editorial

Enough is enough

Data science studies have provided evidence that regulating gun ownership can save lives. However, US lawmakers still fail to follow the science.

n 24 May 2022, an 18-year-old boy killed 21 people — 19 children and 2 adults — at Robb Elementary School in Uvalde, Texas. Within the span of four weeks, from 11 May through 7 June, there were 58 reported mass shootings in the US, with a total of 85 fatally shot victims and over 250 people injured. Just this year, there have been more than 200 mass shootings in the US, with at least 27 of them taking place in schools. The statistics are shocking and heart-breaking, to say the least.

Every mass shooting in the US ignites the debate over gun laws. Some people advocate for stricter gun control legislation to prevent similar tragedies from happening again in the future, arguing that, by making it harder to buy and carry a gun, the likelihood of these events would be lower. The gunman from the Uvalde shooting, for instance, legally purchased two rifles in the days following his 18th birthday, taking advantage of Texas's loose gun laws. Conversely, others argue that, in fact, we should make it easier for people to carry guns so they can better defend themselves.

Unfortunately, research on firearm violence has been largely underfunded in the US. For years, researchers had to mainly rely on donations and private funding to better understand the causes of gun violence. A study from 2017 showed that gun violence has received less federal research funding than most of the leading causes of death in

the US: the field had 1.6% of the funding and 4.5% of the volume of publications that would be expected based on mortality rate¹. In 2019, Congressional leaders reached a deal to fund research on gun violence for the first time in over two decades, which was long overdue, but the US\$25 million budget that was set aside for the field remains insufficient² and very distant from the projected US\$1.4 billion budget based on the rate of gun-related deaths¹. On top of that, there is a lack of research data on gun ownership, gun availability, and guns in legal and illegal markets; for example, there are restrictions in place that prevent most researchers from using detailed gun trace data for scientific purposes.

And yet, even though this research topic has lagged behind due to the lack of funding and incentives, there is enough scientific evidence that gun control can actually save lives. Data science studies — mostly using causal and statistical methods - have shown that deregulating concealed carry of firearms increases violent crime3; that requiring permits or licenses to purchase guns is associated with a reduced risk of guns being diverted to criminals⁴ and with significant reductions in the incidence of fatal mass shootings⁵; that prohibiting gun ownership by individuals convicted of domestic violence leads to a substantial reduction in gun violence6; and that large-capacity magazine bans can reduce the incidence of

fatal mass shootings⁷. A handful of studies also point to the fact that more guns do not lead to less crimes.

Nevertheless, even after yet another painful tragedy, US lawmakers are still not listening to the science.

Undoubtedly, the problem is not that there is a lack of evidence for the benefits of gun control. It is true that more funding towards gun violence research is urgently needed to answer many of the untouched questions in the field², but we already have enough results to drive meaningful changes when it comes to gun control. US lawmakers must listen to the science and make use of evidence-based research to adjust laws accordingly. And we must stand our ground and speak up. Otherwise, we will be saying "enough is enough" many more times to come.

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