Brief Interventions for Alcohol Use: Where, When, and How?

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More than one-third of US high school seniors report past-month alcohol consumption,¹ and alcohol contributes to the top 3 causes of death among youth: unintentional injury (most of which are motor vehicle accidents), homicide, and suicide.² Intervening early in adolescent substance use is critical because it can improve the life course trajectory of addiction and its harms.³ Because only 1 in 10 adolescents who need treatment of an alcohol use problem actually receive it,⁴ waiting for youth to seek help from a provider is not an effective strategy. To detect alcohol use and intervene early, major organizations,⁵⁻⁷ including the American Academy of Pediatrics,³ recommend routine alcohol screening, brief intervention (BI), and referral to treatment (SBIRT) for adolescents and young adults.

Interpreting the evidence base for SBIRT is complex. Study designs can vary by substance (alcohol, drugs, or both), outcome (reduction in consumption, consequences of use, or both), setting (emergency department [ED], primary care, or school), sample (adolescents, young adults, or older adults), modality of the BI (given by a therapist or by a computer or mobile device), content of the BI (youth-friendly or otherwise), and timing of outcome measurement (months or even years later).⁸⁻¹¹ Even once studies have shown efficacy, that is, improvement in outcomes under ideal study conditions, it is then a separate question as to whether study findings show effectiveness when implemented under real-world conditions.^{12,13}

In this issue of *Pediatrics*, Cunningham and colleagues report promising

findings from a randomized controlled trial of alcohol screening and BI for youth ages 14 to 20 years in the ED setting. Critically, the authors compared 2 types of BI, therapist-delivered versus computerized, with a control condition (referral to mental health and substance use services).

The authors' findings are modest but encouraging. At 1 year, the therapist and computerized BIs had similar efficacy, reducing the odds of adverse alcohol consequences by 13% and 14%, respectively. (Alcohol consequences were measured by using a standardized cutoff of the Rutgers Alcohol Problem Index,¹⁴ which examines alcohol dependence, loss of control, and disruption of normal social functions, such as attending school or work.)

Critically, no differences were found in total alcohol consumption with either the therapist or computerized BI, a finding consistent with adult studies of BI in the ED setting.¹¹ The authors did, however, find benefits for other risk behaviors. For example, both BIs reduced the odds of misusing prescription medications.

What do we take away from these findings? Perhaps most importantly, computerized BI may be comparable to BI delivered by a therapist.¹⁵ Because many high-risk drinkers present to the ED at night, computerized BI is a desirable option because it delivers evidence-supported care without relying on therapists outside usual work hours. Computerized BI also promises fidelity across different settings and providers, ensuring that

all youth receive the same intervention. Indeed, practice variability among therapists is a reason why efficacy under ideal study conditions does not always translate into effectiveness in the real world.^{12,13} Still, relying on computers or mobile devices introduces new potential drawbacks, including technological difficulties or device failure; loss or damage of the technology; costs of purchasing, maintaining, and replacing technology; and acceptability of and familiarity with technology among providers.¹⁶

The other question worth considering is whether the ED is the best location for SBIRT. SBIRT in the ED is timely, because it offers on-the-spot intervention for youth who present for alcohol-related harm, arguably a “teachable moment.” On the other hand, brief psychotherapies require a sober, clear-thinking participant. Providing SBIRT in the primary care office offers an opportunity to prevent alcohol-related ED visits and intervene before an adolescent’s alcohol use escalates. Other advantages include the

familiar medical home setting; confidential, patient-centered care; longitudinal patient-provider relationships; same-site follow-up visits; and coordinated interdisciplinary care.¹⁷

Among adults, primary care SBIRT reduces alcohol consumption,⁹ unlike ED SBIRT.¹¹ However, primary care SBIRT for adolescents has received little study.⁸ One recent trial showed that computerized screening and brief pediatrician advice in primary care led adolescent drinkers to cease drinking in the short-term and also prevented initiation among nondrinkers.¹⁸ Putting these findings together with those of Cunningham et al suggests that primary care is an opportune setting for SBIRT to prevent drinking initiation, reduce alcohol consumption, and promote cessation; providing SBIRT in the ED, conversely, offers a critical opportunity for intervening with the high-risk adolescent and reduces drinking-related harm. Further research should ascertain how best to link SBIRT services from the ED to primary care.

So which venue, ED or primary care, is best for SBIRT? Given the high cost of alcohol-related tragedies throughout the life course compared with the low cost of SBIRT, it is a worthwhile intervention in both settings.¹⁹ Although further studies are inevitably needed, the evidence base supporting using technology for SBIRT is growing. Youth are comfortable with using computers and mobile devices for SBIRT, and such technologies offer a convenient, cost-effective alternative to traditional psychotherapies.¹⁶ The challenge will be to develop and test computerized BIs that invoke the power of the patient-provider relationship, but even now, they address a critical gap in linking alcohol-affected youth to the help they need.

ABBREVIATIONS

BI: brief intervention
ED: emergency department
SBIRT: screening, brief intervention, and referral to treatment

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