VIEWPOINT

Getting Serious About Reducing Suicide
More "How" and Less "Why"

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Between 2005 and 2012, age-adjusted mortality rates declined for all 10 leading causes of death in the United States—except for suicide. The rate of suicide increased from 10.9 per 100 000 in 2005 to 12.6 per 100 000 in 2012.[1] Suicide accounted for 41 149 deaths in 2013, the latest year for which national data are available. In 2013, suicide was the second leading cause of death in 15- to 34-year-olds, claiming 11 226 lives in this age group.[2] What is different about suicide, and why has there been so little progress in preventing it?

Suicide is intertwined with mental illness. People who have chronic mood disorders or psychosis are 10 to 20 times more likely to commit suicide than people without those disorders. Serious mental illnesses affect about 5% of the population but account for 47% to 74% of the population attributable risk (PAR) of suicide, according to a recent review of studies.[3] However, despite substantial public investments in research on the etiology of mental illnesses over the last several decades, rates of onset and recovery have not improved, and the suicide rate has been steadily increasing in the United States.

Recent declines in death rates from heart disease, cancer, and stroke have been attributable not only to a more precise understanding of the underlying pathophysiology of these conditions and development of more effective ways to treat them, but also to use of potent public health approaches to modify the behaviors and environments that increase risk of these diseases in the population (eg, tobacco control). Practical approaches to suicide prevention should be given comparable priority in mental health research and practice. However, in its most recent budget, the National Institute of Mental Health (NIMH) allocated only 1.4% of its research funding to suicide prevention studies, whereas 31% was allocated to funding neuroscience and basic behavioral science studies.

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For suicide in the United States, the most important modifiable risk factor is access to firearms. Guns were used in 51% of completed suicides in 2013.[4] The case-fatality rate for intentional self-injury with a gun is 84%; the average case-fatality rate for intentional self-injury using other means is 4%. The next most lethal means of suicide are suffocation/hanging (69% fatal) and falls (31%), but these methods together account for fewer than half the number of suicides that guns claim each year.[5] Strong evidence supports the scientific consensus that access to firearms in the home is associated with a significantly increased suicide risk and that reducing gun access for people at risk will reduce suicide.[6]

A study from Switzerland found that suicides among young males decreased by about 10% nationwide in a single year as a direct result of an Army reform that halved the number of Swiss soldiers storing guns at home. The researchers calculated that 78% of those who were deterred from suicide by lack of access to a gun survived; only 22% died anyway because they substituted some other means of suicide.[7] In theory, a comparable decline in suicide could be achieved in the United States through sensible changes in firearms laws and other public policies, primarily at the state level, that would reduce gun access specifically for people most at risk of harming themselves or others. But more research is needed into exactly how these reforms should be designed and implemented.

There are hopeful signs that suicide prevention may be receiving more attention at the NIMH. Between 2009 and 2015, the NIMH collaborated with the US Army to conduct the largest study of suicide prevention among US military personnel ever conceived, the Army Study to Assess Risk and Resilience in Servicemembers (Army STARRS). In 2014, the Institute introduced its "New Research Agenda for Suicide Prevention," highlighting the need for better risk detection, outreach, and treatment access—and for reducing the lethality of available means of self-harm. By implementing the new agenda, the NIMH hopes to reduce suicides in the United States by 40% in 10 years.

The goal is laudable, but the plan is likely to fall short; the NIMH is expecting too much for too little. What is needed is a NIMH investment in suicide prevention research commensurate with the social burden of suicide in the United States, with appropriate emphasis on a key policy problem: how to limit access to firearms for people at risk. The problem is challenging because constitutional and political realities preclude broadly limiting legal access to firearms, as many other advanced countries have done. Instead, US policy makers must craft legal strategies for identifying individuals who pose a sufficiently high risk of harming themselves or others to warrant abridging their right to possess a firearm. This prospect is complicated because suicide is associated with multiple, interacting, and nonspecific risk factors; the red flags are displayed by many more people who will never commit suicide than by those who will.

Suicide prevention should also be a primary concern of the National Center for Injury Prevention and

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Control (NCIPC) at the US Centers for Disease Control and Prevention (CDC). Although only 1.4% of the CDC's $10.8 billion total budget in 2014 was devoted to injury prevention, President Obama's FY 2015 budget proposed a 29% increase[8]—a welcome investment that would have provided much-needed opportunities for research on the effects of restrictions to firearm access on suicide. However, Congress failed to enact the proposed increase because $10 million had been designated in the budget for "gun violence prevention research," an area of CDC inquiry that Congress has discouraged since 1996.[9] Until political constraints on injury prevention research recede, the CDC is likely to play a limited role in developing and evaluating policies aiming to reduce gun-related suicide deaths in the United States.

What kinds of research would be most helpful? A key aim of a risk-based firearm policy is to identify particular times in the lives of people with serious mental disorders when risk of self-harm is elevated. For example, being involuntarily held for a brief evaluation in a psychiatric facility can be an important marker for increased suicide risk. But in most states, the majority of short-term holds do not progress to formal involuntary commitment in a judicial proceeding that would result in loss of gun rights under current federal and state laws.

Enacting laws requiring that the record of an involuntary hold (involuntary emergency detention) be reported to the National Instant Background Check System (NICS), and that all firearms be temporarily removed from an involuntarily hospitalized person's residence, might help reduce gun-related suicide for these high-risk individuals—but this is unclear. Carefully designed comparative effectiveness studies in different jurisdictions could produce evidence needed to evaluate these kinds of policy solutions. State laws designed to separate guns temporarily from people at risk of harming themselves or others, such as laws already enacted in Connecticut, Indiana, and California following multiple-casualty shootings, are another potentially important tool in suicide prevention that needs careful evaluation.

Gun removal or risk warrant laws apply specifically to persons at high risk, during particular times of high risk. These innovative laws provide a legal tool for law enforcement to temporarily separate guns from dangerous individuals who might not otherwise be legally disqualified from possessing guns by a criminal record or history of involuntary civil commitment. Gun removal under these statutes requires a judicial order based on a finding of probable dangerousness and includes an opportunity for expedient restoration of gun rights when a person no longer poses a safety risk. This approach to preventing gun violence has broad popular support: a recent national poll found that 72% of the general public and 64% of gun owners would support a law "…allowing family members to ask the court to temporarily remove guns from a relative or intimate partner who they believe is at risk of harming himself or others."[10]

Regulatory approaches complement other gun safety measures and practices, such as clinicians educating patients about the risk of guns in the home, and voluntary separation from guns during times of acknowledged risk. More information is needed about how all of these approaches may work, and what formal policies and implementation approaches could make them more effective, scalable, workable, and fair.

Gun-related suicide in the United States is an important public health issue and demands a robust, evidence-based public health response. More research is needed to inform and accelerate suicide prevention efforts. This agenda aligns with the respective missions of the NIMH and the CDC, but not with current funding priorities and allocations. Research is needed on the effects of public health interventions, policies, laws, and implementation strategies, thereby enabling (1) more effective identification of persons at risk of suicide, (2) more effective approaches to limiting their access to lethal means—firearms, in particular—during times of risk, and (3) development of ways to appropriately balance risk and rights, without further stigmatizing people with mental illnesses or inhibiting their disclosure of suicidal ideation. The NIMH and the CDC should lead the way by investing in research on the best means to do that, and Congress should allocate funding accordingly.

ARTICLE INFORMATION

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