Opioids fueled a doubling of suicides and overdoses in the US

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Suicides and drug overdoses kill American adults at twice the rate today as they did just 17 years ago, and opioids are a key contributor to that rise, according to a new review and analysis by a University of Michigan team.

Reversing this deadly double trend will take investment in programs that have been proven to prevent and treat opioid addiction, the authors of the study say in a new article in the New England Journal of Medicine.

They also call for more research to identify who's most at risk of deliberate or unintentional opioid overdoses, to make sure these individuals get better pain management, mental health care and medication-assisted therapy for opioid addiction.

Using data from Centers for Disease Control and Prevention databases, the researchers show that the sheer number of deaths from suicides and unintentional overdoses together rose from 41,364 in the year 2000 to 110,749 in 2017.

When they calculated a rate per 100,000 Americans, to account for the rise in total population in that time, and found that the rate of these two causes of death had risen from 14.7 to 33.7 in that same time.

And when they drilled down to include just suicides and overdoses listed as being caused by opioids, they found that these causes accounted for more than 41 percent of such deaths in 2017, up from 17 percent in 2000. Opioids were implicated in more than two-thirds of all unintentional overdose deaths in 2017, and one-third of all overdose-related suicides.

In their article, researchers Amy Bohnert, Ph.D., and Mark Ilgen, Ph.D., review the evidence around the links between overdoses, suicides, chronic pain and opioids of all kinds, including those prescribed by doctors and the kinds bought on the street.

They also look at the current evidence for what works to identify risk of suicide or overdose, and to treat people with chronic pain, opioid use disorders and mental health conditions.

Bohnert and Ilgen note that suicide notes are only found in about one-third of overdose deaths, making the motivations behind other overdose deaths less clear. That's why grouping overdoses and known suicides by overdose together makes sense.

"Unlike other common causes of death, overdose and suicide deaths have increased over the last 15 years in the United States," says Bohnert. "This pattern, along with overlap in the factors that increase risk for each, support the idea that they are related problems and the increases are due to shared fundamental causes."

Both researchers have previously studied these issues in depth, and potential ways to address them. Bohnert co-directs the U-M Program for Mental Health Innovation, Services and Outcomes and is an associate professor of psychiatry at the U-
M Medical School. Ilgen, who directs the U-M Addiction Treatment Services and is an associate director of the U-M Addiction Center, is a professor of psychiatry. Both researchers also work for the VA Center for Clinical Management Research, and are members of the U-M Institute for Healthcare Policy and Innovation.

Supply or demand?

The rise in overdose and suicide death rates over the past two decades paralleled the rise in opioid painkiller prescriptions, and later the rise in use of heroin and illegally manufactured fentanyl.

The researchers look at the competing theories of whether an increased supply of opioids from legal and illegal sources, or an increased demand for them because of social and economic factors, were more likely to be to blame.

Though they say that evidence from Australia suggest that the "supply" theory has more support for overdose, they note that both theories have validity and deserve to be addressed through policy solutions.

Because of the common factors involved, they say, it may be possible for the U.S. to reduce the death toll from both overdose and suicide through increased use of proven prevention and treatment strategies.

Who’s most at risk

For both suicide and unintentional overdose, men had death rates twice as high as women in 2017, according to the researchers' analysis of CDC data.

Rates of suicide deaths were highest for white men and American Indian/Alaska Native men, and lower across the board for women.

When it came to unintentional overdoses, white men under age 40 had the highest rate, with nearly 50 deaths per 100,000. But the rate among black men rose in middle and older age, surpassing that of white and Native American men.

For women, unintentional overdose death rates were much higher than suicide rates among white, black and Native American women under the age of 65. But Bohnert and Ilgen cite research on racial biases among medical examiners in ruling deaths as suicides or overdoses. They also note studies about the increased risk of suicide and overdose among people with mental health conditions and substance use disorders.

What might work

"Individuals with chronic pain are at clear elevated risk for both unintentional overdose and suicide. To date, many system-level approaches to address overdose and suicide have addressed these as if they are unrelated outcomes," says Ilgen. "Our goal was to highlight the fact that these adverse outcomes likely go together and effective efforts to help those with pain will likely need to simultaneously consider both overdose and suicide risk."

To bring down the risk of suicide or overdose among those most at risk of dying from these causes, Bohnert and Ilgen lay out an array of potential interventions based on the evidence available from recent research.

For instance, they call for people who are on high-dose regimens of prescription opioids, or who are showing signs of prescription opioid misuse, to receive care that could reduce their suicide and overdose risk, at the same time that they are guided through a slow, patient-centered tapering of their opioid use.

Reducing prescription opioid doses gradually may actually reduce patients' pain, research has shown, and reducing the amount of opioid painkillers prescribed at any given time could also help keep at-risk patients from having the means of suicide or unintentional overdose on hand.

They also note that naloxone, which can reverse an opioid overdose no matter whether the overdose is intentional or not, should be prioritized for the friends and family of such patients.

They also call for greater availability of medication-assisted treatment of anyone with an opioid use
disorder.

This could involve the use of methadone, buprenorphine or naltrexone depending on the person and the availability of treatment—and should be done in concert with counseling around overdose and suicide prevention, treatment for any mental health conditions and naloxone distribution.

"Medication-assisted treatment for opioid use disorders have been repeatedly proven to reduce overdose deaths relative to no treatment or non-medication treatment," says Bohnert. "Reducing the severity of opioid use disorder through medications will also improve mental health. Reducing barriers to use of these medications is essential to addressing both overdose and suicide."


Provided by University of Michigan

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