The Evidence for SBIRT in Adolescents

With this issue of the *Journal of Adolescent Health*, we bring you a supplement focused exclusively on building the evidence base for Screening, Brief Interventions and Referral for Treatment (SBIRT) for adolescents. The supplement opens with an editorial by Dr. Scott Hadland, the Guest Editor, providing a framework by highlighting that substance use disorders (SUDs) usually begin during adolescence and are the leading causes of premature mortality and health problems throughout the world [1]. Given that the U.S. Preventive Services Task Force continues only to recommend screening for youth 18 years of age and older, Hadland emphasizes that the supplement’s two commentaries (2,3), eight original articles (4–11), and one narrative review (12) helps build the critical evidence that is necessary for us to develop useable guidelines to identify young people with SUDs before their 18th birthday and initiate brief interventions.

The first commentary, by Eggleston [2], highlights the role that the Conrad N. Hilton Foundation played in supporting a large number of grantees over the past decade to develop innovative SBIRT programs throughout the U.S., nine of which are featured in this supplement [3–11].

In the second commentary, by Levy and Weitzman [3], the authors outline a bold research agenda for SBIRT in adolescents highlighting the need to build the evidence for SBIRT using “real world settings” that allow for local innovation that builds on the needs of the community and incorporates screening for co-occurring mental health disorders.

The first original article [4], by Hunt et al. of the Abt Associates consulting firm, provides an overview of the accomplishments of the Conrad N. Hilton’s investment in providing SBIRT implementation and outcomes of 1,266 grantee sites. The reach was broad and included young people from primary care settings, school-based clinics, community-based clinical services and juvenile justice programs. The implementation and needs of young people varied by the site, with substance use rates ranging from a high of 5% in primary and school-based settings and up to 92% in juvenile justice programs. The authors evaluate the programs identified many challenges to implementation including confidentiality, local policies in school-based settings, poor reimbursement in state Medicaid and private insurance programs, lack of treatment programs for referral, and other mental health concerns.

In the largest primary care setting included in this supplement, Sterling et al. [5] describes the 7-year follow up of a randomized clinical trial with over 1,800 adolescents (12–18) attending a single site at Kaiser Permanente Northern California. Young people were randomized to one of three conditions: (1) SBIRT delivered by a pediatrician; (2) SBIRT delivered by a pediatrician with referral to behavioral clinician for brief intervention and further management; and (3) usual care in which pediatricians with no training in SBIRT screened adolescents. With the findings of an analysis of the trial’s earlier follow-up data demonstrating that any intervention was better than usual source of care, the authors combined the two interventions in their final analysis. Outcomes were obtained from the medical record and from post-treatment, and they provide good news: In SBIRT intervention groups, the odds were significantly lower of a diagnosis of an alcohol use disorder, and of any SUD (other than alcohol); cannabis and nicotine use disorders were also reported at reduced rates. In addition, the utilization of primary care psychiatry and addiction medicine was lower in the intervention groups. This study makes a strong case for taking this intervention to other primary care clinical systems for adolescents.

In the next paper, by Weitzman and her colleagues [6], a psychoeducational intervention draws on some of the principles of SBIRT by using an intervention clinical randomized trial entitled, “Take Good Care.” This program focused on young people with chronic medical conditions receiving their care at subspecialty clinics of Boston Children’s Hospital and provided education relevant to the adolescent’s specific medical condition. At the 6-month follow up, perceptions of the risk of alcohol use were significantly lower among adolescents receiving the intervention. In addition, the number of days of past 3-month drinking was significantly lower among girls than boys. Drinking rates in the overall sample were low, with less than one in four participants reporting past year use at baseline. The intervention represents an important approach for young people with chronic conditions that needs further trials with larger samples of adolescents. Another approach that might achieve better outcomes would be to focus on one clinical condition with a larger sample size.

