CME

Substance Abuse Screening and Brief Intervention for Adolescents in Primary Care

Sarah Pitts, MD; and Lydia A. Shrier, MD, MPH

Abstract

Adolescent substance use is common and is associated with serious mental, physical, and social risks, warranting systematic screening in the primary care setting. It is important for clinicians to become familiar with Screening, Brief Intervention, and Referral to Treatment (SBIRT), including administration of validated screening tools to identify level of risk associated with substance use and application of appropriate brief interventions. Positive reinforcement and brief advice is indicated for those adolescents with no or minimal risk for a substance use disorder. Providing a brief intervention using motivational interviewing strategies with subsequent close clinical follow-up is warranted when an adolescent meets criteria for a mild to moderate substance use disorder. Referral to treatment is recommended in cases of severe substance use. Immediate action, including breaking confidentiality, may be necessary when an adolescent's behavior raises acute safety concerns. Making time to interview adolescents alone is essential. It is also important to review the limitations of confidentiality with patients and parents/guardians and offer them strategies to discuss sensitive issues with their adolescents. Available resources for adolescents, parents/guardians, and clinicians regarding the risks of adolescent substance use and evidence-based treatment options can be used to support implementation of SBIRT in adolescent primary care. **[*Pediatr Ann*. 2014;43(10):e248-e252.]**

Sarah Pitts, MD, is Attending Physician, Divisions of Adolescent/Young Adult Medicine and Endocrinology, Boston Children's Hospital; and Instructor of Pediatrics, Harvard Medical School. Lydia A. Shrier, MD, MPH, is Attending Physician, Division of Adolescent/Young Adult Medicine, Boston's Children's Hospital; and Associate Professor of Pediatrics, Harvard Medical School.

Address correspondence to: Sarah Pitts, MD, Division of Adolescent/Young Adult Medicine, Boston Children's Hospital, 300 Longwood Avenue, Boston, MA 02115; email: sarah.pitts@childrens.harvard.edu.

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The Surgeon General,[1] the National Institute on Alcohol Abuse and Alcoholism (NIAAA),[2] and the American Academy of Pediatrics[3] recommend routinely screening adolescents for substance use. Routine screening and interventions that prevent or delay onset or escalation of substance use can reduce, among other things, the adverse effects on adolescent neurodevelopment and the risks for associated unintentional injury, the number one cause of adolescent mortality.[4] Screening refers to the use of a tool to determine who is at risk for a disorder or behavior in a population of interest. With over half of adolescents reporting lifetime substance use per the 2013 Youth Risk Behavior Surveillance report, screening the general adolescent population is justified.[5] Multiple tools are available to screen adolescents for substance use.[6,7] However, health care providers report barriers to screening adolescents, including time constraints, confidentiality concerns, inadequate training, and lack of resources for responding to positive screens.[8] The majority of providers who report routine screening do not use validated screening tools,[8] which is of concern given that clinical impressions are not sensitive for identifying problems associated with substance use.[9]

An intervention to reduce use and/or high-risk behaviors is recommended whenever a screen indicates high risk of a substance use disorder. For teens with the most acute or serious substance use problems, the brief intervention is targeted at having them accept a referral to substance use disorder treatment. This approach, often referred to as Screening, Brief Intervention, and Referral to Treatment (SBIRT), is recommended as part of routine primary care for adolescents.[3] A newly validated screening tool, S2BI, developed to support SBIRT, is a specific and sensitive screen that uses a single frequency question regarding past-year use of tobacco, alcohol, and marijuana to identify adolescents at risk for substance use disorders[7] while also offering guidance for brief intervention and need for referral to treatment (**Table 1**).

The S2BI screen has a sensitivity of 90% and a specificity of 89% for identifying problematic substance use in the past year.[7] If an S2BI screen is positive for any past-year use of tobacco, alcohol, or marijuana, further questions are asked about the use of other substances, including misuse of prescription medication, illegal drugs, inhalants, and herbs or synthetic drugs. Using a tool to identify and further explore problems associated with substance use, such as the CRAFFT,[10] is the appropriate next step for an S2BI screen positive for monthly or more use of any substance.

