The Link Between Mental Illness and Firearm Violence: Implications for Social Policy and Clinical Practice

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Abstract

The United States has substantially higher levels of firearm violence than most other developed countries. Firearm violence is a significant and preventable public health crisis. Mental illness is a weak risk factor for violence despite popular misconceptions reflected in the media and policy. That said, mental health professionals play a critical role in assessing their patients for violence risk, counseling about firearm safety, and guiding the creation of rational and evidence-based public policy that can be effective in mitigating violence risk without unnecessarily stigmatizing people with mental illness. This article summarizes existing evidence about the interplay among mental illness, violence, and firearms, with particular attention paid to the role of active symptoms, addiction, victimization, and psychosocial risk factors. The social and legal context of firearm ownership is discussed as a preface to exploring practical, evidence-driven, and behaviorally informed policy recommendations for mitigating firearm violence risk.

Contents

1. INTRODUCTION

The United States is one of only three countries with a Constitutionally protected right to own firearms; of the three, it is the only one with minimal restrictions on that right (Elkins 2013). With over 350 million privately owned firearms (Ingraham 2015), the United States substantially exceeds all other countries in both per capita ownership of guns and absolute number of guns: Approximately 30% of all privately owned firearms in the world are in the hands of US residents (Small Arms Surv. 2011).

The number of lives taken with guns also makes the United States exceptional. The US rate of suicide by firearm is 8 times higher and the rate of homicide by firearm is 25 times higher than the rates in other economically developed countries (Grinshteyn & Hemenway 2016). Although mass shootings capture the news cycle on an all too frequent basis, the quotidian toll of gun-related violent crime, domestic violence (DV), and suicide shatters lives and erodes communities. Mass shootings generally account for 1% or less of all firearm violence, and suicides routinely take twice as many lives as homicides. The public health impact of firearms in the United States is staggering.

Popular media, meanwhile, does little to keep the problem in perspective. The common perceptions driven by news media are that gun violence and mass shootings are increasing and are at historically high levels. Firearm homicide rates have actually decreased despite widespread perceptions to the contrary (Cohn et al. 2013). Estimates of increases in mass shootings, meanwhile, are tenuous at best. Although there has been some suggestion that the absolute number and frequency of these events may have seen a recent uptick (Blair & Schweit 2014, Schweit 2016), other studies suggest that mass shootings have maintained a relatively steady share of approximately 1% of US violence over the past century (Duwe 2004, Stone 2015).

A pernicious and false but increasingly common message promoted in the media is that people with mental illness are prone to violence in general and are responsible for mass shootings (McGinty et al. 2014b, 2016b). Studies consistently indicate that, even among mass murders and shootings, mental illness is a factor in a minority of these events (Duwe 2004, Fox & DeLateur 2014, Stone 2015, Taylor 2016, Vossekuil et al. 2002). Nonetheless, the notion that mental illness drives these events is stoked regularly, and the impact of this trend in US media coverage of violence is so significant that it is now seen to be distorting perceptions even outside of the United States (Jorm & Reavley 2014).

The notoriety given to mass shootings and the link made to mental illness have two effects. First, they promote stigma by conflating mental illness and violence—a bias that affects patients, providers, the public, and policy makers (Clement et al. 2015, Corrigan et al. 2005, Price & Khubchandani 2016). Second, they distract the public and policy makers from dealing with the issues of violence and mental illness, and gun violence in particular, in an empirically grounded, frank way.

The simplistic model of mental illness driving mass shootings or violent crime leads to a simplistic, politically popular, but ineffectual policy solution: provide more mental health services (Gold 2013, Pinals et al. 2015). Who could reasonably be against that idea? Policy makers and politicians are attracted to this solution because it helps them avoid more complicated and politically treacherous debates about effective limits on gun ownership, tracking, or registration. Given the overloaded state of current mental health services, mental health professionals are certainly tempted to endorse this solution and to take such funds, even knowing that access to mental health services will have little impact on gun violence, mass shootings, or violence in general. Such Faustian bargains have foreseeable consequences, though, including increased stigma for mentally ill individuals and the diversion of necessary resources from better interventions (Rozel 2016). Policies intending to mitigate gun violence risk by narrowly focusing on the narrow intersection between mental illness and mass shootings will be intrinsically limited in scope and utility and may potentially disrupt effective elements of the mental health system (Appelbaum 2013, Metzl & MacLeish 2015).

