Published in final edited form as:

J Am Acad Child Adolesc Psychiatry. 2020 September ; 59(9): 1019–1021. doi:10.1016/j.jaac.2020.01.017.

Youth Suicide: An Opportunity for Prevention

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In the United States, youth suicide is a large and growing public health problem that contributes to health care costs, lost productivity, morbidity, and premature death. In 2017, an estimated 199,877 youths aged 10 to 24 years were treated in emergency departments in the United States for self-harm,[1] and 7.4% of high school students reported that they attempted suicide one or more times in the past year.[2] Suicide was the second leading cause of death among youths aged 10 to 24 years in 2017,[1] and the suicide rate increased significantly for both male and female youths from 1999 to 2017.[3]

Although suicide affects all youths, some groups bear a disproportionate burden. Most suicide decedents are male[1]; however, female individuals have more nonfatal suicidal behavior.[2] The suicide rate is highest among non-Hispanic American Indian/Alaska Native (AI/AN) youths; in 2017, the rate among non-Hispanic AI/AN youths was >2 times the rate among non-Hispanic White youths and approximately 3.5 times the rate among non-Hispanic Black youths.[1] Sexual minority youths (SMY) (eg, lesbian, gay, bisexual) are also at greater risk for suicidal behavior and ideation than their heterosexual peers.[2]

Suicide is preventable. Given the increases in the youth suicide rate in recent years, a better understanding of the characteristics and circumstances associated with youth suicide is needed. By applying a public health approach to youth suicide prevention, we can garner a comprehensive understanding of the problem, identify risk and protective factors, and develop appropriate prevention strategies. This approach includes the following: 1) assessing and describing the problem (eg, surveillance); 2) identifying causes or risk and protective factors; 3) developing and evaluating programs and policies; and 4) implementing and disseminating findings and activities. Public health surveillance provides data that are essential to informed decision making and action.[4]

The Centers for Disease Control and Prevention's (CDC) National Violent Death Reporting System (NVDRS) is an important source of public health surveillance that collects data on the characteristics and circumstances associated with violence-related deaths, including suicides. NVDRS is a state-based surveillance system that links multiple data sources including death certificates, coroner/medical examiner reports, and law enforcement reports to obtain a comprehensive picture. Prior to NVDRS, single data sources provided limited

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Disclosure: Drs. Ertl, Crosby, and Blair have reported no biomedical financial interests or potential conflicts of interest.

The findings and conclusions in this article are those of the authors and do not necessarily represent the official position of the CDC.

information regarding violent deaths; by combining sources, NVDRS collects detailed information on injury characteristics, demographics, circumstances (ie, events that preceded or were determined to be related to a victim's death), mental health diagnoses, and toxicology in order to understand patterns and inform targeted prevention efforts. Circumstances and mental health diagnoses captured in coroner/medical examiner or law enforcement reports reflect information provided by family and friends at the time of death and, therefore, may be incomplete. In 2019, NVDRS expanded data collection and now funds all 50 states, the District of Columbia, and Puerto Rico.

A new Morbidity and Mortality Weekly Report Surveillance Summary using 2016 NVDRS data from 32 states identified 3,655 youths aged 10 to 24 years who died by suicide.[5] The majority of these decedents were male (78.7%), aged 18 to 24 years (75.1%), and non-Hispanic White (68.1%).[5] Among youths aged 10 to 17 years, most died by hanging/strangulation/suffocation (49.3%), followed by a firearm (40.4%); whereas most decedents aged 18 to 24 years died by a firearm (46.2%), followed by hanging/strangulation/suffocation (37.4%).[5] Diagnosed mental health problems were reported in 46.3% of decedents aged 10 to 17 years and in 45.7% of decedents aged 18 to 24 years; however, only 30.3% and 24.3%, respectively, were reported to be currently receiving mental health treatment at the time of death.[5] Although mental health conditions are a critical piece of the puzzle, suicide is rarely caused by a single factor. Suicide among youths aged 10 to 17 years was commonly precipitated by family relationship (32.6%) and school (26.0%) problems, and suicide among youths aged 18 to 24 years was often precipitated by intimate partner (32.9%) and substance abuse (21.2%) problems.[5] Given the multiple biological, psychological, interpersonal, environmental, and societal influences that contribute to suicide among youths, comprehensive prevention strategies are needed to achieve and to sustain reductions in youth suicide.

