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Emergency Physicians and Firearms: Effects of Hands-on Training



Emergency department (ED) providers have opportunities to prevent firearm injuries or deaths; ED-based interventions include violence intervention programs and counseling about reducing firearm access to prevent suicide.¹ Yet ED providers often do not counsel patients about firearms, in part from knowledge gaps or discomfort discussing firearms. Specific firearm education, including by law enforcement officers, may help providers understand how they help prevent gun violence.

We held a 3-hour in-person educational session at a gun store and firing range to teach ED providers about firearms and related injuries. Lectures covered the epidemiology of firearm injuries and deaths; a hands-on introduction to firearms, ammunition, and storage devices, presented by a National Rifle Association–certified firearm instructor; a discussion about interactions between ED staff and law enforcement officers, facilitated by local law enforcement officers; and when and how to talk with patients about firearm access. The event ended with an optional session in the shooting range.

Twenty-six attendees included ED providers (n=21; 81%), trauma surgeons (n=2; 8%), and nonprovider university leaders (n=3; 11%). Sixteen attendees (62%) were men; most attendees completed the anonymous pretest (n=23) and posttest (n=21). We scored knowledge questions as incorrect or correct and dichotomized attitude questions as “disagree/strongly disagree” versus “agree/strongly agree.” The study was approved by the Colorado Multiple Institutional Review Board.

At baseline, attendees answered a mean of 2.85 of 6 knowledge questions correctly; this increased to 5.09 after the session ($P<.001$). At baseline, 61% of respondents agreed or strongly agreed that they were comfortable talking to patients about firearms, but only 35% were comfortable identifying which patients to talk to; these each increased significantly after the lectures.

In this novel training, we demonstrated improvement in provider gaps in knowledge and comfort with firearms. A recent review found few studies addressing training in this area, with only one validating its outcomes.² Development of firearm continuing medical education may reflect a powerful opportunity for improving patient care because it may increase the likelihood of counseling patients about firearms.^{3,4} Online and lecture-based education may be efficient for most medical topics; however, firearms are unique in that knowledge and comfort might require hands-on learning. Future work should compare physician knowledge and comfort outcomes after traditional versus hands-on training about firearms. It should also consider tailoring sessions to different physician specialties, including removal of the law enforcement officer module when less relevant.

Past work has demonstrated that, among gun owners, 14% believed their physician was knowledgeable about guns, 8% believed physicians had a responsibility to discuss guns, and 71% would not follow their physician’s advice about gun storage.⁵ Such findings underscore the need for physicians to engage in discussions focused on patient-centered decisionmaking.

To our knowledge, this was the first event of its kind. Our novel, in-person, emergency physician firearm training represents a successful pilot session for increasing physician knowledge and comfort with firearms—and a step forward in improving respectful care for individuals who own and use guns and for prevention of firearm injuries and deaths.

Marian E. Betz, MD, MPH

Vikhyat S. Bebarta, MD

*Department of Emergency Medicine
University of Colorado School of Medicine
Aurora, CO*

William DeWispelaere, BA
University of Colorado School of Medicine
Aurora, CO

Whitney Barrett, MD
Department of Emergency Medicine
University of Colorado School of Medicine
Department of Emergency Medicine
Denver Health Medical Center
Denver, CO

Michael Victoroff, MD
Department of Family Medicine
University of Colorado School of Medicine
Aurora, CO

Kayla Williamson, MS
Diana Abbott, PhD
Department of Biostatistics and Informatics
Colorado School of Public Health
Aurora, CO

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