There are additional issues for mental health practitioners beyond the ethics and utility of endorsing funding for mental health services as a solution to gun violence. Firearm access and storage is a bona fide and legitimate focus of clinical concern in a number of cases on many practitioners' caseloads. The mental health provider's role in the direct management of firearm access and the overall burden of firearm violence should not be neglected. In addition, innovative policy proposals for regulating access to firearms often imply substantial involvement of mental health professionals in making judgments about the risk of an individual's access to firearms or of the lifting of a provision prohibiting an individual's access. As discussions about ways to limit the damage caused by gun violence expand, mental health professionals will likely be called upon more frequently to be part of proposed solutions regarding this issue.

At the outset, it must be recognized that the impact of firearms is highly varied: Injuries due to accidental discharge, suicide, homicide, and mass shootings have different risk factors and will entail different interventions to mitigate risk at individual and population levels. The topics of accidental shootings and suicides, though vitally important from a public health perspective and intriguing from an evidence-based medicine and policy perspective, are left for more in-depth analyses by other authors in other forums. This article addresses the intersection between mental illness and firearm violence and how the nature of that intersection frames clinical and policy interventions to mitigate the damage of gun violence. This review focuses on how scientific information can inform these efforts, but the ethical and legal aspects of working with a legally protected social determinant of a public health issue must also be considered in any policy analysis (Childress et al. 2002).

2. MENTAL ILLNESS, VIOLENCE, AND GUN VIOLENCE

2.1. Mental Illness and Violence

A useful starting point for examining the relationship between mental illness and violence, particularly gun violence, is to look at this issue from a broad, population-based perspective. Epidemiological studies have shown an association between having a mental illness and being involved in crime or violence (Elbogen & Johnson 2009, Stuart 2003, Tiihonen et al. 1997, Walsh et al. 2002). Although the power of this link is greatly overestimated by the general public (Pescosolido 2013), it has been documented repeatedly that people who report diagnosable levels of psychiatric symptoms also report more involvement in acts of violence toward others than the general population reports. An even stronger association emerges, however, between being a victim of violence and having a mental illness (Desmarais et al. 2014, Teplin et al. 2005), with individuals with mental illness at least three times more likely to be targets than to be perpetrators of violence (Choe et al. 2008). Several studies have also indicated that, among people with severe psychiatric illness, recent violent victimization is one of the best predictors of imminent violence risk (Hiday et al. 2001, Johnson et al. 2016, ten Have et al. 2014).

The most basic lesson of this epidemiological literature is that the overwhelming majority of people with mental illness are not violent and the majority of people who are violent do not have identifiable mental illness (Choe et al. 2008). Because an overwhelming percentage of people with mental illness are not violent, and because the occurrence of serious mental illness is relatively low, it is estimated that only about 4% of criminal violence can reasonably be attributed to mentally ill individuals (Metzl & MacLeish 2015, Swanson 1996). This means that even if all of the association between mental illness and violence could somehow be eliminated, we would still have to confront 96% of the violence in the United States (Swanson 2008, 2015).

Studies exploring gun violence by people with mental illness are limited, likely due to the rarity of this type of violence. One study has shown that gun violence by people with severe mental illness occurs in 2% or less of patients in the year after discharge from inpatient settings; rates may be lower among less acute patients (Steadman et al. 2015). Clearly, there is a fairly small nexus at the intersection of people who are mentally ill, armed, and potentially violent. Again, even if all of these individuals could be identified and stopped from engaging in gun violence, the impact on the overall level of gun violence would not be substantial. At a population level, it seems that the designation of being "mentally ill" does little to identify a useful group for targeted violence prevention policy.