Following this, Mitchell and colleagues [7] report on a stepped-wedge cluster-randomized trial of SBIRT across two rural federally qualified health care centers (FQHCs) in New Mexico and Tennessee. Clinicians were cluster-randomized in groups of three or four to either the intervention or the usual-care arm. The SBIRT training was provided through six video teleconference sessions, and there was no formal training for those in the usual care team. Intervention-arm clinicians delivered one of three messages depending on past year of

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adolescent substance use: With no use, they had an abbreviated brief intervention; with use once or twice/year, they had a more extensive intervention; and with monthly or more use of substances, they received a more extensive intervention. At the 3-month intervention the SBIRT intervention was associated with no reduced substance use compared to the control group. The sample that was recruited for the study had a low rate of use: only one in five adolescents had used substances. FQHCs, where up to 25% of adolescents receive their care, represents a unique setting, and this study needs to be replicated in other FQHCs where prevalence rates of substance use may be higher.

Next up, in Levy et al. [8], the authors report on a national survey of pediatric endocrinologists and rheumatologists to determine how many of these subspecialists are screening for substance use in their clinical practices. Of the 225 subspecialists screened (15% of those surveyed), though 80% thought it was important to screen for substance use and within their clinical purview, only one in three screened. Barriers to screening included lack of time, support for screening, and how to respond to positive screens.

Mullaney et al. [9] then reports on an SBIRT intervention in middle schools in King County, Washington. Schools participating in the intervention conducted universal substance use screening for students in a grade or in an entire school. The leaders of the intervention included school counselors. Community-based organizations were engaged to lead at least one session on motivational interviewing for adolescents with positive screens. Even though the intervention reached 3,253 adolescents, only 116 completed a post-intervention survey, and just 26 participated in a focus group to assess the acceptability of the program. In general, young people were positive about the program, with some concerns about confidentiality. Clearly, schools provide unique opportunities to reach large numbers of adolescents, yet there are many logistical problems regarding confidentiality and parental engagement.

Following, Ozechowski and Wilson [10] report on their results from an SBIRT intervention in three high school-based health centers in Albuquerque. This school-based health center intervention included screening for substance use and other areas including depression, suicidality, physical activity, sleep, sexual activity, and relationships with family, friends, and teachers. One in five students screened positive for substance use, and those using substances were more likely to screen positive for the other screened areas. This intervention supports the need to combine substance use screening with other health-related behaviors that may benefit from simultaneous interventions.

The final original article, by Brolin and colleagues, reports on an SBIRT program that includes adolescents and young adults [11]. This screening took place within YouthBuild, an organization providing educational and job-skills for youth who are not enrolled in school or employed. The young people were screened using the Drug & Alcohol Screening Test 10. Those young people who screened positive received a brief intervention, and those with high scores were referred for SUD treatment. The 62 YouthBuild programs that participated in the study reached 1,400 youth. Approximately half of the programs showed a high level of need, with 17% needing brief interventions and 47% referral for treatment. These findings further support the importance of bringing interventions to programs that serve at risk young people.

The supplement concludes with a narrative review by Reif and colleagues [12], which assesses how SBIRT programs are paid across healthcare and school settings to determine if SBIRT is financially viable. The authors used rapid scoping review methods and a search of the gray literature, where they found that data on SBIRT outside traditional health care settings is not readily available. Their findings demonstrate that SBIRT is generally funded through grants (similar to the interventions described in this supplement) and Medicaid, private health insurance in some settings, and public funding for school-based health centers. The authors urge SBIRT programs to report on the financing structure of their interventions.

In a first for the Journal of Adolescent Health, this supplement provides an overview of what we know about the opportunities for reaching at-risk young people with SBIRT interventions in a variety of settings, including primary care delivery systems, subspeciality clinical programs, school-based programs in both middle schools and high schools, juvenile-justice programs, FQHCs and community-based systems. These unique settings need resources not only to provide the interventions but also to monitor the outcomes of the interventions. As pointed out by Dr. Hadland in his editorial [1], “substance use disorders commonly begin during adolescence and are the leading causes of premature death and health problems worldwide.” This supplement provides an additional step forward for building the evidence base for SBIRT.

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References