election results as it has been thought to do.5 The Sunlight Foundation reports that less than 5% of the NRA's campaign spending in 2012 went to races that ended with the result it was seeking. Mayor Michael Bloomberg of New York has repeatedly declared his intention to establish a well-funded electoral counterweight to the NRA to advance a "mainstream agenda" on firearm policy. President Barack Obama has appointed Vice President Joe Biden to chair a new task force that will develop "specific proposals" for policy reform legislation no later than January.

This time, the circumstances are different. The outcome will be different only if we make it so. The interventions proposed here will not end firearm violence in the United States, but they will reduce it, and that's a goal worth fighting for. If Sandy Hook, Aurora, and the others are what it takes for us finally to confront this challenge, they will still be terrible beyond description. We will still share responsibility for them. But it will be of some comfort to know that all those students, educators, moviegoers, and temple-goers did not die in vain.

Disclosure forms provided by the author are available with the full text of this article at NEJM.org.

From the Department of Emergency Medicine, School of Medicine, University of California, Davis, Sacramento.

This article was published on December 26, 2012, at NEJM.org.

1. Ludwig J, Cook PJ. Homicide and suicide rates associated with implementation of the Brady Handgun Violence Prevention Act. JAMA 2000;284:585-91.

2. Wintemute GJ, Drake CM, Beaumont JJ, Wright MA, Parham CA. Prior misdemeanor convictions as a risk factor for later violent and firearm-related criminal activity among authorized purchasers of handguns. JAMA 1998;280:2083-7.

3. Wintemute GJ. Association between firearm ownership, firearm-related risk and riskreduction behaviors, and alcohol-related risk behaviors. Inj Prev 2011;17:422-7.

4. Wintemute GJ, Wright MA, Drake CM, Beaumont JJ. Subsequent criminal activity among violent misdemeanants who seek to purchase handguns: risk factors and effectiveness of denying handgun purchase. JAMA 2001;285:1019-26.

5. Waldman P. The myth of NRA dominance part I: the NRA's ineffective spending (http://thinkprogress.org/justice/2012/02/ 09/421893/the-myth-of-nra-dominance-partithe-nras-ineffective-spending).

DOI: 10.1056/NEJMp1215491

Copyright © 2012 Massachusetts Medical Society.

Social Withdrawal and Violence — Newtown, Connecticut

John T. Walkup, M.D., and David H. Rubin, M.D.

Tn the aftermath of the great Ltragedy in Newtown, Connecticut, the mental health community is responding to our own and others' desperation to understand why this event occurred and is advocating for strategies that might prevent similar events in the future. Discussion has focused on whether Adam Lanza was mentally ill, the risk of violence among the mentally ill, access to high-quality mental health care, gun control, and the relationship between the media and violence. An important dimension that has been less discussed is the question of social withdrawal and isolation, within and beyond the confines of mental illness. For the withdrawn and isolated and the angry and alienated, there are deep-seated barriers to care, and

there may exist a small subgroup that is uniquely vulnerable to the seductive power of violence in our culture.

Whether Adam Lanza was mentally ill and whether he had Asperger's syndrome, as has been alleged, will never be known. But it's important to recognize that mental illness is an insufficient explanation for mass murder. The pathway to mass murder is inexplicably complex, involving a confluence of factors that come together only rarely.^{1,2} Nevertheless, there appears to be reasonable consensus that Lanza was withdrawn and isolated early in his life and that that condition persisted through adolescence. Withdrawn and isolative behavior is of interest to the medical community for reasons beyond its association with people who have committed school shootings. Indeed, such behavior is quite common, often appears early in childhood, is relatively persistent and stable, and can be very responsive to treatment.³ Yet withdrawn and isolative behavior usually goes undetected or unaddressed until impairment is obvious; at its extreme, it can manifest in a shocking murder and suicide.

This behavioral dimension actually includes a variety of behaviors and developmental trajectories that have varied and important implications and outcomes; it encompasses the lack of interpersonal reciprocity seen in children with autism spectrum disorders, avoidance and inhibition presenting before puberty in anxious children, withdrawal due to

The New England Journal of Medicine

Downloaded from nejm.org by NICOLETTA TORTOLONE on January 31, 2013. For personal use only. No other uses without permission.

