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We Need To Treat Gun Violence Like A Public Health Problem

Gun violence spreads much like a disease epidemic.

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As an internist and primary care physician, I almost never confront the immediate aftermath of a shooting. But I often see the complications of gun violence years afterward. Last month, I took care of a young man in his 20s who had been shot in his teens. He was paralyzed from the waist down — not just wheelchair dependent, but reliant upon family members for many of his daily activities. In order to urinate, he had to insert a catheter into his bladder every six hours. To have a bowel movement, he had to manually release stool from his rectum. Several large, painful bed sores on his buttocks had eroded through the full thickness of skin, revealing the white sheen of underlying bone and predisposing him to severe infections. In the six years following his shooting, he’d been hospitalized a whopping 34 times.

Last weekend, I admitted two more young people just like him.

If these descriptions feel graphic, it’s because real life is graphic, too. The consequences of gun violence are just as difficult to confront, if not more so, after the noise of the trauma bay has faded and the newspaper headlines stop flashing. When I care for these individuals, I’m filled with unease because an initial episode of violence continues to wreak havoc on the body. I’m also filled with a deep sense of resignation because it’s difficult to imagine the tide turning on gun violence in this country.

I imagine I’m not the only health professional who feels this way — in medical training we spend years learning and treating HIV, hypertension, peptic ulcers, and anemia, but we don’t learn how to prevent and treat gun violence, which causes more deaths than all of these diseases combined. By now we all know the statistics: more than 30,000 people die annually in the U.S. from firearm injuries. Another 75,000 annually are injured. To be sure, there are many reasons why gun violence is very different from other causes of morbidity and mortality. For one, many firearm injuries are intentional, and a slew of complex and interrelated issues like mental illness, a history of violence, substance use, and access to guns may relate to why a shooter ultimately decides to pull the trigger.
But research also suggests that gun violence spreads much like a disease epidemic, and therefore treating this issue like a public health problem, rather than a criminal justice or legislative problem, is both appropriate and effective. Researchers from Harvard and Yale Universities recently conducted an analysis of 138,000 individuals who had been arrested in Chicago, Illinois between 2006 and 2014. Using the same type of infectious disease model that often predicts contagion, the researchers determined that social contagion – as measured by the frequency and duration of exposure to gun violence – accounted for two-thirds of the 11,000 shooting episodes studied. That is, the more frequently someone was exposed to gun violence, the more likely they were to perpetrate it themselves; conversely, the more distant the exposure, the less likely they were to commit an act of violence.

Treating gun violence like a public health epidemic has gained traction in the medical community. Organized medicine, including the American Medical Association, the American Academy of Family Physicians, and the American College of Physicians, have recently renewed advocacy efforts. The recently dismissed Surgeon General, Dr.Vivek Murthy, was a staunch advocate for firearm regulations and publicly identified gun violence as a public health crisis. A well-respected medical journal put out a call last year for more papers on firearm injuries and gun violence. But due to a sensitive political climate, any attempt to make guns safer, even by doctors charged with protecting our health, is viewed as an attempt to eliminate guns altogether. Vocal opposition to gun violence prevention has prevented medical professionals from addressing this epidemic in any forceful or coordinated way.

Sensible gun control policies may never be feasible in this country. But it may be possible for more people to understand and address the drivers of gun violence, and for public health efforts to save lives where legislators won't or can't. To this end, more research is needed urgently to help identify and disseminate cogent, evidence based solutions to gun violence, including identifying individuals at high risk and developing targeted mental health, housing, educational, and other social services to intercept. While gun violence research is woefully underfunded and under-published, a well-known consequence of a longstanding federal ban on funding research that could be used to "advocate or promote gun control," a concerted push in local communities, public health agencies, and medical professions to focus on this issue would be a promising step forward.