The CDC's Preventing Suicide: A Technical Package of Policy, Programs and Practices is a compilation of prevention strategies based on the best available evidence to help communities and states to reduce suicide and suicidal behaviors.[6] These strategies include the following: strengthening economic supports; strengthening access and delivery of suicide care; creating protective environments; promoting connectedness; teaching coping and problem-solving skills; identifying and supporting persons at risk; and lessening harms and preventing future risk. Each strategy includes examples of specific approaches that states and communities can implement along with a summary of the available evidence.

Some programs highlighted in the technical package are focused on youths. Programs such as Sources of Strength have been shown to increase perceptions of adult support for suicidal youths and acceptability of help-seeking behaviors among high school students.[7] Social-emotional learning programs, such as Youth Aware of Mental Health, and parenting skill and family relationship programs, such as Strengthening Families 10–14, teach adolescents and their families about the risk and protective factors associated with suicide and enhance their problem-solving skills for dealing with adversity, stress, school, and other problems.[8,9] Strengthening Families 10–14 improves parents' skills for disciplining, managing emotions and conflict, and communicating with their children; promotes youths' interpersonal and problem-solving skills; and creates family activities to build cohesion and positive parent-

child interactions.[9] In addition, identifying persons at risk for suicide and delivering treatment and support for these individuals through gatekeeper training can have a positive impact on suicide and its associated risk factors.[6] Gatekeepers are community members such as teachers, coaches, and health care providers who are trained to identify persons who may be at risk for suicide and to refer them to treatment and/or support services.[6] Finally, safe reporting and messaging to youth about suicide that adheres to the Recommendations for Reporting on Suicide (http://reportingonsuicide.org/) can help to reduce the likelihood of suicide contagion.[6]

Health care providers (eg, pediatricians, primary care providers, mental health professionals) have a important opportunities to participate in youth suicide prevention. In addition to the crucial role of diagnosing and treating mental health conditions, health care professionals can serve several roles in the prevention of suicide.[10] These roles include clinical responsibilities, advocacy for individual patients and communities, research, and education. As a practitioner, the provider may have clinical responsibilities with regard to either an individual patient, a broader community, or both. Providers have an opportunity to play a pivotal role in suicide prevention by seeking the best available evidence on assessment tools and practice models.[10] One option for providers in a clinical setting to identify youths at risk is to implement screening for their patients using a tool such as the Ask Suicide-Screening Questions (ASQ, Columbia-Suicide Severity Rating Scale [C-SSSRS], or Patient Health Questionnaire-9 [PHQ-9]) Toolkit. If a youth screens positive, then the appropriate follow-up can occur, such as initiating treatment by the clinician or referral to a behavioral health provider.

Many mental health problems among youths may be missed or unknown; for suicide prevention efforts to be successful, they must extend beyond treatment in a clinical setting to reach those who are undiagnosed or not in treatment. In addition to the provision of good clinical care, practitioners can engage in advocacy on behalf of patients and communities. Practitioners can serve as compelling advocates regarding suicide prevention in their communities.[10] The obligation to advocacy is grounded in their professional experience and expertise as well as a duty to patients. Their insight can provide a unique perspective to decision makers in the business, private, and government sectors.

Practitioners are also needed to address the deficits in research associated with expanding the understanding of what works for suicide prevention. There is still a great need for evaluation of tools, programs, and policies in particular, to expand the available options to address suicidal behavior among diverse socio-demographic populations. The research deficits have practical implications, as they affect professional scientific recommendations. Practitioners can address these research needs by contributing studies to the body of literature.

More information on how to identify and support youths at risk for suicide is available in the CDC's Preventing Suicide: A Technical Package of Policy, Programs, and Practices[6] and elsewhere.[11] Everyone, including health care providers, has a role to play in preventing youth suicide.

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