Copyright © 2013 Massachusetts Medical Society. All rights reserved.

traumatic life-altering experiences, and social withdrawal as observed in adolescent depression. Withdrawal or isolation can also precede the development of schizophrenia and is commonly included as a component of "the schizophrenia prodrome." Finally, there is a very small group of withdrawn and isolated children who lack empathy and are cold and callous toward other human beings. Early identification of withdrawn and isolative behavior can go a long way toward improving outcomes for young people, since effective evidence-based treatments are increasingly available for each of these situations.

The facts about the risk of violence in the mentally ill are relatively straightforward.4 The vast majority of people with psychiatric disorders are not violent, and the mentally ill do not commit a substantial proportion of violent crimes in the United States. When violence is committed by a mentally ill person, it usually occurs in reaction to an interpersonal provocation and is often charged with emotion. Only rarely do mentally ill people engage in dispassionate, planned, predatory violence toward others. In school shootings, there has been evidence of both a strong emotional component - feelings of anger and alienation - and extended and detailed planning that went undetected or unaddressed.1

Even if early signs were noticed, a mentally ill, withdrawn, isolated young man and his family would face barriers to full engagement in psychiatric treatment. Severely mentally ill people, especially if they are angry and alienated, do not often voluntarily seek treatment, and even those who do may not be fully engaged or cooperative. Young adults 18 years of age or older must consent to treatment; their families, as concerned as they may be, aren't necessarily able to bring them to a care provider and can't force them to continue receiving treatment. Moreover, our standards for confidentiality preclude involvement of concerned parents unless it has been specifically authorized by the young person. Also, pursuing care for individuals at risk has become more difficult. Mental health professionals have capitulated to a higher threshold for hospitalization, in part because of standards dictated by insurers; clinicians may also second-guess or fear civil commitment proceedings and so fail to advocate for higher levels of care.

The interface between mental health care providers and these important safeguards of individual liberty can result in delay in, or a complete lack of, a cohesive and comprehensive response to young adults who are experiencing psychiatric difficulties. Particularly, mentally ill young people have the capacity to mask their intent to harm themselves or others.

At the societal level, many challenges confronting efforts to improve access to high-quality mental health care will have to be addressed in upcoming policy discussions. Stigma is still the biggest barrier to effectively engaging individuals and families in the mental health system. But fully addressing the mental health burden in the United States would also be costly. Mental illness is common, often affects people when they're young, can last a long time, and puts people at risk for drug use and other maladaptive behaviors. Though effective treatments exist, some psychiatric disorders are not particularly responsive to treatment and can lead to substantial, sustained, and costly disability. Moreover, given the diverse types of mental health care practitioners and psychiatric practices, patients may not receive the most effective treatments that are known or available. In addition, many practitioners with expertise in evidence-based treatment do not accept insurance, since reimbursement rates are uniformly low.

Psychotherapy and medications can be very effective, but benefit from psychotherapy depends on the patient's motivation and effort, and many patients - and many parents of mentally ill children — don't want to consider the use of medication, even if it has been proven safe and effective. The social contexts of mental health treatment also influence its effectiveness: public uncertainty regarding the safety of medications, past malfeasance by the pharmaceutical industry, and political and religious forces that challenge the fundamental brain basis of mental conditions have affected the use of even safe and effective medications and psychotherapies.

The tragedy in Newtown has revived many Americans' passion for gun control and has drawn attention to the media's influence on violent behavior. What is missing from most related discussions is a focus on the seductive, powerful subculture that celebrates and advocates violent and antisocial behavior. Most people are not interested in and do not engage with this subculture, and most who do so are

N ENGLJ MED 368;5 NEJM.ORG JANUARY 31, 2013

The New England Journal of Medicine

Downloaded from nejm.org by NICOLETTA TORTOLONE on January 31, 2013. For personal use only. No other uses without permission.

Copyright © 2013 Massachusetts Medical Society. All rights reserved.

not seduced into action by antisocial themes and violence in films, video games, written materials, or interest groups. However, a very small minority of angry and alienated mentally ill persons may gain a sense of belonging and support from this subculture and may be particularly vulnerable to being seduced into action.

