IN BRIEF

Adolescent Alcohol Use and Alcohol Use Disorders

Rachel H. Alinsky, MD, MPH,* Jennifer Hipp, DO, MPH†

*Substance Use Intervention & Treatment Program, University Health Center, University of Maryland College Park, College Park, MD
†University of Florida College of Medicine–Jacksonville, Jacksonville, FL

OVERVIEW AND EPIDEMIOLOGY

For the neurodevelopmentally vulnerable adolescent brain, any amount of alcohol use has risks and consequences and may lead to serious harm. Although overall rates of alcohol consumption among youth have declined in the past decade, alcohol remains the most frequently consumed substance by this age group, despite the legal drinking age in the United States being 21 years. The 2019 Youth Risk Behavior Survey revealed that in a 30-day period, 29% of high school students drank alcohol, and 14% reported that they binge drank (defined as ≥4 alcohol beverages at a time for females, ≥5 for males). Another study found that 28% of students have tried alcohol by eighth grade, and 68.2% have tried it by twelfth grade.

Any alcohol use by adolescents results in some amount of risk, and alcohol results in an annual 3,500 deaths among youth younger than 21 years. Alcohol is the primary contributor to the leading cause of adolescent death: motor vehicle crashes. Seventeen percent of high schoolers report that in the past 30 days they rode in a car with a driver who had consumed alcohol, and 5% of high school drivers report that in the past 30 days they drove after drinking alcohol. Alcohol use also increases the risk of physical and sexual violence, suicide, homicide, and major physical, mental, academic, and social problems.

PREVENTION

Pediatricians play a crucial role in the prevention of alcohol initiation as well as associated harms. This begins with an understanding of what is happening in the home, as there are both genetic and environmental risk factors for adolescent alcohol use. Taking a thorough yet sensitive family history will allow for the identification of family members with alcohol use disorder (AUD) or other substance use disorders (SUDs), an important risk factor for the development of AUD in youth. In Addition, parenting styles in early adolescence have major effects on the development of AUD. Compared with a permissive approach to alcohol (ie, providing alcohol to or allowing alcohol consumption in the home by the teenager), having alcohol-specific household rules and closely monitoring youth can delay the onset of alcohol initiation and reduce the risk of alcohol-related harm later in life. Delaying the onset of alcohol initiation is an important prevention strategy as the age at first use is inversely correlated with lifetime risk of developing AUD. Parental monitoring can mitigate some of the effects of peers, who play a significant role in the risk of early-onset adolescent drinking. Having friends who use alcohol is one of the best predictors of an adolescent's

AUTHOR DISCLOSURE: Drs Alinsky and Hipp have disclosed no financial relationships relevant to this article. This commentary does not contain a discussion of an unapproved/investigative use of a commercial product/device.

Substance Use Screening, Brief Intervention, and Referral to Treatment. Levy SJL, Williams JF; Committee on Substance Use and Prevention. *Pediatrics*. 2016;138(1):e20161211

Alcohol Use by Youth. Quigley J; Committee on Substance Use and Prevention. *Pediatrics*. 2019;144(1):e20191356

Evidence-Based Treatment of Young Adults With Substance Use Disorders. Hadland SE, Yule AM, Levy SJ, Hallett E, Silverstein M, Bagley SM. *Pediatrics*. 2021;147(suppl 2):S204–S214

Alcohol and Public Health: Underage Drinking. Centers for Disease Control and Prevention. October 26, 2022. Available at: https://www.cdc.gov/alcohol/fact-sheets/underage-drinking.htm

Downloaded from http://publications.aap.org/pediatricsinreview/article-pdf/45/4/244/1607128/pedsinreview.2022005896.pdf
by Kelcy Mcintyre

own alcohol use, as most adolescents drink in social situations. Pediatricians can reinforce the importance of abstinence from alcohol to youth and can encourage caregivers to set clear boundaries, monitor their children, and get to know their children's friends.

IDENTIFYING THOSE AT RISK: SCREENING

The American Academy of Pediatrics recommends screening all adolescents for alcohol and other substance use starting at age 12 years. It is crucial that pediatricians establish a safe space for adolescents to privately disclose substance use and other potentially risky behaviors, thus an up-front discussion about confidentiality is warranted with both adolescents and their caregivers. Adolescents' right to privacy regarding a variety of issues, including reproductive health and substance use, is protected by law, although the specifics vary by state. Pediatricians do have an obligation to disclose potentially life-threatening behaviors to caregivers.

Annual screening for alcohol and other substance use can occur as part of the adolescent social history, often framed within the "HEADSS" examination (home, education/employment, activities, drugs, sex, suicidality/safety). This screening can be accomplished by following the "SBIRT" method of screening, brief intervention, and referral to treatment, which uses validated screening tools coupled with algorithms of how to approach potentially problematic substance use. SBIRT tools allow for rapid identification of adolescents with problematic substance use in many settings, including primary care and emergency departments. There are many evidence-based validated screeners that pediatricians can use, with a common screening approach being the combination of the S2BI (Screening to Brief Intervention: https://www.drugabuse.gov/ast/s2bi/#/) followed by the CRAFFT (Car, Relax, Alone, Friends/Family, Forget, Trouble: http://crafft.org/get-the-crafft/). The S2BI screens for frequency of use of alcohol and other substances, with excellent sensitivity and specificity for predicting moderate to severe AUD. For positive S2BI screens, the CRAFFT questions follow, which allow providers to quickly assess for problems associated with alcohol or other substance use, again with high accuracy in identifying youth with a high probability of having an SUD.

