Editorial

Active Shooter Drills: A Closer Look at Next Steps

The novel coronavirus has rightfully triggered a public health emergency; however, it has also diverted the attention of the nation away from the enduring crisis of gun violence, especially gun violence in our nation’s schools. Because firearms are the second leading cause of death for adolescents [1] and gun access is strongly correlated with unintentional and intentional injury [2], we must continue to focus on the health of our students and schools. Schools serve as a place for social development [3], and acts of violence often occur at school [4], adversely influencing healthy development. For example, in school shootings alone in the United States between 1996 through 2019, there have been approximately 196 students and 30 school staff killed and another 243 wounded [5]. These data suggest the damage inflicted by school shootings extend far beyond students.

Although the likelihood of a school shooting in any given school district remains statistically low, in the absence of strong legislation, schools have taken action by implementing active shooter drills. For instance, 95% of American public schools had active shooter drills in place during the 2015–2016 school year [6]. These drills are often referred to as “lockdown drills” and involve confining students to specific areas with additional instructions in the event of an incident.

However, as noted by Moore-Petinak et al., in this edition of the Journal of Adolescent Health [7], little research has attempted to include the perceptions of students impacted by these active shooter drills. Moore-Petinak et al. [7] conducted a qualitative study analyzing adolescents’ perceptions of gun violence and active shooter drills. These researchers concluded that very few youth reported receiving evidence-based active shooter drill training and that the drills they did receive caused emotional distress where about 60% reported feeling unsafe, scared, helpless, or sad as a result of experiencing active shooter drills. Moreover, although about 58% of youth reported that active shooter drills teach them what to do if such a situation presents itself, they were uncertain of their ultimate benefit.

Their research also identified fidelity challenges in implementing evidence-based active shooter drill strategies. If schools are implementing only parts of evidence-based active strategies, this alone may contribute to part of the emotional distress that Moore-Petinak et al.’s study [7] sample of students is reporting. This is particularly unsettling with the finding that students reported such drills may actually inform potential shooters of the actions schools may take in a given situation. This perception is not unfounded as The Violence Project has determined from a review of mass shooters from 1966 to 2019 that (1) nearly all were current or former students and (2) these students displayed warning signs before the incident [8]. Combined, these findings present multiple opportunities for school personnel and those concerned with the well-being of youth to develop more comprehensive approaches to complement active shooter drills.

At the individual level, we know from the general strain theory [9] that females are more likely to respond to strains such as peer rejection, being bullied, or a victim of gossip with depression or self-blame, whereas males are more likely to respond with anger and to blame others, which may lead to externalizing behaviors such as violent crime [10]. This may explain why 96% (50 out 52) of active school shooters in the United States from 2000 to 2017 were male [6], suggesting male gender is a strong, independent risk factor for harming others. Therefore, monitoring patterns of behavior and responding quickly to students experiencing strain may be useful in identifying vulnerable students early and connecting them with appropriate services before tragic violence occurs.

Moore-Petinak et al.’s [7] study also suggests additional research is necessary to better understand the critical components of effective shooter drills and how to successfully implement them on the one hand, and how best to prepare students, on the other. Thus, beyond understanding individual-level risk factors designed to identify vulnerable students, systems-level approaches are also necessary. For example, implementation research could identify facilitators and barriers to successful implementation of evidence-based strategies, and school leaders could focus on developing a strong school climate to foster trusting and positive relationships and connectedness among faculty, staff, and students.

At the interpersonal and organizational levels, school leaders set the tone and the expectations for behavior, which then affects faculty and staff and subsequently students. Therefore, executing active shooter drills successfully starts at the top and far in advance of the drill itself by fostering safe and supportive learning environments. To this end, research [11]
has demonstrated higher perceptions of academic support were strongly associated with not only higher reported grade point averages but also with lower reported incidents of fighting and being bullied and increase in feeling safe at school. Social-emotional learning programs are associated with reductions in violence perpetration because they help adolescents develop a shared set of skills that help them thrive in their learning and social environments by more effectively handling life challenges [12]. Furthermore, noteworthy among successful school-based bullying interventions [13,14] are the modification of the school climate, including but not limited to, increased teacher involvement and supervision and clear order and disciplinary policies to improve the nature of relationships among teachers, students, and their school.

For schools and districts that continue to conduct active shooter drills, Everytown for Gun Safety Support Fund, the American Federation of Teachers, and the National Education Association offer additional evidence-based guidance [15]. These groups advocate for avoiding drills simulating actual incidents: notifying parents, students, and teachers in advance of planned drills; creating age and developmentally appropriate content in conjunction with teachers and school-based mental health specialists; combining drills with support systems to address student well-being; and evaluating drill effectiveness. Some of these recommendations are also consistent with those made by Moore-Petinak et al. [6].

Finally, at the community and public policy levels, grass roots efforts such as the March of Our Lives gun-safety movement must continue their demands for greater action from lawmakers to pass legislation addressing gun violence and limiting gun access. These capable advocacy groups must continue to point out successful examples from other industrialized nations where gun violence has been significantly reduced. For example, Japan experienced just six gun deaths compared to 33,599 in the United States in 2014 [16]. Japan has accomplished this milestone through a variety of policies, including mandatory educational training, written and shooting examinations, mental health and drug screenings, and criminal record searches. Even when citizens are granted a gun license, it expires after three years, handguns are not permitted, new cartridges can only be purchased by returning used cartridges, gun retailer densities are limited, and police reserve the right to inspect, search, and seize weapons. While some of these policies may not be possible in the United States owing to individualistic cultural norms and freedoms, recent research [17] suggests child access protection laws (making the storage of guns or ammunition accessible by a child illegal) display the strongest evidence of subsequent reductions in fireman deaths when compared to right-to-carry and stand your ground laws. Hence, there are clearly steps our nation could take to further protect our most vulnerable national treasure: our children.

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