VIEWPOINT

Firearm Homicide and Suicide During the COVID-19 Pandemic
Implications for Clinicians and Health Care Systems

Debra E. Houry, MD, MPH
US Centers for Disease Control and Prevention, Atlanta, Georgia.

Thomas R. Simon, PhD
US Centers for Disease Control and Prevention, Atlanta, Georgia.

Alexander E. Crosby, MD, MPH
Morehouse School of Medicine, Atlanta, Georgia.

Firearm-related violence is a significant public health problem that requires a comprehensive approach to prevention that includes engagement and action by clinicians and health care systems. The effects of firearm-related violence on health care include immediate treatment for injuries, long-term care (eg, for spinal cord injuries and trauma), and a substantial toll on clinicians related to secondary traumatic stress. Firearms are the method of injury for most homicides and suicides (79% and 53%, respectively, in 2020).[1] The circumstances of 2020, including the COVID-19 pandemic and community–law enforcement tensions related to law enforcement use of force, have potentially contributed to increased risks for homicide and suicide, including exacerbating the social and structural factors that drive racial and ethnic inequities.[1]

A recent report released by the US Centers for Disease Control and Prevention found a 35% increase in the firearm homicide rate in the US between 2019 and 2020, with 14 392 deaths (rate of 4.6 per 100 000 persons) in 2019 and 19 350 deaths (rate of 6.1 per 100 000) in 2020.[1] With this increase, the firearm homicide rate in 2020 was the highest in more than 25 years. The firearm suicide rate in 2020 (24 245 deaths; rate of 8.1 per 100 000 persons aged ≥10 years) stayed near record high levels after steady increases leveled off in 2018.[1]

> The troubling increases and widening disparities related to firearm injuries and deaths observed in 2020 underscore the public health importance of violence prevention.

Several existing inequities in firearm mortality rates widened in 2020. For example, counties with higher poverty levels already had the highest firearm homicide rates, and these counties also experienced the greatest increases. County poverty levels likely reflect a range of risk factors that contribute to violence and inequities. Even though 24% of the US population lived in high-poverty counties in 2020, 39% of the non-Hispanic Black population and 44% of the non-Hispanic American Indian or Alaska Native population lived in these high-poverty counties. In 2020, among males aged 10 to 24 years, non-Hispanic Black youth had the highest firearm homicide rate (77.3/100 000) and non-Hispanic American Indian or Alaska Native youth had the highest firearm suicide rate (23.4/100 000) and these groups experienced the largest rate increases from 2019 (41% and 67%, respectively).[1]

Health care professionals and systems have an essential role in comprehensive strategies to reduce violence and suicide and corresponding inequities in communities. However, medical school curricula do not consistently incorporate firearm safety, violence prevention, or social determinants of health in training. Many clinicians are not comfortable asking patients about firearm injury risk factors[2] and are not trained in trauma-informed care. At the health system level, financial incentives prioritize rapid visits and higher volume that leave less time for patient counseling and prevention; yet the financial costs to systems from caring for individuals who experience firearm-related trauma is substantial.

Many clinicians may not have the experience or be aware of the opportunities to prevent firearm-related morbidity and mortality. For example, in a survey of 1015 family physicians, 46% reported no training in firearm safety counseling and 68% did not feel knowledgeable discussing safe storage devices for firearms. Family physicians who had received formal training about firearm safety counseling were more likely to report a higher level of comfort with asking patients about firearm ownership.[3] Physicians and other health care professionals can enhance the safety of their patients, improve data to inform community efforts, and support system changes to prevent violence and reduce inequities. Examples include pediatricians asking parents about safe storage of firearms at home, emergency physicians and surgeons engaging in hospital-based violence intervention programs and referring injured patients to wraparound services (such as counseling and job training), and behavioral health practitioners assessing suicidality and counseling about access to lethal means. Clinicians also can work with health departments and community partners to share their medical and health care–related expertise in regard to policies and programs that increase economic and household stability and enhance access to care, services, and support (eg, tax credits, housing policies, mentoring, and after-school programs).[4]

