duties such as emptying trash, cleaning classrooms and bathrooms. Classes are small and the curriculum is flexible, designed to assist the student with what he or she missed while using or in treatment. Some recovery high schools help students find jobs (Forester, 2011). Research shows that youth who attend a recovery school for at least three months following substance use treatment maintain their sobriety eight times longer, on average, than before attending such a school (Meyers et al., 2014). However, these schools struggle to receive and/or maintain adequate funding (Forester, 2011). Entities interested in this movement can start with the Association of Recovery Schools Web site located at <http://www.recoveryschools.org/>.

Other Treatment Approaches.

Addiction Medications.

A variety of medications have been approved by the Food and Drug Administration (FDA) to increase abstinence from certain substances. However, most of the FDA-approved medications cannot be used with young people in the treatment of substance use. **Only buprenorphine has been approved for use in youth 16 years of age and older.** The evidence of efficacy in youth is not yet available (Howlett, 2012; Meyer et al., 2014).

Considerations for Adolescents with Opioid Use Disorders (OUDs).

There is evidence that opioid use has increased dramatically among young people in recent years. However, treatments for adolescents using opioids should not simply consider them as “little adults”, but should instead focus on the fact that young people are a unique population with characteristic needs. This focus is particularly critical if considering medication-assisted treatments (MATs) for adolescents using opioids. Several factors must be taken into account in determining

proper medication dosages, including the young person's age, medical status, individual substance use history, and situational factors. Moreover, careful psychopharmacological management is required if the adolescent is also taking psychoactive medications for a co-occurring psychiatric disorder. If the duration of the adolescent's opioid use is short, withdrawal or opioid replacement detoxification with intensive counseling has been recommended as more appropriate (Chalk et al., 2013)

It has been recommended that substance use treatment programs adopt Early Detection and Intervention for the Prevention of Psychosis Program (EDIPPP)-type programs for their adolescent clients. EDIPPP trains the educational and medical community to recognize warning signs of psychosis and quickly refer adolescents for screening, early intervention, and treatment. Early results of these programs have demonstrated reduced rates of psychotic episodes and hospitalizations as well as improved attendance at school and job sites (Meyers et al., 2014).

Treatment Summary.

Lipsey, Tanner-Smith, & Wilson (2010) observed overall positive treatment effects in adolescents for all treatment models, but the best outcomes were associated with family therapies, CBT, and MET/CBT. Comprehensive reviews of treatments for adolescent substance use/misuse can be found in Howell et al. (2012), Lipsey et al. (2010), and Winters et al. (2011), for example.

Expert consensus procedure was used to identify essential elements of effective substance use treatment for adolescents in an article by Drug Strategies (2003). The following elements were identified:

1. Screening and comprehensive assessment of the young person and the family.
2. Comprehensive services which not only address the adolescent's substance use/misuse but any mental health, medical, familial, or educational issues as well.
3. Involvement of the family, especially parents/caregivers.
4. Offering of developmentally appropriate therapies and services to address the different capabilities and needs of the youth.
5. Strategies that engage and keep adolescents in treatment.
6. Qualified staff that have the appropriate knowledge and experience working with substance users who are young and their families.
7. Programs that address gender and cultural gender differences.
8. Programs that plan for care after the formal treatment program has been completed.

9. Programs that measure outcomes/program success.

A small number of studies (e.g., Brannigan, Schackman, Falco, & Millman, 2004, and Mark et al., 2008) has examined select programs and found very few that contained all elements. Thus, the extent to which community substance use treatment programs for adolescents include these core elements is not yet clear (Winters et al., 2011).

Barriers and Facilitators to Effective Residential Treatment: An “Adolescent” Perspective

Research says many of the adolescents that enter substance use treatment programs do not stay through completion. A small study by Gogel, Cavaleri, Gardin II, & Wisdom (2011) provided a glimpse of perceived treatment barriers and facilitators for adolescents based on results from semi-structured interviews. The findings are shown below:

Barriers

- Treatment program is comprised of mixed resident population. The residents have different addictions and different reasons for being in the treatment program.
- Their past experiences were very much on their minds, despite being in a new and different environment.
- Too much focus on program rules that interferes with treatment work.
- Time to work with staff was too brief and/or repeated staff turnover made it difficult to open up and connect.
- Staff's message to resident is 'I'm here to get a paycheck' (Gogel, Cavaleri, Gardin II, & Wisdom, 2011).

