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EDITORIAL

Reducing Firearm-Related Harms: Time for Us to Study and Speak Out

The numbers that describe firearm-related injury and death in the United States are astounding. Over recent years, more than 32 000 firearm-related deaths occurred annually (1). In 2013, firearms nonfatally injured 84 258 persons and killed 33 636 more, with 21 175 of these deaths being suicides (2). In 2010, firearm-related incidents cost society more than $174 billion, including more than $3 billion in direct health care costs to an already beleaguered system (3). These numbers do not include the rippling physical and emotional burdens gun-related incidents leave on those who are nonfatally wounded and the communities who lose or support injured colleagues, friends, and family. It does not matter whether we believe that guns kill people or that people kill people with guns—the result is the same: a public health crisis.

When public health crises arise, our powerful health care complex responds by doing what our scientific training and duty to help others require. We formulate questions that need answers, collect and analyze data to answer them, test hypotheses to discover remedies, study how to implement them, and monitor progress. This is how polio was nearly eliminated, automobile-related injury and death rates were reduced, tobacco-related illness decreased, and an Ebola epidemic is being curtailed. The list goes on. But it seems to stop when it comes to firearm injury. Why?

Two years ago, we called on physicians to focus on the public health threat of guns (4). The profession's relative silence was disturbing but in part explicable by our inability to study the problem. Political forces had effectively banned the Centers for Disease Control and Prevention (CDC) and other scientific agencies from funding research on gun-related injury and death. The ban worked: A recent systematic review of studies evaluating access to guns and its association with suicide and homicide identified no relevant studies published since 2005 (5, 6). However, in the wake of the horrific mass murder of children, a January 2013 Presidential executive order lifted this ban and directed the CDC to conduct research on the causes and prevention of gun violence. Obviously, this directive alone will not end the suppression of science; although research may now be "allowed," the CDC cannot direct new resources to this task because the President's CDC budget requests to support a focus on gun-related violence were not funded. Compounding the lack of research funding is the fear among some researchers that studying guns will make them political targets and threaten their future funding even for unrelated topics.

However, study has occurred and our profession is beginning to speak more loudly.

At the CDC's request, the Institute of Medicine developed a focused research agenda designed to have an effect on firearm-related violence in 3 to 5 years (7). The Institute of Medicine committee concluded that we need a better understanding of factors associated with access to guns and their use in violence, the effectiveness of gun safety technologies or public policies at reducing gun-inflicted harm, and the influence of video games and other media. It also called for the collection of better data and database linkages to enable more effective research. These basic gaps in our knowledge are inexcusable.

In this issue, Rowhani-Rahbar and colleagues (8) begin to fill some gaps. Using probabilistic linkage, they used Washington State–wide hospitalization, criminal justice, and vital statistics records to evaluate the risks patients faced after a firearm-related hospitalization (FRH). Compared with patients with noninjury-related hospitalization, patients with an FRH were at inordinate risk for subsequent FRH (subhazard ratio, 21.2 [95% CI, 7.0 to 64.0]), firearm-related death (subhazard ratio, 4.3 [CI, 1.3 to 14.1]), and firearm- or violence-related arrest (subhazard ratio, 2.7 [CI, 2.0 to 3.5]). Residential mobility, events missed by probabilistic matching, and the inability to more fully control for social or environmental confounders surely affected the precision of these estimates. Nonetheless, these findings have face validity. But are they valuable?

They are if we use them to motivate additional research to determine whether intervening at the time of an FRH can reduce future adverse outcomes. Could factors associated with increased risk help target secondary prevention strategies? Which prevention strategies are effective? Might FRH be an opportunity to break a violent cycle and promote primary prevention by avoiding others' inclusion in subsequent cycles? Currently, physicians discharge patients after an FRH with little, if any, plan to avoid the next round of violence. Shouldn't we be crying out to learn how we can work with social workers, criminologists, policymakers, and other professionals to do a better job in preventing firearm-related harm?

In another article in this issue, 7 national physician organizations are calling for measures to help us do just that (9). Executive leaders of the American Academy of Family Physicians, American Academy of Pediatrics, American College of Emergency Physicians, American Congress of Obstetricians and Gynecologists, American College of Physicians, American College of Surgeons, and American Psychiatric Association are together pressing for increased research (and unfettered access to the findings) to discover strategies to diminish firearm-related harms. In addition, they call for sensible measures to reduce firearm violence: universal background checks; elimination of laws intruding on physicians' and patients' rights to discuss issues related to health and safety, including guns; and restricting the manufacture and civilian sale of military-style weapons and high-capacity magazines. The American Public Health Association and the American Bar Association,

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which confirms that these recommendations do not conflict with Second Amendment rights or U.S. Supreme Court rulings, join these physician organizations. Together, the organizations united in this call for action represent more than 500 000 health care professional members. A recent survey of internists indicates that most believe that firearm injury is a public health issue and that physicians should get involved in its prevention (10).

Let's start. What if the more than one half million health care professional members of these organizations contacted their federal and state government representatives to tell them that they believe firearm-related injury is a public health crisis that we need to fix? We just did. It took less than 1 minute to find contact information for our state government legislators (we searched "e-mail my PA legislator"). You may contact your Congressional representatives at www.house.gov/representatives/find or www.senate.gov/general/contact_information/senators_cfm.cfm. We provide a copy of the letter we sent (**Supplement**, available at www.annals.org), and you can modify it or write your own to convey your thoughts on the public health threat of firearms.

We, as health care professionals, are trusted, expected, and paid to prevent harm to our patients and discover solutions to public health problems. Have we done our jobs? Can we? The answers are no and maybe: No, we have not sufficiently reduced the firearm-related harms our patients suffer, but maybe we can, if we demand the resources and freedom to do so.

Darren B. Taichman, MD, PhD
Executive Deputy Editor

Christine Laine, MD, MPH
Editor in Chief

* *Annals* editors who contributed to this work are Deborah Cotton, MD, MPH; Cynthia Mulrow, MD, MSc; Jaya K. Rao, MD, MHS; Catharine Stack, PhD; and Sankey V. Williams, MD.

Requests for Single Reprints: Darren B. Taichman, MD, PhD, American College of Physicians, 190 N. Independence Mall West, Philadelphia, PA 19106; e-mail, dtaichman@acponline.org.

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Current author addresses are available at www.annals.org.

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Current Author Addresses: Drs. Taichman and Laine: American College of Physicians, 190 N. Independence Mall West, Philadelphia, PA 19106.