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GUN VIOLENCE (P MASIAKOS, SECTION EDITOR)

#ThisIsOurLane: Incorporating Gun Violence Prevention into Clinical Care

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Abstract

Purpose of Review This article reviews the medical community's evolving perspective on its role in gun violence prevention efforts, particularly evaluating the evidence for and potential impact of patient education and firearm safety counseling.

Recent Findings Growing numbers of physicians and professional medical societies recognize gun violence as a public health crisis and are increasingly supporting a more active role for the profession to address it. In spite of this urging, relatively few physicians routinely address firearm safety with their patients, in part driven by a lack of standardized education about how to incorporate gun violence prevention into clinical care.

Summary Clinicians have a unique opportunity to prevent firearm-related injuries and death by performing firearm safety screening and violence prevention counseling at the bedside. With growing evidence for the effectiveness of such counseling and increasing number of widely available resources, clinicians across medical disciplines are well positioned to address this unmet need.

Keywords Gun safety · Firearm legislation · Gun violence prevention · Physician counseling · Medical education

Introduction

On November 7, 2018, the National Rifle Association (NRA) took to social media to mock the medical community's commitment to ending gun violence. "Someone should tell self-important anti-gun doctors to stay in their lane," they tweeted [1].

Twitter's medical community responded. Using #ThisIsOurLane, thousands of doctors, nurses, and other clinicians shared images and stories emphasizing that treating victims of gun violence, managing infectious complications of wounds, rehabilitating patients with spinal cord injuries, and caring for people suffering from chronic pain, anxiety, and post-traumatic stress disorder are very much within a clinician's domain. Beyond social media, medical organizations across fields of practice urged their members to counsel patients about firearm safety [2••]. These calls echo those made by the editors-in-chief of leading US-based medical journals who have exhorted the medical community to take specific steps to address gun violence [3]. Yet despite these increasingly loud and public declarations that physicians have a role to play in addressing this public health crisis, in practice, many clinicians remain disengaged, perhaps because the what, why, and how—that is, what it really means to incorporate gun violence prevention into clinical care—is only now becoming clear.

Defining the Problem: Gun Violence in the USA

The scourge of gun violence plagues communities across the USA. Approximately 100 Americans die each day from gun violence—nearly two-thirds due to suicide [4, 5]. Access to a firearm is an independent risk factor for homicide and suicide [6], yet approximately 4.7 million children in the USA live in homes with guns that are not safely stored [7]. There are more guns than people within our borders, and the direct costs to the American healthcare system—from emergent surgery to intensive care, and chronic pain management to post-traumatic stress disorder—bleed into the billions [8, 9].

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As with every public health challenge before it, one fact about gun violence is clear: progress lies in prevention, and the doctor's role therefore begins far before the wounded are wheeled into the emergency department. Educating and partnering with our patients to advance firearm safety is critical to this effort, and this must begin with educating ourselves.

Clarifying our Agency: Clinicians' Role in Preventing Gun Violence

In 1995, the American College of Physicians (ACP) published its first policy statement describing a public health approach to preventing firearm-related violence [10]. Over two decades later, at least 3 more position papers, by 8 professional associations, endorsed by 52 health organizations, have subsequently been published—each articulating the same fundamental point: gun violence is an urgent and devastating public health threat, and as both counselors and first responders, clinicians carry a responsibility to work to prevent it [2••, 11–13]. Nowhere is this more critical nor its effect more immediate than at the bedside, where, at times, it may be appropriate for clinicians to do three things: (1) ask our patients about access to firearms, (2) counsel patients about safe use of those firearms, and (3) if necessary, intervene to thwart harm.

The ACP propounds that physicians educate their patients about the potential risks of firearm ownership, particularly when children, those with cognitive impairment or dementia, substance use disorders, mental illness, or a history of violence or victimization, are present [12]. Firearm access among these high-risk populations is similar to that of the general population, but the risk of injury rises substantially [14•]. To mitigate this risk, guidelines emphasize teaching safe storage practices: keeping guns locked, unloaded, and stored separately from ammunition with the keys safely out of reach of those at risk. Physicians can explore what is feasible in partnership with patients, supporting them to identify the best storage method for their needs and to navigate conflicting viewpoints in the home as appropriate.

In situations of acutely elevated risk, physicians may have an opportunity to intervene to prevent harm to a patient or another person. In cases in which a clinician is concerned that a patient poses an imminent risk to him or herself or others, physicians can commit patients to the hospital for emergent evaluation. Legislatures across the country are offering an important new tool: seventeen states and Washington, D.C., have adopted versions of an Extreme Risk Protection Order (ERPO or "Red Flag") law, which facilitates temporary removal of firearms from the home if the owner is thought to pose an imminent risk. The details of how such orders are issued—and who may petition for them—vary by state. For example, in Maryland and Hawaii, some healthcare professionals are among those who may file these petitions; in other states, that prerogative belongs exclusively to family and law enforcement. Nonetheless, across all states with a version of these laws, physicians are crucial actors in educating patients and families about the existence of this legal pathway [15]. Familiarity with various storage methods, state and local firearm laws, and community customs is key to managing these situations thoughtfully and respectfully. And as with other health behaviors, physicians should follow up frequently to support patients' decisions and to monitor for changes in practice.