Studies of interventions in clinic or community settings to promote safe firearm storage suggest that counseling about safe storage paired with providing a safety device is associated with safer firearm storage practices.[5] If a clinician discusses firearms with a patient or family of a patient, using language that conveys respect for the decision to own a firearm and focusing on shared interests in preventing harm are important for effective communication.[2] Educational resources regarding increasing safe firearm storage practices are

Corresponding Author: Debra E. Houry, MD, MPH, US Centers for Disease Control and Prevention, 1600 Clifton Rd NE, Atlanta, GA 30329 (dhoury@cdc.gov).

available from professional organizations such as the American Academy of Pediatrics. In addition, the Department of Veterans Affairs has multiple efforts involving health care professionals directed at preventing firearm-related, self-inflicted injury and has released resources describing safe storage options, barriers to safe storage, and effective messaging.

Interventions with appropriate referrals for those at risk for violence, including patients seen with a violence or firearm-related injury in the emergency department or who are hospitalized, also could help decrease risk for future violence.[4] For example, hospital-community–partnership models have shown substantial promise for youth. In a report that involved 726 individuals (aged 14-18 years) who were randomized to either a control group or to a motivational interviewing intervention with skill building and referrals to services, those in the intervention group reported lasting reductions in peer aggression and victimization.[4] Similarly, a hospital-based peer intervention for 112 youth treated with violent injuries was associated with a 60% lower risk of criminal involvement with the justice system for youth exposed to the program compared with controls (7.0% vs 17.4%).[4,6]

Health care professionals and hospital systems also could implement a universal trauma–informed care approach. This approach assumes that any person seeking services may have experienced trauma such as prior violence exposure, concentrated poverty, or racism and that these experiences could present as distrust or as a "difficult patient" in the clinical setting. Using a trauma-informed care approach with patients after a violent event or injury could help improve the patient-clinician encounter and lessen retraumatization. After training was implemented for trauma-informed care among 318 hospital employees at 2 trauma centers, physician referrals increased from 7.3% to 47.8% over a 4-year period for identification of patients with a need for long-term, trauma-focused resources.[7] The Substance Abuse and Mental Health Services Administration provides guidance on an organizational approach that includes governance, physical environment, cross-sector collaboration, and training and workforce development.

Accurate, timely, local data could enrich understanding of inequities in violence, guide prevention decisions, and enable ongoing evaluation and health system–level quality improvement. Clinicians could bring their unique medical perspective to fatality review committees, identify trends to support community collaborative efforts, and document circumstances of an injury to inform prevention efforts. One example of this clinical partnership, the Cardiff model, merges law enforcement data with anonymized and aggregated data on the location, timing, and mechanism of assault-related injuries treated in emergency departments. These merged data are more complete and could be used in local collaborative efforts to implement tailored violence prevention strategies. Successful implementation of the model in Cardiff, Wales, in 2003 was associated with a 42% relative reduction in monthly hospital admission rates for violence-related injuries (from 7/100 000 to 5/100 000) compared with an increase in 3 comparison cities (5/100 000 to 8/100 000)[8] and $15 in health system savings for each $1 spent.[9] Testing in Atlanta, Georgia, has demonstrated the feasibility of the model in the US, but full implementation of the partnership with effects on violence outcomes has yet to be replicated.[10]

Although substantial evidence exists for these and other violence prevention strategies, health care professionals could help address important research and implementation gaps. For example, additional research on safe firearms storage counseling might enhance clinician comfort, efficiency, and patient acceptability while also evaluating effects on injury outcomes. Clinicians could also continue to evaluate innovative hospital and health system–based prevention strategies for effects on firearm homicides and suicides and the cost benefits. Clinicians also could have a critical role in building and sustaining data systems to inform local action, and in raising awareness about the social determinants of health and how policies (eg, economic, health care, educational, housing) could help reduce inequities and disparities in violence.

The troubling increases and widening disparities related to firearm injuries and deaths observed in 2020 underscore the public health importance of violence prevention.[1] Clinicians and health systems could intervene and prevent future violence through strategies such as counseling on lethal means, trauma-informed care, and hospital-based interventions. In addition, understanding community and systemic dynamics that contribute to risk for violence and disparities is essential when caring for individual patients and when working to prevent violence in the community.

ARTICLE INFORMATION

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