From the results of group comparison studies, it is apparent that the estimated relationship between involvement in violence and the presence of a mental illness varies considerably depending on the type of disorder examined and the methodology used. Serious mental illnesses, such as schizophrenia and depression, generally show associations that are several times weaker than those seen in more behaviorally based diagnoses, such as substance abuse or antisocial personality disorders (Elbogen & Johnson 2009, Oakley et al. 2009, Steadman et al. 1998). There is some evidence that individuals experiencing first-episode psychosis could be at elevated risk for involvement in violence, with levels of involvement about 3–5 times what might be expected (Large & Nielssen 2011, Winsper et al. 2013). In addition, meta-analyses show considerable variation among estimates of association related to study design features and evaluation of moderating risk factors (Fazel et al. 2009, Fazel & Yu 2009, Witt et al. 2013). Although a majority of studies show an association between serious mental illnesses and subsequent arrests for violence, some field studies using self-report methods (Lidz et al. 1993, Monahan et al. 2001) show that individuals with serious mental illness alone have no higher likelihood of violence than their neighbors.

2.2. Substance Use and Violence

A number of studies identify substance use and substance use disorders as particularly strong factors increasing the chance that an individual with a mental illness will get involved in violence (Mulvey et al. 2006, Swanson et al. 1990). The self-report studies cited in the previous section (Lidz et al. 1993, Monahan et al. 2001, Steadman et al. 1998) indicate that individuals diagnosed with both a mental illness and a substance use disorder have a higher prevalence of involvement in violence than their neighbors. Other investigations also indicate that increased levels of substance use are associated with increased likelihood of violence in patients in the community (Skeem et al. 2004), and comorbid mental illness is often considered a critical risk factor for violence among people with substance use disorders (Chen & Wu 2016). Illicit substance use is associated with firearm violence in particular, especially when that substance use is also associated with involvement in illegal drug sales (McGinty et al. 2016a). Another review has identified a series of intersections between violence risk and alcohol use, including alcohol intoxication as a risk factor for being shot, firearm suicide, and accidental firearm injury (Branas et al. 2016).

2.3. Psychosocial Risk Factors and Violence

The literature on psychosocial risk factors for violence also indicates that certain characteristics of an individual, e.g., age, socioeconomic status, and prior criminal involvement, are much more statistically predictive of involvement in violence than the presence of a mental illness (Bonta et al. 1998). The power of mental illness as a predictor diminishes greatly when these characteristics are taken into account (Elbogen & Johnson 2009, Prins et al. 2015, Skeem et al. 2014). This is most likely the case because mental illness and mental deterioration are rarely seen as the major forces behind involvement in violence (Mulvey et al. 2006). Most violent incidents involving individuals with a mental illness involve either a family member or a close acquaintance (Newhill et al. 1995, Steadman et al. 1998) and are usually embedded in a history of tumultuous encounters. Moreover, examination of crimes involving individuals with mental illness indicate that less than 20% of them are directly preceded by exacerbated symptoms of the illness (Peterson et al. 2014). It is rare that the presence of a mental illness is a dispositive explanation for an act of violence (Monahan & Steadman 2012, Skeem et al. 2016). Mental illness is one factor in a person's life that is sometimes relevant to involvement in violence, but it is very rarely the only factor, or even a causal factor.

A particularly salient social and contextual factor to consider for its relation to violence in mentally ill individuals is exposure to and involvement in DV. Assessment and screening for current or prior DV has become a standard of care in most clinical disciplines, and mental health professionals are regularly called on to provide interventions for offenders despite the relatively small impact of most DV interventions (Babcock et al. 2004). An estimated 30% of patients in treatment have been victims of DV, with women with depression or anxiety at the highest risk (Oram et al. 2013, Trevillion et al. 2012). This issue is clearly within the purview of mental health care and offers an opportunity for the prevention of violence.

