

Screening for Young Adults for Illicit Drug Use: A Good Idea Although Evidence Is Lacking

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In the latest review, the US Preventive Services Task Force (USPSTF) concluded that the evidence is “insufficient to assess the balance and benefits and harms of screening for illicit drug use in adolescents” and of “primary care-based behavioral counseling interventions to prevent or reduce illicit drug use” in adolescents and young adults (defined as ages 12–17 and 18–25, respectively).^{1–3} In these statements, illicit drugs are substances that are illegal drugs or medications used non-medically but do not include alcohol or nicotine. These recommendations were based on 2 new evidence reviews.^{2,3} The USPSTF had previously concluded the evidence was insufficient for screening and brief intervention for unhealthy alcohol use among adolescents.^{4,5} These statements

notwithstanding, the American Academy of Pediatrics (AAP) 2016 policy statement on substance use screening and brief intervention recommends that pediatricians “increase their capacity in substance use detection, assessment, and intervention; and become familiar with adolescent” screening, intervention, and referral practices and “their potential to be incorporated into universal screening and comprehensive care.”⁶ The AAP also advocates for brief intervention research and for insurers to pay for screening and brief intervention. More importantly, the AAP, in its recommendations for preventive pediatric health care, recommends “tobacco, alcohol or other drug use assessment...with appropriate action to follow, if positive” for adolescents.⁶

Herein we report how the USPSTF has summarized the evidence in the recent reviews. The evidence that screening tools are accurate is modest but present.^{2,5} Few studies of each tool exist, and few tools have been studied for their ability to detect the full spectrum, from any use to disorder. Nonetheless, brief screening questionnaires appear to detect alcohol and drug use or risk with $\geq 70\%$ sensitivity in adolescents. Examples of valid tools for adolescents include Car, Relax, Alone, Forget, Family or Friends, Trouble (CRAFT); the Brief Screener for Tobacco, Alcohol, and Other Drugs (BSTAD); and Screening to Brief Intervention (S2BI); and for alcohol, tools include the National Institute on Alcohol Abuse and Alcoholism (NIAAA)

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Youth Screen and the Alcohol Use Disorders Identification Test–Consumption (AUDIT-C). The AUDIT-C; Tobacco, Alcohol, Prescription Medication and Other Substances (TAPS); and the Alcohol, Smoking, and Substance Involvement Screening Test (ASSIST) have been validated in young adults. Because the natural history over the course of adolescence is for the frequency, intensity, and number of substances used to increase, screening tools aim to distinguish between nonuse and any use, even for alcohol, making the goals of screening unique for this age group.

The evidence for brief intervention to reduce drug use among adolescents and young adults identified by screening is lacking, as is the evidence that interventions can prevent substance use initiation.^{2,3} In three trials, brief interventions for drug use among adolescents identified by screening were assessed, with no differences found in drug use, health, or social or legal consequences. The 27 trials in adults (including young adults) yielded similar null results. Only one trial, with a null result, tested the effect of brief intervention on adolescent alcohol use. At least 14 studies have tested the efficacy of brief intervention for reducing self-reported drinking among young adults identified by screening; effect sizes are even larger than they are for adults.⁵ These interventions have not reduced health consequences of alcohol use.

The evidence that primary care-based interventions can reduce initiation of drug use is also limited.³ In 28 studies, including 3 prevention trials in pregnant American Indian youth, approximately half reported no better outcomes in the intervention groups, and 2 trials reported worse outcomes (more drug use) in the intervention groups. No significant differences existed in pooled analyses, although a subgroup of 4 trials did find a favorable effect of computerized interventions on misuse of prescription medications.

Evidence suggests that interventions, often specialized treatments, are efficacious in young adults who seek treatment.⁷ This observation is the rationale used by the USPSTF to justify a recommendation for screening in adults, including young adults, although these effects were limited to cannabis use and to patients seeking drug disorder treatment. Medications to treat addiction have efficacy in adults, including young adults, with fewer studies among adolescents.

Thus, we have (1) screening tools that identify unhealthy alcohol and other drug use among adolescents and young adults, (2) brief interventions that reduce self-reported alcohol use among young adults with unhealthy alcohol use identified by screening, and (3) addiction treatments with efficacy for young adults who seek it. The missing evidence includes the following: (1) enhanced accuracy of screening tests among adolescents, (2) efficacy of brief counseling interventions for alcohol and other drugs among adolescents and for drugs among young adults, and (3) efficacy of primary care-based interventions to prevent substance use initiation.

Risks and challenges also must be considered, with attention to confidentiality and risks of disclosure. Counseling interventions must be implemented with fidelity so that they do not have the opposite of the intended effects. People identified as using substances are often stigmatized, and one consequence is that they may receive poor-quality health care. One of the worst examples is the incarceration of pregnant women for using substances in some states.

Despite these challenges and substantial research needs, there may be more reason to address substance use in clinical practice with adolescents and young adults than with adults. First, youth have fewer long-standing patterns of behavior than adults. Second, the most

common substances used are alcohol, tobacco (now nicotine vaping), and cannabis. Use of these substances is more likely to be responsive to brief preventive interventions than the use of heroin or cocaine. These interventions need to be developmentally appropriate because interventions designed for adults may not apply to youth (eg, attending to peer influences and current downsides rather than risks for future consequences). Third, youth using substances identified by screening are less likely than adults to have long-standing moderate to severe substance use disorders. Other reasons to screen include the identification necessary to diagnose many symptoms or signs or before prescribing any medication, particularly psychoactive or potentially addictive medications.

Furthermore, youth is the time to intervene. Use of substances greatly increases the risk for development of substance use disorders in adulthood, and the majority of people who will develop a substance use disorder do so before age 25, which, in part, reflects effects on the developing brain. Drug and alcohol use are the main preventable risks for the most common causes of death among adolescents and young adults (injury, motor vehicle crashes, suicide, and homicide).

The evidence is robust that brief intervention for adults has no efficacy for screen-identified drug use.⁴ For adolescents, we lack studies to determine if there is efficacy for brief intervention to reduce unhealthy substance use. Although the USPSTF review of the science is sound, and the conclusion that there is not enough study of screening and intervention among adolescents is correct, it may be that to advance a productive scientific agenda, the practices need to be disseminated to better study both effectiveness and implementation. Pragmatic and big data studies in systems in which screening is implemented can

supplement and inform randomized efficacy studies.

We are optimistic that clinical prevention of substance use in youth has promise even if it will not likely lead to immediate reductions in substance use or disorder or end the opioid overdose death epidemic in the short-term. Screening yields clinically useful information and can be the start of future behavior change. It also lets youth know that their physician considers it a health issue and is available for questions. We urgently need research on the most effective ways to implement screening and intervention for youth with alcohol and other drug use.

ABBREVIATIONS

AAP: American Academy of Pediatrics
USPSTF: US Preventive Services Task Force

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