Managing confidentiality is a consideration with every adolescent clinical interaction. Time alone with adolescent patients at most, if not all, encounters facilitates discussion of personal topics. The Society for Adolescent Health and Medicine has provided a rationale for confidential health care for adolescents.[11] Creating a safe environment and an opportunity for adolescents to share their confidential concerns, questions, and behaviors is essential to good care.

The following vignettes (using pseudonymns to protect patient identity) demonstrate SBIRT guided by the S2BI screen (**Table 1**).

Tim is a 14-year-old with mild intermittent asthma who presents for his annual health maintenance visit. As part of a routine psychosocial assessment, his provider reviews the clinic's confidentiality policy and screens Tim for mental health, substance use, safety, and sexual health concerns. Tim denies past-year use of tobacco, alcohol, or marijuana.

Although over 60% of high school students have tried alcohol in their lifetime, the majority have never tried marijuana or tobacco, and only a minority report ongoing recent (past year) or current (past 3 months) use of alcohol, marijuana, or tobacco.[5] In the 2013 Monitoring the Future survey of 8th, 10th, and 12th graders, past-year use of alcohol and marijuana across all grades was 42.8% and 25.8%, respectively.[12] A report of no past-year substance use provides an opportunity to give positive reinforcement. Using a strength-based approach to praise adolescents who choose not to use, providing evidence-based information to support their healthy decision, and reminding them that many others have made the same choice may validate their choice of abstinence. However, it is important to remember to keep the door open for future conversations about substance use. Some patients may feel uncomfortable sharing information about subsequent substance use behaviors if they fear that they will let down the provider who was so proud of them the year before.

In the previous scenario, the provider can commend Tim for the healthy decisions he has made. Personalizing the conversation to include a discussion about the inherent risks of tobacco and marijuana use given Tim's history of asthma may strengthen his resolve to remain abstinent. A routine health care visit provides an excellent opportunity to review that secondhand smoke is a significant health hazard, especially for patients with asthma, something that Tim may not have considered.

Finally, encouraging Tim's parents/guardians to discuss substance use and other adolescent health risks is recommended. Research supports family connectedness as the leading protective factor against youth involvement in alcohol and other drug use.[13] Open communication between parents/guardians and teens regarding sensitive topics is one of the best strategies for keeping adolescents from experimenting with and using alcohol and drugs.[13] The Office of Adolescent Health of the US Department of Health and Human Services of-

TABLE 1.

S2BI Screen Results, Intervention Strategies, and Sample Language

S2BI Screen: In the past year, how many times have you used….Tobacco? Alcohol? Marijuana?*		
Result/Interpretation	**Intervention**	**Sample Language**
No past year use/ "No Use"	Positive reinforcement	Avoiding tobacco, alcohol, and other drugs is one of the smartest things you can do for your health. It's terrific that you have made the decision not to use drugs.
Couple of times/ "No SUD"	Brief advice to quit	I recommend that you quit smoking marijuana for the sake of your health. Marijuana use makes it harder for you to learn at school—in fact, many kids find that their grades drop when they start using marijuana.
Monthly or more "Mild/Moderate SUD"	Assess/discuss problems; motivational interviewing and/or brief intervention; make plan	I recommend that you stop drinking alcohol for at least until you are older. A blackout means that you drank enough to poison your brain cells, at least temporarily. It sounds as if you have had some frightening experiences. How do you think you can protect yourself better in the future?"
Weekly or more "Severe SUD"	Assess/discuss problems; make a plan; refer	I recommend that you quit for the sake of your health, your functioning at school, and your relationship with your mother. I see that you are really thinking this through carefully. I would like you to speak with my colleague who can help you decide how you want to address your marijuana use. What do you think?