It is clear that the social dynamics of DV situations are particularly relevant to assessing and preventing patient violence. Violence involving people with mental illness—both as targets and as perpetrators—is far more likely to involve family members or acquaintances (Buila & Marley 2001, Estroff et al. 1998). Similarly, 90% of women who are murdered are killed by a person they know, and half of these are victims of a current or former partner or spouse (Catalano et al. 2009). In contrast, a recent meta-analysis places the risk of being killed by a stranger with severe psychotic illness at 1 in 14 million per year (Nielssen et al. 2011).

This review of the literature about the correlates of violence in individuals with mental illness highlights the importance of recognizing the social context surrounding an individual and fluctuations in the state of an individual's illness. Categorization of individuals by illness appears to introduce a large amount of interindividual heterogeneity on factors relevant to the occurrence of violence, and as a result, the use of psychiatric diagnosis or symptom level alone has very limited utility as a tool for the prediction of violence risk (Rozel et al. 2017). Numerous factors can increase violence risk in people with mental illness, including prior criminal or violent behavior, prior victimization, substance use and intoxication, nonadherence to treatment, and the presence of other psychosocial stressors such as economic distress and housing instability (Swanson et al. 2014).

This reality calls for approaches to identifying individuals at risk in terms of their social context and fluctuations in their life situation and behavior over time (Mulvey & Lidz 1995). Mental illnesses progress, deteriorate, stabilize, or get better with time and circumstance; they are a condition, not an indicator of a person's unique dangerousness (Adam 2013). Like pulmonary disorders or heart conditions, mental illnesses must be managed to avoid decompensation and the harm that might occur during those periods of decompensation. Approaches that frame risk as an interaction of both static (or set) aspects of a person (such as history of prior violence or victimization) and dynamic (or shifting over time) factors (such as level of substance use or decreased emotion regulation) align with the greater body of the research on the factors related to violence in individuals with and without mental illness (Douglas & Skeem 2005). This framework can lead to actionable interventions to limit violence risk and address gun violence more effectively. However, any of these approaches would also present new challenges for mental health professionals.

3. THE SOCIAL AND LEGAL CONTEXT OF GUN OWNERSHIP IN THE UNITED STATES

3.1. Gun Ownership and Gun Owners

Any meaningful framing of the problem of gun violence—and any hope of enacting meaningful interventions—must be rooted in an understanding of the social and legal context of gun ownership in the United States. Not examining and appreciating these influences would be a major oversight for those interested in designing interventions to limit the tragedies of gun violence. As demonstrated in many other areas, the gap between efficacy and effectiveness is often determined by the ground truth: where clinical professionals work and their patients live. Clinical and public health interventions to mitigate gun violence are no different: They will only succeed if they accommodate or overcome intrinsic legal or sociocultural barriers. Unfortunately, few topics are currently as politicized and polarizing as the gun control/gun rights debate. The emotional nature of this debate almost inevitably engenders strong and often extreme beliefs in both policy makers and the public, which may not accurately reflect research evidence or the likely effectiveness of particular interventions.

The first clear fact is that gun ownership is common. Although gun ownership by household seems to have declined over the past 30 years, rates remain above 30% (Morin 2014, Smith & Son 2015), with well over 300 million guns in private hands (Ingraham 2015). Firearms can be easily acquired from licensed gun dealers or through private transfers, the latter often bypassing any opportunity for a background check. Moreover, gun ownership can be concentrated: Half of gun owners have four or more firearms (Hepburn et al. 2007). Ownership rates vary significantly by a number of factors: by demographic characteristics of a locale, by state (from a low of 5.2% in Delaware to 61.7% in Alaska), and by self-identified affiliation with gun culture (Kalesan et al.

2016). Most (60% of) gun owners identify self-defense as a reason for gun ownership, with hunting, sport, and target shooting also commonly endorsed (Swift 2013).