Facilitators

- Resident feels comfortable with staff because they “get” them or evoke “calm”.
- Having their parents/caregivers involved in the program (Gogel et al., 2011).

Only around 10 percent of adolescents who need treatment for a substance use disorder (SUD) actually receive treatment (NIDA, 2014a).

Recovery Support Services

Relapse is always a possibility for adolescents with a substance use disorder (SUD). However, relapse should not be handled punitively and it should not be used an opportunity to remind the young person that he/she failed. Rather relapse should become an opportunity to re-engage the youth in treatment or examine additional and/or different treatment options (NIDA, 2014a).

Recovery is a **PROCESS**. For adolescents, recovery will be strengthened by support from non-drug-using friends, the school, and family members (NIDA, 2014a). Social support is critical.

Special Topic

Underage Drinking.

Underage drinking contributes to a broad range of costly social and health problems, including interpersonal violence (e.g., assaults, rapes, homicides); motor vehicle crashes; alcohol and drug poisoning; unintentional injuries such as falls, drowning, and burns; suicide; brain impairment; alcohol dependence; risky sexual activity; and academic problems. Noticeable reductions have been seen, particularly among younger age groups, but there is still cause for concern. Young people continue to engage in binge drinking at levels that increase their risk of injury or death and there is an erosion of the traditional gap in binge drinking between underage females and males. The gap has nearly disappeared with the drinking practices of females converging with those of males (Report to Congress, 2013).

Alcohol continued to be the most widely used substance of use among young people in our country, with a higher proportion using alcohol than tobacco or other substances. The most common underage consumption pattern was binge drinking. Of course, this pattern places binge drinkers and those around them at substantially greater risk for negative consequences. Binge rates tend to increase rapidly with age. It should be noted that very young adolescents (i.e., ages 12 to 15) who binge drink reach binge-drinking blood alcohol concentrations (BACs) with fewer drinks than do older adolescents (Report to Congress, 2013).

Tracking beverage preferences has shown distilled spirits are becoming more popular among adolescents and challenging beer as the beverage most likely to be consumed by underage drinkers. This finding was especially relevant for youth that reported engaging in binge drinking (Report to Congress, 2013).

There appears to be racial and ethnic differences in youth drinking. White youth ages 12 to 20 years are more likely to report binge drinking and current alcohol use than any other racial or ethnic group. The lowest rates are reflected by Black and Asian youth. In contrast, data on prevalence of drinking before age 13 reflects higher rates for Black and Hispanic youth than for White youth. Readers are cautioned to view these racial and ethnic differences with caution but encouraged to consider race and ethnicity in planning underage drinking countermeasures in specific communities (Report to Congress, 2013).

Data indicate that youth tend to consume more drinks when in the company of two or more other people than when drinking with a single person or alone. Yet, drinking in the presence of others is most common setting for young drinkers. More than four fifths who had consumed alcohol within the past month reported doing so when at least two other individuals were present. Moreover, private residences appear to be the most common setting for alcohol consumption by young people. Most underage drinkers reported drinking either in their own home or someone else's. Other popular settings for underage drinking include a restaurant, bar, or club; at a park, on a beach, or in a parking lot; or in a car or other vehicle (Report to Congress, 2013).

Research has shown that early initiation of alcohol and/or other drugs is a critical indicator of future substance use. Therefore, delaying the onset of alcohol initiation can significantly enhance later health. Peak years of alcohol initiation appear to be between grades 7 and 11, but ten percent of nine and ten year olds have already started drinking. In fact, around 20 percent of underage drinkers begin consumption before they reach 13 years of age (Report to Congress, 2013).