** Past-year abuse of prescription and illegal drugs, inhalants, and herbs or synthetic drugs, such as K2, should be assessed if adolescents respond in the affirmative to this initial question.*

S2BI = Screening to Brief Intervention; SUD = substance use disorder.

fers many resources for both clinicians and parents to guide their discussions of substance use with adolescents.[12]

Nicole is a previously healthy 16-year-old presenting to clinic for her sports physical to participate in cheerleading. She reports no medical or mental health concerns. She lives in the suburbs with an intact middle class family, gets A's and B's in school, and has good friends. After reviewing the clinic's policy on confidentiality, Nicole's provider asks her how often she has used tobacco, alcohol, and marijuana in the past year. She responds that she engages in monthly alcohol use and marijuana use once or twice in the past year. She has not used tobacco or other substances. Nicole answers yes to the CRAFFT Forget question; she reports that she had a blackout on one occasion after having five drinks. The experience scared her, and since then she has cut back to three drinks. She has never driven or accepted a ride from someone who had used alcohol or marijuana.

Normative teen behavior, problematic use, or both? What to do next? This is a common scenario encountered by many primary care clinicians because alcohol remains the most widely used substance by adolescents.[5,14] Although 2013 data from Monitoring the Future indicate the lowest levels for alcohol use in 8th, 10th, and 12th graders since 1991, more than one-half (52%) of 12th graders and 12% of 8th graders reported having been drunk at least once in their lifetime.[14] According to the 2013 Youth Risk Behavior Survey, 20.8% of high school students surveyed had had five or more drinks of alcohol on a single occasion at least once during the prior 30 days.[5] Although this is generally defined as a binge drink, the NIAAA notes that binge drinking definitions should be adjusted by youth age and sex (eg, three drinks is a binge for girls aged 9 to 17 years).[2] Although Nicole's behaviors may be common, they are dangerous given the potential for harm that regular alcohol consumption has on the developing adolescent brain and body.

So, what to do with a patient like Nicole? Her screen result suggests that she likely has a mild to moderate alcohol use disorder—meaning that she has started developing problems associated with her alcohol use—but with a monthly frequency of use she is relatively unlikely to have a severe alcohol use disorder, which is sometimes called addiction **(Table 2)**. A brief motivational intervention to encourage her to quit or reduce use, administered on the spot, is the recommended next step. Including Nicole's own concerns about having a blackout may be combined with brief advice affirming the dangers of this behavior and used as a focal point to direct the conversation toward a plan for behavioral change. It is encouraging that she had cut down on her use following her blackout, and that decision can be reinforced. Whatever Nicole elects to do next, re-

cording the specific plan in the medical record facilitates follow-up.

Motivational interviewing is a patient-centered counseling approach that builds on intrinsic motivation.[15,16] Through nonjudgmental questioning and thoughtful listening, the clinician collaborates with the patient to explore the patient's ambivalence about his/her behaviors and to identify and strengthen motivation to change consistent with his/her own values and concerns.[17] Motivational interviewing of varying lengths, in different settings, and performed by variably trained clinicians has been shown to be effective across a variety of substance use behaviors.[18] Although complete application of motivational interviewing is a skill developed over years of practice led by the guidance of experts in the field,[19] motivational interviewing strategies can be adapted to the clinical setting to enhance rapport with patients or build motivation for change in substance use behaviors.[15]

Commending Nicole for never driving or accepting a ride with an impaired driver and discussing the inherent risks of doing so is an important clinical intervention that can save lives. If possible, a follow-up visit with Nicole in a few weeks would provide the opportunity to reassess her use patterns and risk and to continue the conversation regarding reduction and cessation of alcohol consumption. Breaking confidentiality in this case may not be necessary, but making time to provide guidance to parents/guardians regarding how to talk with Nicole about substance use, monitoring her personal and online social interactions to make sure they are healthy, and together signing a Contract for Life could be life saving.[13] The Contract for Life is an online printable agreement between an adolescent and his/her parents that is designed to facilitate their communication about "potentially destructive decisions related to alcohol, other drugs, peer pressure, and behavior."[20]

TABLE 2.