There are also some clear patterns regarding the possible consequences of gun ownership. The number and rates of incidents of gun violence, especially firearm homicides, have been decreasing steadily over the past few decades (Fowler et al. 2015, Wintemute 2015). When researchers have examined relative accessibility—by, for example, comparing gun-owning household with non-gun-owning households or comparing states with high versus low gun ownership rates—they have found that elevated rates of gun access in households are associated with increased risk of homicide and suicide over time by household and at a population level (Fowler et al. 2015; Kellermann et al. 1992, 1993; Miller et al. 2002, 2006). This is particularly important because access to firearms by DV perpetrators is a critical risk factor in DV-related homicides (Campbell et al. 2003). In addition, a law enforcement officer in a state with a high gun ownership rate is three times as likely to be shot and killed during their work (Swedler et al. 2015).

It should also be noted that high gun ownership rates do not appear to convey any meaningful protection against violent victimization at a population level. The idea that increased firearm ownership leads to decreased crime (Lott 2010, Plassmann & Whitley 2003) does not appear to hold up to rigorous analysis (Natl. Res. Counc. 2004; Donohue & Ayres 2003, 2009), and international studies instead suggest that handgun ownership is associated with increased risk of violent victimization (van Kesteren 2014). Although the issue remains controversial, the hypothesis can, at best, be described as unconfirmed, and self-defense alone is a weak argument for increased or easy gun access.

3.2. Legal Issues

The second significant point to recognize is that gun ownership is legal; this is unlikely to change in the foreseeable future. The United States is one of three countries to have a Constitutionally protected right to firearms (Elkins 2013). The Second Amendment to the US Constitution, ratified into law in 1791, reads, "A well-regulated Militia, being necessary to the security of a free State, the right of the people to keep and bear Arms, shall not be infringed." Although private citizens' access to weapons has been a point of contention since the earliest participatory governments of Greece and Rome (Halbrook 2013), the debate in the United States has become markedly pitched in the past 25 years. Increased media coverage of shootings; changes in the quantity, variety, and costs of firearms widely available for purchase; changes in the priorities of certain national advocacy groups; and a number of significant court rulings have all contributed to making this a currently volatile topic (Wilson 2016).

One of the central points of contention has been whether the Second Amendment protected the right of individuals to own firearms in general or only in the context of their role in a militia or other state-related function. Removing any doubt on this matter, the US Supreme Court affirmed that the right to bear arms is an individual right not to be unduly limited by federal or state law (*District of Columbia v. Heller* 2008, *McDonald v. City of Chicago* 2010). These rulings are significant because they establish that the right is for the individual (i.e., attachment to a militia is not pertinent) and make clear that the protection expressly extends to firearms well-suited for self-defense—that is, the very revolvers and semiautomatic handguns used in more than 70% of criminal gun homicides (**https://ucr.fbi.gov/crime-in-the-u.s/2014/crime-in-the-u.s.-2014/tables/expanded-homicide-data/expanded_homicide_data_table_8_murder_victims_by_weapon_2010-2014.xls**).

Both *Heller* and *McDonald* acknowledge that some limitations on firearm access may be reasonable for persons with clearly identified risks. Specifically, the Court stated that its decision

was not meant to eliminate "the longstanding prohibitions on the possession of firearms by . . . the mentally ill" (*District of Columbia v. Heller* 2008). The case, however, did not present the necessity for the Court to address exactly how these restrictions on the mentally ill would be constructed or the appropriate limits of the restrictions that might be imposed. Current state and federal standards limit access to firearms for people in a number of categories other than the mentally ill, including prior violent felons and people with addiction issues. The standard method for enforcing the restrictions on sales to individuals with mental illness is to have states transmit records of involuntary commitments for potential harm to self or others to a centralized federal database, the National Instant Criminal Background Check System (NICS). This database must be consulted by federally licensed gun dealers to determine if an individual should be disqualified from purchasing a weapon.