A group of underage drinkers typically missing from research and alcohol use discussions are children under the age of 12 years. The three major ongoing Federally sponsored national surveys in the United States do not collect data on children in this age range. The National Survey on Drug Use and Health (NSDUH) includes children 12 years of age but none younger than 12 years. The yearly Monitoring for the Future (MTF) survey and the Youth Risk Behavior Survey (YRBS) that is administered every two years omits children age 12 and younger. However, a substantial number of children ages 12 and below have had some degree of exposure to alcohol. Thus, the alcohol burden to individuals of all ages should be known so longer-term consequences of early use can be addressed (Donovan, 2013).

A 2007 study by Donovan showed that alcohol use rates increase with age and double between grades 4 and 6. The largest jump in use rates occurs between grades 5 and 6. Boys were more likely to have used alcohol than girls across each grade level. African American children were almost as likely as White and Hispanic children to have used alcohol (Donovan, 2013).

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Young Adults

The life stage “young adults” (also referenced as ‘emerging adults’) typically includes young people at least 18 years of age through the early to mid-20’s. Some references include ages 18-24 years as the range for young adulthood (Bergman, Greene, Slaymaker, Hoepfner, & Kelly, 2014; Milam et al., 2013). There are references that show young adulthood as spanning the ages of approximately 18-26 years (IOM/NRC, 2015). The Substance Abuse and Mental Health Services Administration (SAMHSA) most commonly uses 18-25 years of age in defining young adults (SAMHSA/CBHSQ,

Young adults represent a large segment of the SUD treatment population, comprising the second largest proportion of treatment admissions (Bergman et al., 2014).

2014). Among distinctions for this age group include the highest rates of co-occurring substance use and psychiatric disorders. Young adults represent a large segment of the SUD treatment population, comprising the second largest proportion of treatment admissions (Bergman et al., 2014).

Nevertheless, young adulthood is both a significant as well as pivotal time of life. It is during this time that young men and women typically complete their education, start working, develop relationships, and pursue other endeavors that help set them on the path to a healthy and productive adult life. Unfortunately many young adults in our country are experiencing great difficulty accomplishing these transitions. The bewildering pace of change in modern life has also confounded the traditional pathways to marriage, parenting, and other hallmarks of independent adulthood. Conversations with today’s young adults are likely to evoke observations about the uncertainties and stresses they confront (FIFCFS, 2014; IOM/NRC, 2015).

Young adulthood is an age of exploration. Young adults move out of their parents’ houses and into dorms or other abodes with their peers. They form serious relationships, explore their own identities, and contemplate how they fit in the world. The roles of parents diminish and peer influences gain greater strength. Young adults are on their own for the first time and free to make their own decisions, including the decision about whether to use substances (NIAAA, 2006).

In 2014, the Substance Abuse and Mental Health Services Administration (SAMHSA) released a report showing how prevalent substance use was in the lives of many young adults ages 18 to 25 years. The data revealed that thousands of young adults use illicit substances for the first time every day. Included were 1,200 first uses of cocaine; 1,561 first uses of hallucinogens; 258 first uses of heroin; 566 first uses of inhalants; 2,470 first uses of marijuana; 174 first uses of methamphetamines; 1,754 first time nonmedical uses of prescription pain opioids; and 850 first uses of stimulants (SAMHSA/CBHSQ, 2014).

A number of factors contribute to substance use by young adults, with a wealth of research pinpointing factors contributing to their alcohol use. Gender plays a role, with young men more likely drinking in ways that are harmful than women. Native Americans and Whites tend to drink more than Asians and Blacks/African Americans; drinking rates for Hispanics tend to fall in the middle. The college environment in and of itself does not necessarily lead to more drinking by college students versus nonstudents. However, the college environment may provide more situations where drinking might be encouraged such as parties on the weekend, so college students may tend to drink in greater quantities than nonstudents. (Some research reports college students

dropping this practice before it becomes a long-term problem compared to nonstudents.) Employment may influence current drinking but discourage heavy drinking (i.e., drinking five or more drinks). Being in the military also tends to influence heavy drinking in young adults, along with peers. Getting married and/or becoming a parent tends to be related to lower alcohol use (NIAA, 2006).

