

Primum Non Nocere: Surgeons and the Politics of Firearm Trauma

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In April 2015, the American Academy of Family Physicians (AAFP), American Academy of Pediatrics (AAP), American College of Emergency Physicians (ACEP), American Congress of Obstetricians and Gynecologists (ACOG), American College of Physicians (ACP), American College of Surgeons (ACS), American Psychiatric Association (APA), the American Public Health Association (APHA), and the American Bar Association (ABA) published a joint statement advocating a public health approach to curbing the epidemic of firearm violence.¹ In the 1,665 days since, there have been 1,678 reported mass shootings, defined as a single shooting result in at least four victims, killing an estimated 1,921 and injuring another 7,169.² Even more disconcerting is that the deaths from mass shootings account for approximately 1% of firearm deaths in the United States – the vast majority are from suicides (65%).³ A closer examination of the statistics surrounding firearm violence yields increasingly grim results.

Studies have repeatedly shown that Americans are significantly more likely to die from firearm violence, both through homicide and suicide, than people in other industrialized nations. A World Health Organization (WHO) study comparing the United States to 22 other nations found that Americans are ten times more likely die from a firearm, eight times more likely to commit suicide by firearm and 25 times more likely to be murdered by a firearm.⁴ Each day, approximately 100,000 Americans are shot, 34% of whom die. Each year, about 29.7 per one million Americans are murdered with a firearm. For those keeping score, the second highest annual firearm homicide rate is in Switzerland, at 7.7 per one million.^{3,4} As if this were not troubling enough, the victims of firearm violence are predominantly young Americans.⁵ The national emergency department presentation rate for gunshot wounds (GSWs) is as high as 20.16 per 100,000 for children under 19 years old, and 90% of children under 14 years old killed by firearms each year are American.^{4,6}

These horrifying statistics are largely a result of skyrocketing levels of firearm ownership and loose laws. Current estimates, which likely underestimate totals as many firearms in the United States are unaccounted for,

suggest there are approximately 120.5 firearms per 100 residents, dwarfing the next highest nation of Yemen, which registers 52.8 per 100. In 2017, the United States contributed to 4% of the world's population and 46% of the world's firearm ownership.⁷ Exacerbating the issue is the current state of firearm regulations. Currently, all 50 states and the District of Columbia (D.C.) permit concealed carry and only 35 states require a permit to do so. Moreover, only 21 states and D.C. require a criminal background check from unlicensed dealers. 17 states and D.C. require records of all sales, 15 states and D.C. require background checks for the sale of all firearms, and only 9 states and D.C. require a waiting period to purchase a firearm.⁸

Together, this data paints the picture of a firearm-friendly, people-unfriendly state. Until recently, the debate surrounding common sense gun reform was limited mainly to the media. However, to chain this debate to the modern media – both news and social – is to banish an issue of great importance to the realm of sophists. Common sense gun reform requires a debate based in evidence and data, not the disheartening sinusoid of attention and neglect that occurs in the news media each time there is yet another mass shooting. This need for an informed debate had been greatly hindered by the Dickey Amendment, effectively prohibiting government funded research into gun violence. The 2018 Omnibus package slightly lessened the burden of the Dickey Amendment, affording the Centers for Disease Control and Prevention (CDC) the right to conduct research on gun violence, just not specifically to advocate for reform.⁹ Small as this change may be, it does open the door for more research and data collection on the true impact of firearms.

While the CDC is shackled in its capacity to push for common sense gun reform, it falls on the rest of the healthcare field to pick up the slack. Physicians and surgeons are increasingly doing just that. This was perfectly demonstrated in November 2018 when the ACP published a policy paper addressing the public health crisis created by firearm violence, prompting a tweet from the National Rifle Association (NRA) telling doctors to “stay in their lane.” The backlash from medical professionals was immediate and overwhelming, with

doctors flooding social media with heart-wrenching stories and harrowing photos of blood-soaked scrubs that clearly demonstrated, as Dr. Judy Melinek phrased it, “This [firearm violence] isn’t just my lane. It’s my [expletive] highway.”¹⁰ While individual physicians take to social media, medical professional organizations have been publishing more policy statements and position papers in the past few years. Statements from the ACS, ACEP, and American Association for the Surgery of Trauma (AAST) have all argued that it is incumbent upon those in medicine to advocate for common sense gun reform because good, patient-centered healthcare is as much about injury prevention as it is about injury care.^{11–13} These statements are supported by research articles from various medical organizations that have demonstrated lower rates of firearm violence and associated deaths in states with stronger firearm laws.^{3,4,14} Data consistently shows that the best outcomes for victims of firearm violence are achieved by preventing the violence in the first place.

What does all of this mean for us as medical students? It means that as the next generation of healthcare providers, we owe it to our patients to do more than just suture an unending series of GSWs. The crisis of firearm violence in America continues to worsen and the call to action cannot be ignored. If we are to make a real impact, we must be just as skilled policy makers as proceduralists. We must wield the pen as well as we wield the scalpel. All the clinical knowledge and surgical skills in the world will make no difference if we do not reduce the number of firearm injuries. The skillset we need is policy analysis and lobbying, which can only be developed through political activism and engagement, not more practice questions and Online MedEd.

As Dr. Martin Croce said in his 2018 AAST Presidential Address, our “primary goal is to reduce the number of bullet holes in people.” Until we do that, we may win some battles, but we will lose the war on firearm violence.

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