There have been several problems with using this system for limiting purchases by mentally ill individuals. First, of course, is the fact that many purchases do not occur in situations where a background check is required. In most states, private purchases between individuals, transactions at gun shows, or sales of certain types of weapons (e.g., long guns) do not require checks. Second, the enduring wording of the criteria for restricting sale because of mental illness, i.e., the Gun Control Act of 1968's exclusion of people who have been "adjudicated as a mental defective" [18 U.S.C. § 922(d)(4)], has been quite complex in execution. This phrase has been generally translated as barring the purchase of firearms from a federally or state-licensed dealer by individuals who have been involuntarily committed (either at any point in life or within a stated prior time period). Standards and procedures for involuntary commitment vary considerably from state to state, however, making the standard far from uniform. Third, many states have been very slow to provide data to the registry. Estimates indicate that, before 2007, states had sent only a negligible number of their mental health commitment reports to the federal government (Liu et al. 2013). Reporting is still far from complete (Swanson et al. 2014).

Although broad revocation of the personal right to bear arms could occur either through subsequent court review or by constitutional amendment, neither seems likely or imminent. Continued acceptance of screening for appropriate denials at the point of purchase is the accepted compromise position on this issue. Thus, one may reasonably discard the notion of broad bans on firearms, seizures of existing firearms, or similar interventions as practical measures to reduce gun violence.

Despite the common and nearly clichéd calls for major overhaul of gun laws in the wake of highly publicized tragedies, substantial revisions rarely, if ever, occur. This trend is often the direct result of the fact that most gun laws are state statutes and, as such, affected by political party control of state legislatures. Moreover, many newly enacted gun laws seem to broaden rights rather than restrict them, possibly in reaction to fear of the loss of gun rights (Luca et al. 2016). Highly publicized shootings drive sharp increases in gun sales, as do new gun laws or court rulings, regardless of whether the law or ruling is restrictive or expansive (Aisch & Keller 2016). Given the array of political, social, and legal barriers, it is likely that any call for a broad ban on firearms would have negligible likelihood for success and may, thus, be an unwise application of political capital.

3.3. Gun Culture

Part of the reason that broad statutory changes regarding gun ownership are often met with deep resistance is that they are seen as more than just an attempt to revise a set of regulations; they are often seen as a threat to a way of life or culture. Many individuals who own guns are part of a gun culture that can be difficult for outsiders to understand. Fully grasping or appreciating this aspect of gun ownership may be particularly hard for mental health professionals. No reliable study examining relative ownership rates by profession—i.e., whether psychologists and other

mental health professionals own guns at similar rates as the general population—seems to exist. It seems fair to assume, however, that firearm ownership by mental health professionals may be lower than that of the general population, based simply on demographics and related attitudes. This creates a situation that tests mental health professionals' capacities to integrate respect for these differing cultural beliefs into their practice.

Defining and testing the impact of gun culture on gun ownership and attitudes toward firearm regulation are difficult tasks. In general, it seems that there is a sense of identity among firearm owners and enthusiasts that is often anchored in a shared enjoyment of owning and using firearms, often tied to family traditions, personal beliefs, and social relationships. The values of the community of gun enthusiasts have shifted over time, and the current trend appears to be increased identification as a persecuted group (Somerset 2015).

Most relevant to the discussion here, a sizable number of gun owners perceive health and mental health professionals as hostile to their interests, values, and rights (Wheeler 2015). Focused training for these professionals on firearm-related issues has been limited (Price & Khubchandani 2016, Traylor et al. 2010). The stage is set for professionals to enter discussions about firearms with limited comfort and competence, which seems an invitation for misunderstandings. Cultural blindness on the part of mental health professionals may lead to failures in engaging the patient, understanding their interests, and communicating useful health information to them or their family (Radant & Johnson 2003, Shaughnessy et al. 1999). Effective work by clinicians with gun owners is increasingly seen as a cross-cultural problem and will require careful integration of both a quantitative understanding of gun violence and a qualitative understanding of the interests of gun owners (Betz & Wintemute 2015).

4. CURRENT POLICY INITIATIVES ADDRESSING GUN VIOLENCE AND MENTAL ILLNESS

4.1. Screening Firearm Purchasers

Most of the current legal and policy efforts relating to mental illness and firearm violence revolve around limiting access by screening at the time of purchase. As mentioned above, this approach requires background checks on individuals purchasing firearms at a federally registered dealer. If the person has a record of involuntary commitment in the NICS, the seller is required to deny the sale.