Personality factors influence drinking behaviors too. Sensation-seeking, impulsivity, and risk taking tend to be linked to nonconformity and deviant behavior, both of which are predictors of heavy drinking and other related problems. Moreover, feeling invincible affects drinking behavior. They do not see themselves as vulnerable to negative consequences such as accidents or developing dependence on alcohol. Mood disorders may prompt increased alcohol use, as supported through a study by Cooper et al. The researchers found that drinking to cope with negative feelings was as good predictor of heavy drinking and drinking problems in young adults (NIAA, 2006).

Marijuana use has been on the rise among young adults. SAMHSA's Director of the Office of Applied Studies has acknowledged higher use rates in the 18-25-year-old age group. He further mentioned that this age group has not been on SAMHSA's radar and that efforts must be undertaken to intervene before they need treatment or go to jail (Medical News Today, 2011). The rate of current illicit drug use for 18-25 year olds continued to be driven by marijuana use in 2013 (SAMHSA/CBHSQ, 2014).

Prescription drug use rates for young adults showed a decline between 2009 and 2012, from 6.4 percent to 5.3 percent (Partnership for Drug-Free Kids, 2013).

Marijuana use has been on the rise among young adults, a group that has not been on SAMHSA's radar (Medical News Today, 2011).

Approximately 764,000 young adults received treatment in 2014. Of those, nearly 32 percent received treatment for the use of both alcohol and illicit drugs, 33 percent received treatment for illicit drug use but not alcohol, and 24 percent received treatment for alcohol use but not for use of illicit drugs (Han, Hedden, Lipari, Copello, & Kroutil, 2015).

Similar to older adults, young adults 18-25 years of age tend not to seek treatment for their SUD and those who do delay their treatment decision. A study of Florida young adults (18-23 years of age), e.g., found that the majority (68 percent) with a history of SUD reported never seeking help in the form of treatment. Of that group, 11 percent reported delays in seeking treatment of one to seven years. Inconsistent with previous studies, young adults with later SUD onset were the less likely to seek treatment. It was further determined that a comorbid post-traumatic stress disorder (PTSD) played a significant role in help-seeking behavior (Gayman, Cuddeback, & Morrissey, 2011). SAMHSA Administrator Pamela Hyde acknowledged that far too many young adults allow substance use to jeopardize their wellbeing health, and futures. She indicated that more must be done to ensure that effective prevention and treatment programs are available to assist young adults in making right choices (SAMHSA Press Announcement, 2014).

Prevention

Even though young adults are typically on their own and not around their parents often, parents still play a major protective role in drinking behavior (IOM/NRC, 2015; NIAAA, 2006). Research has

Even though young adults are typically on their own and not around their parents often, parents still play a major protective role in drinking behavior (IOM/NRC, 2015; NIAAA, 2006).

shown that the example set by parents with their own drinking affects their children's drinking throughout their lifespan. The young adult tends to model his or her behavior after the parent's patterns of consumption (NIAAA, 2006).

Establishing policies to reduce overall alcohol intake or rates of high-risk drinking has been identified as a positive prevention strategy for young adults that consume alcohol. They tend to be control policies that target either the drinking behavior of the population as a whole or young people under the legal drinking age of 21 years. Colleges, for example may establish alcohol-free campuses or residences, prohibit self-service of alcohol at campus events, ban marketing/sales of alcohol on campus, and prohibit beer kegs on campus. It should be noted that these policies may have less impact on students who reside off campus. Similar strategies can be used to prevent alcohol problems among military personnel (NIAAA, 2006).

