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December 19, 2023

United States Senate
Committee on the Judiciary
Washington D.C.
20510 - 6275

Dear Senate Judiciary Committee,

Thanks for the opportunity to respond to written questions for the Hearing record. I have attached my written responses.

Thank you again for the opportunity to participate in this Hearing, and please do not hesitate to contact me for clarification or for additional information.

Sincerely,

Megan L. Ranney, MD, MPH, FACEP
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Senate Judiciary Committee
The Gun Violence Epidemic: A Public Health Crisis Hearing
November 28, 2023
Questions for the Record
Senator Amy Klobuchar

For Dr. Megan Ranney, President of Public Affairs, Dean of the Yale School of Public Health

Last year the leaders of 10 health systems in Minnesota - based on their first-hand experiences as health care providers – wrote: "we believe it is time to declare gun violence as a public health crisis and to work to prevent the deaths of innocent people of all ages and backgrounds."

- At the hearing, you testified how you cared for a 15-year-old young man who tragically passed away from a gunshot wound. How has your experience, and that of other health workers, provided an understanding of the devastation gun violence has on people, families, communities, and the care workers who treat the victims?

As a physician and public health researcher, I have personally witnessed the harm caused by a gunshot wound – both for the person who is shot, and for their community.

I am not alone. In 2018, my colleagues across the country, from disciplines as varied as trauma surgery, social work, infectious disease, public health, and pharmacology, joined together to describe the effect of a gunshot wound. We used the #ThisIsOurLane hashtag to explain the caring for both the acute and long-term effects of gun violence is very much our lane. We started with the hashtag on social media, and then expanded our reach to the written press[1] *and medical journals.*[2] *It was a spontaneous description of both witnessed and personally experienced trauma.*

We described how taking care of victims, their families, and their community members has given health care providers across the country an unfortunate, visceral understanding of the immediate effects of a gunshot wound on the human body. It's nearly impossible to describe the controlled chaos of a trauma resuscitation to someone who has not experienced it. Providing this care also gives us a deeply personal understanding of the after-effects of the wound. Collectively, we've taken care of patients who return to the emergency department due to post-traumatic stress. We've seen people lose their jobs, descend into homelessness, or be riddled by new psychosocial issues stemming from their injuries. We've seen victims felled by postoperative complications after undergoing surgery to repair a part of their body previously damaged by a bullet. We've taken care of family members who have heart attacks or strokes after finding out that a loved one was shot. We've of course watched the cycle of retaliation that follows an initial shooting.

We also described how caring for victims can overwhelm us.

I know multiple colleagues who have left the practice of medicine or nursing due to the secondary trauma that they experienced. One nurse lost a family member to firearm suicide, and then had to care for a firearm suicide in the emergency department a few weeks later; she had to take a leave. A doctor could not walk back into the ED after caring for victims of a horrific public mass shooting, and now works outside of medicine. Another doctor was unable to continue to watch the killing of Black boys and young men in Philadelphia and has retired from clinical practice. These clinicians' departure from bedside care compounds the effect of gun violence on society.[3]

Just as difficult as the trauma that we witness is the knowledge that it does not have to be this way. As clinicians and public health researchers, we know that disease (and its after-effects) CAN be preventable. Indeed, the lack of attention to stopping this cycle is, perhaps, the most frustrating part of all.

- How would adopting a "public health approach" to gun violence better equip us to prevent gun-related injuries, death, and trauma?

The public health approach is a standard approach to reducing illness, injury, and death across a range of health issues. It comprises four steps: first, quantifying the problem, using data; second, understanding risk and protective factors for illness, injury, or death; third, developing and testing interventions to reduce risk or increase protection; and fourth, scaling the programs that work.[4]

A well-understood example of this public health approach is the reduction in car crash deaths. Over the last 5 decades, we have decreased car crash deaths by more than 70% by applying these standard four steps.[5] *We identified the frequency of car crash deaths; identified risk and protective factors (like wet roads, lack of seatbelts, and drunk driving); tested interventions (like car seats and drunk driving educational campaigns); and then scaled what worked across the country.*

Unfortunately, firearm injuries recently overtook car crashes to become the leading cause of death in children aged 1-19.[6] *Overall, 48,830 Americans in 2021 died from gun-related injuries, which is the highest total since the Centers for Disease Control and Prevention (CDC) began collecting data in 1968.*[7] *The public health approach – much like the one used to reduce car crash deaths – is needed to mitigate the growing rate of preventable firearm injuries and deaths.*

To use this approach, we need more comprehensive, reliable, and timely data on firearm injury and death rates, correlates, risk and protective factors, and consequences. To better develop and test the efficacy of programs or policies, federal funding, particularly through the CDC and the NIH, is needed. Current funding levels, although an improvement from the $0 of appropriations from 1996-2020, are still a pittance of what is needed compared to the level of morbidity and mortality.[8] *Finally, once we have determined what works to reduce firearm injury, deaths, and related morbidity, we can implement and disseminate – with confidence – solutions.*

It is worth mentioning explicitly that although legislation and policy are a necessary part of the public health approach, they are not sufficient. Indeed, some of the most promising public health solutions – such as changes in messaging about safety, improvements in safer storage of firearms, and awareness of risk

factors for firearm suicide – occur outside of the legislative arena.[9,10] *By applying the public health approach, we can therefore create a space where seemingly opposite viewpoints can sit together to reduce the risk of harm for their community; and where we can move past seemingly intractable divides, to protect health.*

Describing gun violence as a public health problem allows us to bring all of these public health skillsets and potential solutions to bear. It expands the scope of what's possible – and offers the possibility of real change in patterns of firearm injury, death, and their after-effects.

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