DSM-5 Criteria for Substance Use Disorder

Criterion	Severity
Use in larger amounts or for longer periods of time than intended	Severity is designated according to the number of symptoms endorsed: 0-1: No diagnosis 2-3: Mild SUD 4-5: Moderate SUD 6 or more: Severe SUD
Unsuccessful efforts to cut down or quit	
Excessive time spent using the drug	
Intense desire/urge for drug (craving)	
Failure to fulfill major obligations	
Continued use despite social/interpersonal problems	
Activities/hobbies reduced given use	
Recurrent use in physically hazardous situations	
Recurrent use despite physical or psychological problem caused by or worsened by use	
Tolerance	
Withdrawal	

SUD, substance use disorder

Adapted from Diagnostic and Statistical Manual of Mental Disorders, *fifth edition.*[23]

James is a 17-year-old who presents with unrelenting nausea and vomiting for the past 2 days. He is afebrile and reports no travel, sick contacts, or eating out. He's surprised that you ask about substance use but reports smoking marijuana weekly or more and reports no use of alcohol, tobacco, or other substances. James answers yes to the CRAFFT Relax, Alone, Friends, and Trouble questions. In your follow-up discussion, he says that he has been smoking three to four times per day, generally alone, for the past 1 to 2 years. He uses marijuana to relax when he feels stressed and to help him sleep. His parents do not approve of his marijuana use and throw away his supply and paraphernalia whenever they find it. He admits that his girlfriend recently broke up with him because she felt that he smoked too much. He was suspended once at school for having marijuana in his locker. The suspension was particularly problematic because he has been struggling academically and may fail some of his classes, making it impossible for him to graduate. While discussing these problems, he says, "I've been thinking about quitting."

Marijuana is the most commonly used illicit drug among adolescents, and its use may increase as decriminalization and legalization of recreational marijuana use is adopted in more states.[14] Cannabis hyperemesis is a clinical phenomenon in which frequent marijuana use results in nausea, vomiting, abdominal pain, and occasionally diarrhea.[21] Symptoms are often relieved by hot showers or baths, and resolution only occurs with cessation of marijuana use, often several months after quitting. It is one of many known ill health effects of marijuana. Yet, per Monitoring the Future data, perceived risks associated with marijuana use are on the decline among adolescents.[14] Although it is hopeful that James is contemplating quitting, such a dramatic behavior change can be daunting and difficult to accomplish without support. James needs help.

A referral to substance abuse treatment is recommended for adolescents with severe substance use when there are acute

safety concerns (eg, suicidality, homicidality, mental status changes, or serious legal concerns) or when authority figures (eg, parent, guardian, or judge) mandate treatment. Unfortunately, fewer than 10% of adolescents with a substance use disorder receive any treatment, and the majority of treatment referrals are made through the justice system.[22] In this case, because James is already contemplating a behavior change on his own, outpatient counseling through an intensive outpatient or partial hospital program would be the appropriate level of care. Descriptions of the varying levels of care and evidence-based treatment strategies are provided in the 2014 edition of *Principles of Adolescent Substance Use Disorder Treatment: A Research-Based Guide* by the National Institute on Drug Abuse, available at http://www.drugabuse.gov/publications. In addition, the Substance Abuse and Mental Health Services Administration offers a national treatment referral line, available at 1-800-662-HELP or http://www.samhsa.gov/treatment/index.aspx.

Parental/guardian involvement improves outcomes and is useful to support an adolescent in accessing appropriate next steps in care. In this case, James' parents are already aware of his marijuana use, which reduces the burden of maintaining confidentiality. After a conversation, the clinician can ask James for permission to share recommendations with his parents so that they can support him in carrying out his plans. In most cases, parents are pleased that their child has decided to share information about serious drug use with a physician and are willing to enter a treatment program.

Adolescents who attend substance use disorder treatment programs benefit from continuing their relationship with their medical home. Obtaining a release of information to discuss treatment plans and progress and arranging follow-up visits to discuss treatment and aftercare can help to destigmatize substance use disorder treatment and may improve overall outcomes.

CONCLUSION

Systematic, confidential screening for adolescent substance use with a validated tool and additional questions, if needed, followed by an appropriate intervention is an important part of adolescent primary care. The S2BI model is simple to follow. Practical, effective brief interventions can be conducted in the primary care setting. Identifying local treatment resources can aid in referring high-risk adolescents to appropriate care.

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