Many young adults are college students and underage and harmful drinking remain significant issues on campuses across the country, despite the many collective efforts to address them. Therefore, the National Institute on Alcohol Abuse and Alcoholism (NIAAA, 2015) developed a *CollegeAIM* guide, along with a Web site, to assist higher education personnel in choosing wisely among the many potential interventions to address drinking issues of college students. *CollegeAIM* is designed to:

- Identify strategies most likely to lead to reductions in drinking and its harmful consequences;
- Help colleges compare their current strategies with other options;
- Locate new, research-based strategies for consideration; and
- Select a combination of approaches that will meet the unique needs of the students and the campuses.

CollegeAIM can be accessed from www.CollegeDrinkingPrevention.gov/CollegeAIM.

As with adolescents, physicians should pay particular attention to education, screening, and early intervention for young adults. Such action can prevent addiction and other health and social consequences. Among the very useful resources for medical personnel is "*Identifying and Responding to Substance Use among Adolescents and Young Adults: A Compendium of Resources for Medical Practice*". This document can be downloaded from <http://www.abam.net/wp-content/uploads/2015/07/ABAMF-Compendium-Final.pdf>.

Several other strategies have been employed to reduce the level of alcohol use among young adults. Raising the price of alcohol is one such strategy. Research has shown that higher prices may discourage drinkers from increasing the quantity and frequency of their alcohol use. Another

strategy targets reductions in traffic crashes associated with positive testing for alcohol. About half of the drivers ages 21-24 in car crashes met these criteria. Therefore, a number of states raised the minimum legal drinking age (MLDA) to 21 years from 18. Research findings tend to show less alcohol consumption after high school in states where the MLDA was raised to 21 years. Additionally, states can lower the legal limit for allowable blood alcohol content (BAC) of drivers. The standard BAC in this country is 0.08 for adult drivers, including young adults, but 0.02 for young people under the age of 21. In states that have lowered the BAC to 0.02 percent, there has been a 19 percent reduction in drinking driving and a 20 percent reduction in fatal traffic crashes (NIAAA, 2006).

Many of the aforementioned strategies can be used with young adults to reduce other substance use, especially cigarettes since they too are legal substances (NIAAA, 2006).

The NIAAA has sponsored several community trial prevention projects. Among the most well-known are The **Saving Lives** Project, the **Community Trials** Project, and the **Communities Mobilizing for Change** on Alcohol interventions. Each of these projects incorporates a comprehensive approach (NIAAA, 2006).

Six communities in Massachusetts were involved with the **Saving Lives** project. This project was designed to reduce alcohol-impaired driving and other related problems such as speeding. A task force developed specific community activities, including establishment of Students Against Drunk Driving (SADD) chapters, programs for college students, information about drinking and risks for retail alcohol outlets, telephone hotlines for reporting speeders, media campaigns, high-school peer-led education, drunk-driving and speeding awareness days, and police training. Over the five-year period of project, participating communities experienced more than a 40-percent reduction in alcohol-related fatal crashes and a 25-percent decrease in fatal car crashes relative to the rest of the state. The most pronounced effects were demonstrated for drivers between the ages of 15 and 25. Young adults in this age group experienced a 39-percent reduction in fatal crashes, compared to the rest of the state (Holder, 2004).

Designed to reduce alcohol-related harm, this experimental study was conducted over five years in California and South Carolina. The project incorporated five intervention components:

- Media and mobilization;
- Responsible beverage service;
- Sales to youth;
- Drinking/Driving; and
- Access.

Intervention communities experienced a 10-percent reduction in nighttime injury crashes and a six-percent reduction in crashes involving driver drinking. Assault injuries requiring hospitalization decreased by two percent (i.e., a significant drop) and similar injuries cared for in emergency

departments in the intervention communities declined 43 percent, compared to comparison communities (Holder, 2004).

The mobilization prevention project was aimed at reducing underage access to alcohol by changing local practices and policies. Fifteen communities in Wisconsin and Minnesota participated. Prevention interventions varied across communities. Results showed more awareness of the need to regulate alcohol sales to young people as well as an increase in checks of age identification during alcohol purchases. Drinking and drinking-related behaviors (i.e., attempting to purchase alcohol, providing alcohol to minors, and driving after drinking) declined, in particular, among 18-20 year olds. This finding further meant that seven percent fewer young adults reported drinking during a 30-day period and the number of drinking occasions declined (Holder, 2004).

