Call for a unified approach to preventing suicides and other self-injury deaths
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Self-injury mortality (SIM) has surpassed diabetes as the seventh leading cause of death in the United States.
Credit: McLean Hospital

Self-injury mortality (SIM), a composite of all methods of suicide and estimated non-suicide deaths from drug self-intoxication, has surpassed diabetes as the seventh leading cause of death in the United States, prompting researchers to call for a new unified approach to SIM prevention.

"It is time to end the siloed approach to prevention," said Hilary S. Connery, MD, Ph.D., clinical director of the Division of Alcohol and Drug Abuse at McLean Hospital and a co-author of "Mortality in the United States from self-injury surpasses diabetes: a prevention imperative," published online by Injury Prevention. "We're so entrenched in separating suicide from drug overdose or alcohol poisoning deaths that people can't wrap their heads around the idea that they are related."

"The mental health and social risk factors preceding suicidal behaviors and substance poisonings are largely overlapping," she said. "For example, we know from epidemiologic research and clinical studies that severe childhood trauma is highly predictive of future death by either substance-related poisoning or suicide."

The comparative study showed the rising rate of estimated SIM in 2014 reached 24 deaths per 100,000 people, matching mortality from diabetes, which is officially the seventh leading cause of death behind Alzheimer's disease. Eighty percent of "accidental" drug intoxication deaths and ninety percent of corresponding undetermined intent deaths among the population 15 years and older were assumed to be death from drug self-intoxication.

Using the same methodology, the latest data from the U.S. Centers for Disease Control and Prevention revealed that combined non-suicide drug self-intoxication and suicide SIM exceeded diabetes mortality with respective rates of 29.1 per 100,000 versus 24.8 in 2016.

"Let's talk about preventing suicide and substance-related deaths together by aggressively screening for trauma, mental health disorders, problematic substance use, and social determinants such as poverty and then providing quality evidence-based care for these risk factors so that self-injury behaviors are prevented," she said. "It would be much more effective and efficient to look at them together and to do prevention together, because their antecedent risk factors are so overlapping."

The study examines all drug self-intoxication deaths, whether intentional (such as corroborated by an authentic suicide note) or from what medical examiners and coroners label as 'accident' (unintentional) or 'undetermined' (evidence suggests equal plausibility for two or more manners of death).

The different manner-of-death categories employed on death certificates have taken on added importance with the rise in and under-reporting of
opioid-related suicides, and for example, the recent reclassification of actress Margot Kidder’s death as suicide rather than accidental overdose.

"A conservative estimate is about 25 percent of substance poisonings involved suicidal thoughts or planning prior to overdose," Connery said. The authors noted that after declining by 19 percent between 1986 and 2000, the US suicide rate was 34 percent higher in 2016 than in 2000. Moreover, they considered most of the opioid and other drug deaths were preceded by repeated self-harm behaviors even when not registered as suicide.

Researchers noted that drug-related suicides had a higher rate of requiring evidentiary documentation (e.g., a suicide note and diagnosed depression) than suicides by firearm or hanging, and drug ingestion was the most common form of attempted suicide, despite the higher rate of mortality for more violent means. That finding shows the need for more affirmative corroborating data before medical examiners and coroners label drug deaths as suicides.

That data is often lacking because of limited resources and the high volume of self-injury deaths, regardless of manner of death, which has overwhelmed coroners and medical examiners, said lead author Ian Rockett, Ph.D., MA, MPH, Department of Epidemiology and the Injury Control Research Center at West Virginia University.

"America is in the midst of a persistent and major but underestimated mental health crisis," said Rockett. "We want to unify mental health and substance use disorder experts to say we have a really serious but preventable problem of premature mortality due to self-injury, and an artificial separation of drug deaths from suicide is slowing our efforts to prevent these deaths."

Ultimately, the authors declared, understanding self-injury mortality as transcending known or registered suicides will enable creation and implementation of effective broad-based prevention strategies like those that have reduced deaths from cardiovascular diseases, smoking-related lung cancer, HIV, and motor vehicular injury. In the end, the authors asserted, what is needed is "both necessary epidemiologic understanding to define the problem and sufficient political will to address it. Without the former, it is impossible to build the latter."


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