Other validated screeners include BSTAD (Brief Screening for Tobacco, Alcohol, and Other Drugs: https://nida.nih.gov/bstad/), AUDIT (Alcohol Use Disorders Identification Test: https://www.who.int/publications/i/item/audit-the-alcohol-use-disorders-identification-test-guidelines-for-use-in-primary-health-care), the ASSIST (Alcohol, Smoking, and Substance Involvement Screening Test: https://www.who.int/publications/i/item/9789241599938-2), and the National Institute on Alcohol Abuse and Alcoholism screen (https://www.niaaa.nih.gov/alcohols-effects-health/professional-education-materials/alcohol-screening-and-brief-intervention-youth-practitioners-guide).

DIAGNOSIS AND TREATMENT

The next step for all patients after screening is a brief intervention (BI) targeted to the severity of the alcohol use that is reported. Algorithms for how to deliver this BI based on the level of risk are included, along with most of the previously mentioned screening tools. This BI can range from encouragement of continued abstinence, brief advice for those reporting use but not classified as likely to have an AUD, and motivational interventions for those with more significant use. These can focus on reducing high-risk behaviors such as binge-drinking, as well as enhance engagement in care for treatment of an AUD.

For youth with a high probability of having an AUD identified on screening, pediatricians can use the *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition* diagnostic criteria for formal diagnosis. An AUD is defined as "[a] problematic pattern of alcohol use leading to clinically significant impairment or distress" as evidenced by at least 2 of 11 diagnostic criteria over the course of 1 year. These criteria fit into 4 categories: impaired control (using more/longer than intended; desire or unsuccessful attempts to cut down/quit; excessive time spent obtaining/using, recovering; and cravings), social impairment (failure to fulfill work/school/home responsibilities; use causing/exacerbating interpersonal problems; giving up/reducing social/work/recreational activities due to use), risky use (recurrent use in physically hazardous situations; use despite physical/psychological problems), and pharmacologic (tolerance, withdrawal). AUD is classified as mild (2–3 symptoms), moderate (4–5 symptoms), or severe (≥6 symptoms).

Adolescents who screen positive for alcohol use but do not meet the criteria for an AUD still benefit from BIs as described previously herein and regular follow-up with their pediatrician. Youth diagnosed as having AUD should undergo further evaluation for potential comorbid other SUDs or mental health disorders. Depending on the pediatrician's level of comfort treating youth with AUD, some youth with more severe AUD will need referral to specific SUD treatment; local addiction resources can be identified at the FindTreatment.gov website (https://findtreatment.samhsa.gov), and pediatricians can consider referrals to adolescent medicine specialists. Youth with physiologic dependence who are experiencing withdrawal will need inpatient

Downloaded from http://publications.aap.org/pediatricsinreview/article-pdf/45/4/244/1607128/pedsinreview.2022005896.pdf
by Kelcy Mcintyre

withdrawal management before progressing to residential or outpatient settings. Other youth may be managed in residential or outpatient settings, receiving a combination of medication and behavioral therapies. Medications approved for the treatment of AUD include naltrexone, acamprosate, and disulfiram; all are approved for use in individuals 18 years and older, although they may be used off-label. The most commonly used medication is naltrexone, an opioid antagonist that reduces cravings and thus decreases overall alcohol use and binge drinking; it can be taken in tablet form or as a once-monthly injectable. Behavioral therapies include both individual and family-based interventions, including motivational enhancement therapy, cognitive behavioral therapy, and the Adolescent Community Reinforcement Approach. All youth referred for treatment should continue to be followed by their pediatrician regularly for check-ins and to ensure continued engagement in care.

CONCLUSION

Pediatricians play an integral role in the prevention, identification, and treatment of alcohol use and AUD in adolescents. It is crucial that pediatricians become comfortable with screening for and addressing alcohol use to ensure the optimal health of all adolescents.

Comments: Adolescent alcohol use and AUDs is an incredibly important topic in which pediatricians provide a vital role to their patients. The authors provide clear direction and review why this is especially important for adolescent patients: highlighting the ease with which alcohol can be obtained and may be present in their patients' homes; the importance of peer groups and social pressures to use alcohol at early ages, when decision making and maturity are not optimal; and differences in family genetic and environmental factors. Encouraging parents to have deliberate discussions on this topic, as silence indicates approval, and providing forums for parents and their adolescents to discuss this at primary care visits are important to do. A mentor of mine taught me decades ago that alcohol use is especially problematic during adolescence, which is a time of seeking independence and fitting in with one's peer groups. Seeking their acceptance can make individuals particularly vulnerable. As part of a faculty development program on addressing alcohol and substance use in adolescence, we went to both Alcoholics Anonymous and Narcotics Anonymous meetings and had the amazing opportunity to interview participants. It was a career-altering experience to hear their stories and made me realize that any of us could be at risk for AUDs. Partnering with adolescents and their families and gaining the trust of adolescents are important strategies to enhance the health of our adolescent patients.

Janet Serwint, MD
Associate Editor, In Brief

Downloaded from http://publications.aap.org/pediatricsinreview/article-pdf/45/4/244/1607128/pedsinreview.2022005896.pdf
by Kelcy Mcintyre