Success of these three comprehensive interventions can be attributed, in part, to the fact that the interventions were adequately enforced. Moreover, the targets of the interventions were made aware of the policies and their enforcement (Holder, 2004).

The workplace has further become a target for substance use prevention in young adults. Existing workplace substance use prevention and early intervention programs primarily targeted older workers and thus did not address the new, younger, more diverse worker. As a result, SAMHSA began its Young Adults in the Workplace (YIW) initiative (Bray, Galvin, & Cluff, 2011).

Initially SAMHSA required YIW grantees to develop workplace programs using interventions shown to be effective either for adults in the workplace settings or for young adults in nonworkplace settings. Further the programs were to be modified for use with young adults in the workforce. Some of these grantees were then funded to implement the programs and participate in a cross-site evaluation. The program used in the YIW initiative drew from the Healthy WorkLife program, an interactive DVD-based health promotion and substance use prevention program and the Healthy Workplace programs, a series of workplace interventions recognized by NREPP as model workplace substance use prevention programs (Bray et al., 2011)

Treatment

It is recommended that different addiction treatment approaches be used with different populations rather than following a “one size fits all” approach. Young adults have different psychology and habits from other populations so putting them in the same treatment with older adults in addiction recovery, e.g., often will not result in the best outcomes. Furthermore, the type of treatment of choice for the young adult will depend, in large part, upon his or her particular situation. Addiction treatment for the young adult will take place in one of the following settings: inpatient, outpatient, or combination (Addiction Blog, n.d.).

It is recommended that different addiction treatment approaches be used with different populations rather than following a “one size fits all” approach (Addiction Blog, n.d.).

- ***Inpatient*** – The young adult will reside in the treatment facility for treatment, which can last from 30 days to several months. Considered the most effective type of treatment, it is also

the most inconvenient and most expensive of addiction treatments. Inpatient treatment is also promoted as being more intensive.

- **Outpatient** – Rather than participating in a lengthy stay at a facility, outpatient treatment affords the young adult the opportunity to receive treatment in a more flexible way. Some treatment may require participation in treatment sessions several times a week, with each session lasting no more than a couple of hours. Some treatment, on the other hand, may only require participation in treatment sessions once each week. While less intensive than inpatient treatment, outpatient treatment is typically more affordable.
- **Combination** – This treatment combines inpatient and outpatient treatment. Typically the young adult will spend several hours at the treatment facility each day but will not reside at the facility. Such an arrangement allows the young adult to attend to other responsibilities like work or school while receiving moderately intense treatment (Addiction Blog, n.d.).

As for other populations, substance use treatment for young adults starts with screening and assessment, followed by a treatment program and aftercare. Treatment stages are delineated below.

- **Stage 1: Screening/assessment**

An addiction specialist evaluates the young adult and his or her substance use. If it is determined that the young adult has a substance use problem, a treatment plan will be developed. This plan commonly includes the type and duration of treatment, along with goals that can be worked on during treatment.

- **Stage 2: Detox and withdrawal**

During detoxification, an individual's body tries to rid itself of remaining substances and attempts to function in a normal manner without them. Withdrawal symptoms typically occur during detox and they can be very uncomfortable, sometimes even dangerous depending on the substance of use. In most instances, young adults are encouraged to undergo detoxification in a detox facility, for their safety and comfort.

- **Stage 3: Psychosocial and/or pharmacological treatment**

There are several facets to addiction treatment, with individual therapy being primary. For young adults, though, special emphasis is also placed on group therapy. This population is a very social group. Other treatment components might include medications, family counseling, and self-help groups such as AA or NA.