As we launch into relevant policy debates, mental health professionals are best tasked with addressing the problems in our system that make it difficult for individuals and their loved ones to obtain effective, high-quality mental health care early in life. Since most psychiatric disorders begin in childhood or adolescence, more research is needed on the progression of mental health problems from childhood through adolescence and into adulthood. More specifically, research is needed to elucidate the multiple trajectories of the early withdrawn and isolated behavior that is so common in the reported histories of people who perform violent acts. Finally, discussions of gun control and violence in the media need to delve deeper and illuminate the dark subculture of alienation and antisocial violence that may engage and seduce rare individuals into performing extreme acts of violence like the one in Newtown.

Disclosure forms provided by the authors are available with the full text of this article at NEJM.org. From the Division of Child and Adolescent Psychiatry, Department of Psychiatry, Weill Cornell Medical College and New York– Presbyterian Hospital, New York.

This article was published on December 28, 2012, at NEJM.org.

1. Flannery DJ, Modzeleski W, Kretschmar JM. Violence and school shootings. Curr Psychiatry Rep 2013;15:331.

 Follman M, Aronsen G, Pan D. A guide to mass shootings in America. Mother Jones. December 15, 2012 (http://www.motherjones. .com/politics/2012/07/mass-shootings-map).
Rubin DH, Althoff RR, Walkup JT, Hudziak JJ. Cross-informant agreement on child and adolescent withdrawn behavior: a latent class approach. Child Psychiatry Hum Dev 2012 September 12 (Epub ahead of print).

4. Friedman RA. In gun debate, a misguided focus on mental illness. New York Times. December 17, 2012 (http://www.nytimes .com/2012/12/18/health/a-misguided-focus-on-mental-illness-in-gun-control-debate .html?_r=0).

DOI: 10.1056/NEJMp1215605

Copyright © 2012 Massachusetts Medical Society.

Preventing Gun Deaths in Children

Judith S. Palfrey, M.D., and Sean Palfrey, M.D.

A s practicing pediatricians who have lost patients to gun violence, we join our colleagues in mourning the 20 children and their teachers who were killed in Newtown, Connecticut, on December 14, 2012. Our sadness is deepened by our knowledge that the deaths, terror, and posttraumatic stress of the relatives and friends left behind could have been prevented.

Prevention is the core of pediatric work. We aim to protect children from all things that can harm them. Injuries are the biggest threat to U.S. children over 1 year of age. In 2010, gun-related injuries accounted for 6570 deaths of children and young people (1 to 24 years of age). That includes 7 deaths per day among people 1 to 19 years of age. Gun injuries cause twice as many deaths as cancer, 5 times as many as heart disease, and 15 times as many as infections (see graph).¹

How can we prevent gun injuries? We know the behaviors that place children and adolescents at high risk. Little children explore their worlds without understanding danger, and in one unsupervised moment, an encounter with a gun can end in fatality. School-age children often enter the worlds created by television shows, movies, and video games. Because of their developmental age, school-age children don't necessarily understand that people who are really shot may really die. A firearm in their hands can transform fantasy into tragedy. Even in our own lives, this risk has been manifest: to this day, one of us is haunted by the childhood memory of aiming a loaded rifle at a babysitter.

Teenagers get into fights over girlfriends or sneakers, get furious or scared. Alcohol and drugs may impair their judgment. A fistfight may cause transient injuries, but a gunfight can kill rivals, friends, or innocent bystanders. Depressed young people may attempt suicide. Less than 5% of such attempts involving drugs are lethal, but 90% of those involving guns are.2 Our niece might be alive today if she hadn't had easy access to a handgun at 18. Finally, permitting guns to reach the hands of severely deranged persons can have monstrous results. The American Academy of Pediatrics (AAP), recognizing all these vulnerabilities, declared in

The New England Journal of Medicine

Downloaded from nejm.org by NICOLETTA TORTOLONE on January 31, 2013. For personal use only. No other uses without permission.

Copyright © 2013 Massachusetts Medical Society. All rights reserved.