There is ample precedent for this type of engagement to address public health concerns in clinical care: recommending child car seat use and seat belts, screening for intimate partner violence, treating substance use disorders, counseling about safe sex. In each of these cases, the clinicians' role in confronting public health epidemics has become the standard of care [16–19]. And research affirms the value of their time. Patients who are counseled by their doctors are significantly more likely to use car seats, eliminate excess sugar, decrease sexual risk taking, and quit smoking—in other words, adopt healthier behaviors [18–21]. Counseling works, in no small part because the physician–patient relationship is, at its foundation, one of trust and shared commitment to the patient's health.

Deciding to Act: Challenges as Opportunities

As awareness mounts of the far-reaching impact of gun violence, it is no surprise that physicians broadly insist on the right to counsel patients about firearm safety. Surveys of clinicians across a wide array of fields—internists, pediatricians, psychiatrists, surgeons—suggest that between 65 and 93% believe gun safety counseling is both within their scope of practice and their responsibility [22–25]. However, fewer than half ever report discussing the subject in practice. For example, a 2014 survey of over 500 internists revealed that 80% had never discussed their patients' gun use; 62% had never cautioned against storing firearms near a child [22•]. In a different study, 42% of primary care providers caring for patients with depression or suicidal ideation reported not asking either patients or their family members about firearm access [26]. Among trainees, these numbers are even less reassuring. At our own institution, a study of children and adolescents who presented to the emergency department with active suicidal or homicidal ideation found that in only 5.1% of encounters did pediatric residents document a conversation about firearm access [27]. A different analysis measured this rate at 3% among psychiatry residents [28]. From our freshest trainees to most seasoned clinicians, we are too often failing to follow our own prescriptions.

This gap offers an opportunity to act. Underlying this lack of physician engagement is a lack of education about how to integrate such counseling efficiently into routine clinical care. Those without training report uncertainty over what to say, how to say it, and whether it would work. The challenge? A

vast majority of today's doctors have no formal training on firearm safety counseling; for neither medical students nor residents does a standardized curriculum exist [29].

Firearm safety counseling is not unique here; medical educators have long decried the paucity of behavioral change training. The Institute of Medicine emphasized this in 2004, when it reported that neither graduate nor undergraduate medical trainees were prepared to address social and behavioral risk factors, including substance use and injury prevention [30, 31]. Fifteen years later, the preponderance of this learning still transpires on the job, but with no institutionalized guidelines for firearm counseling and no standardized approach to teaching, outcomes are inconsistent at best.

Such a void can allow misinformation to spread. A survey last year revealed that two out of every three health care practitioners nationally deemed firearm access unrelated to suicide—despite study after study demonstrating that access to a firearm is an independent risk factor for suicide [32]. Others worry that patients may not listen to them, or that their efforts may not bear fruit [14, 18, 33]. Fortunately, studies show that a vast majority of the public welcome these conversations with their physicians, particularly if well informed [34]. Specifically, firearm owners, 70% in a 2016 study, professed willingness to discuss gun ownership with their doctors, though they might appraise them as less credible authorities [35, 36]. In so engaging, physicians can not only advise patients about safety but also help counter false narratives—such as that gun violence is caused by mental illness, when in fact it is predicted by access to guns [37].

Most importantly, evidence is mounting that physician-led firearm safety counseling works [12, 14•, 18•, 38, 39]. Studies are small and still too few, but those from primary care settings have demonstrated an uptick in safe storage practices, more restricted access among suicidal teens, and lower suicide rates. Counseling efforts in the hospital have similarly been shown to reduce firearm carriage and to deter recurrent acts of violence. In both settings, interventions that couple counseling with the provision of safety devices seem most effective in sustaining safe storage practices [36]. In order to execute these efforts, of course, cultivating physician knowledge and self-efficacy as counselors stands paramount.

Increasingly, myriad organizations have stepped in to fill this need. For 30 years, the Violence Prevention Research Program at UC Davis has been developing and disseminating the key principles of a public health approach to firearm-related violence [40]. Its "What You can Do" initiative hosts a comprehensive repository of research, advocacy, and pedagogical tools for providers poised to prevent firearm injury. Major medical organizations including the American Medical Association and the Massachusetts Medical Society have in turn produced online courses on gun safety for Continuing Medication Education credit [41, 42]. Other institutions, like the University of Michigan, continue to publish video series of physician-led conversations for their viewers [43]. And still other organizations have donned an activist mantle—mobilizing health professionals to advocate for systemic change. One such group, Scrubs Addressing the Firearm Epidemic (SAFE), works to amplify gun safety research and evidence-based policy by building networks of educated providers [44].

At our own institution, Massachusetts General Hospital, we have instituted a case-based curriculum for screening and counseling patients about gun safety, which was rolled out to all incoming interns across Medicine, Psychiatry, Surgery, Pediatrics, Emergency Medicine, and OB/GYN in the summer of 2019. After a brief didactic lecture that introduced a framework for understanding gun violence and its relevance to clinical practice, participants worked with standardized patients to practice their interviewing skills and to develop confidence in communicating about gun safety and violence prevention in clinical settings. Further work to evaluate the effectiveness of all these training modalities will be critical.

Conclusion

This moment feels like a tipping point. No longer can we in the medical profession accept that nearly 40,000 firearm-related deaths and 100,000 more injuries every year are up to others alone to address. We have a duty and obligation to inform and educate our patients about preventing gun violence. These efforts, across medical disciplines, are part of a broader movement. But there is still much work to be done, as together we declare #ThisIsOurLane.

Compliance with Ethical Standards

Conflict of Interest CAS receives support from the Carney Family Foundation. Dr. Sacks and Dr. Hathi have nothing to disclose.

Human and Animal Rights and Informed Consent This article does not contain any studies with human or animal subjects performed by any of the authors.

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