- **Stage 4: Aftercare**

Treatment involves a lengthy process and should not end with the completion of the initial treatment program. Most often, the key to effective substance use treatment for young adults is the aftercare. In aftercare, the individual continues outpatient therapy or counseling. Sometimes aftercare may include a stay in a transitional living facility (i.e.,

halfway house). This step helps promote abstinence and self-sufficiency in the young adult. A good aftercare plan will further include supportive services through which individuals are matched to support groups, job placement, and social services (Addiction Blog, n.d.).

There are a variety of treatment approaches for young adults with SUDs. One effective evidence-based program/practice is the Brief Strengths-Based Case Management (SBCM) for Substance Abuse. Brief SBCM is a one-on-one social service intervention that is designed to reduce barriers and time to treatment entry while improving the overall functioning of the individual. It is time limited, delivered in a maximum of five sessions unlike its full-version counterpart. (The full version is structured over many months, sometimes years.) Brief SBCM differs from case management because of its use of a strengths perspective. The perspective defines how to implement the five functions of the intervention's case management component: assessment, planning, linkage, monitoring, and advocacy. Each session is flexible and provides an opportunity for the clinician to develop and carry out a personal, client-driven plan that enhances the person's overall functioning and/or addresses specific barriers that link with treatment (SAMHSA/NREPP, n.d.).

Brief SBCM has been used with a wide range of adults, including young adults 18-25 years of age. A randomized control trial was used with clients seeking publicly subsidized substance use treatment. Clients were provided brief SBCM in five 90-minute session, one 60-minute motivational interviewing (MI) counseling session, or usual care which consisted of a recommendation of treatment level and referral to a specific program. More clients in the brief SBCM group (55.0 percent) entered treatment within 90 days of intake than in the MI (44.7 percent) or usual care (38.7 percent) group (SAMHSA/NREPP, n.d.).

There continues to be growing evidence of the efficacy of brief substance use treatments on college campuses and military bases. However, not all young adults are in college or the military and, as a result, may not be as aware of brief treatments. Moreover, not all college students or young adults in the military have substance use problems for which brief interventions are the appropriate treatment. Further, numbers of young adults continue to face the challenge of finding a provider after finally acknowledging they need help. The young adult age group does not advocate for themselves very well (IOM/NRC, 2015).

Research has shown positive outcomes for young adults with COD when their specialty care has been integrated, residential SUD treatment (Bergman et al., 2014).

As previously mentioned, young adults have the highest rates of co-occurring substance use/psychiatric disorders (CODs). Research has shown positive outcomes for young adults with COD when their specialty care has been

integrated, residential SUD treatment. Such treatment programs incorporate integrated evidence-based psychiatric services. Their symptoms reduced substantially, on average, from clinical to nonclinical ranges, despite more severe substance use profiles at treatment intake. It is believed that these programs will be especially effective for young adult persons with COD who have never participated in SUD-specific treatment or are not responding well to conventional outpatient SUD services (Bergman et al., 2014).

Other Related Issues

Though the relationship between serious substance use and risk of unemployment is widely known, very few studies had prospectively examined this relationship among college students. Arria et al. (2013) conducted a longitudinal study to examine the association between substance use patterns during college and the likelihood of employment post college. Sociodemographic variables and personality characteristics were held constant. Participants entered college as traditional students and were assessed yearly for six years, regardless of whether they remained enrolled.

Results showed that persistent users of illicit substances (excluding marijuana) and/or nonmedical prescription medications were significantly more likely than nonusers to be unemployed rather than employed full-time post college.

Persistent users as well as infrequent users of marijuana were also more likely than nonusers to be unemployed rather than employed part-time. Hence, individuals with in-college substance use demonstrated poorer post-college employment outcomes, despite the fact they were college graduates (Arria et al., 2013).

Individuals with in-college substance use demonstrated poorer post-college employment outcomes, despite the fact they were college graduates (Arria et al., 2013).

National Survey on Drug Use and Health (NSDUH) survey estimates further reflected past-month use of illicit substances for eight percent of full-time workers and criteria for heavy drinking met by eight and a half percent for persons employed full-time. Estimates were 19.5 percent and 15.5 percent, respectively, for full-time workers in the 18-25 year-old age group (Arria et al., 2013).

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