Of the more than one million denials of potential purchasers since the inception of the NICS program, mental health issues account for only 1.4% (Crim. Justice Inf. Serv. Div. 2015). Only a small proportion of the people on the NICS have mental health exclusions, and these rarely produce a denial for purchase. The exclusions apply only to people who have been adjudicated incompetent—generally through a judicially ordered involuntary commitment or guardianship—or who have criminal dispositions such as not guilty by reason of insanity. The rate of reporting to NICS and the rate of denial of purchase for this criterion have increased considerably since 2007 (Swanson 2015), but 13 states and territories do not use the federal NICS program at all and another seven only use it for certain types of firearms (Crim. Justice Inf. Serv. Div. 2015). Until the NICS Improvement Amendment Act of 2008, significant operational barriers and conceptual ambiguity remained about what data could and could not be reported to the database because of confidentiality; there remain concerns that past records have not been thoroughly reported (Liu et al. 2013).

In 2014, the federal NICS system provided 3,772,583 background checks, approving 98% of those sales. Of the denials, approximately 3,600 potential purchasers were stopped by NICS from

purchasing firearms due to mental health issues; these individuals made up 3.9% of all denials through NICS that year (Crim. Justice Inf. Serv. Div. 2015). Substantially less is known about the disposition of the remainder of the 8,500,000 new firearms manufactured and shipped to US dealers for sale that year (Bur. Alcohol Tob. Firearms Explos. 2015).

Although these screening processes do not appear to have a substantial impact on overall gun violence rates, it appears that they can have an impact on the small sector of gun violence involving people with severe mental illness. A recent study (Swanson et al. 2016) used public records over an 8-year period to examine gun disqualifications and arrests for violent gun crimes as well as firearm suicides for a sample of people receiving publicly funded treatment for severe mental illness. This study found that the implementation of an increased level of NICS reporting of involuntary commitment incidents (in 2007) led to a substantial reduction in the rate of arrest for violent crime for individuals who had, in fact, been involuntarily committed. The level of violent crime in gun-disqualified persons was below that of others with mental illness who were never disqualified. Being denied a gun purchase based on the history of involuntary commitment alone, however, only accounted for 13% of the disqualifications of those who had a prior involuntary commitment and were arrested for a violent crime; 52% of these individuals were disqualified by virtue of a prior criminal record issue. Thus, the narrow criteria of involuntary commitment as an excluding factor affected a relatively small proportion of the patients who went on to engage in significant violence; past history of criminality would have disqualified these individuals (Swanson et al. 2016).

Federal law and most states permit private transfer of firearms between two people, bypassing licensed dealers and background checks. An estimated 40% of firearm transfers occur as private transactions, and an estimated 90% of guns used in crimes came from resold firearms (Wintemute et al. 2010). Private sales at gun shows often take place even when a potential purchaser explicitly indicates that they would not pass a background check. Some states with enhanced regulation of gun show sales limit such transactions (Wintemute 2013).

Some states criminalize the knowing transfer of a firearm to a person who is disqualified from possessing a firearm. Such laws are neither common nor commonly understood, limiting their utility in preventing disqualified people with mental illness from obtaining firearms (Fowler 2001). Prosecution of people who violate such laws also seems to be rare (Sterzer 2012; **http://smartgunlaws.org/gun-laws/policy-areas/background-checks/categories-of-prohibited-people/**).

Private sales and transfers of firearms are easily facilitated through online services. Popular platforms such as Facebook and Instagram have had varying numbers of private sales facilitated through their sites, but recently took steps to limit facilitation of private sales of firearms. Some sites are entirely focused on firearm sales and allow searching based on region, identifying private sales opportunities where background checks are less likely or not legally required (Daniels 2013). Such activities continue despite some limitations instituted by certain sites, and an emerging concern is that these methods of purchase may be serving as a conduit for heavy armament to militias in international conflicts. Private sales of semiautomatic handguns and rifles are routine through some of these websites, with potentially tragic outcomes; it is chilling to think what could happen with transfers of military-grade ordnance (Chivers 2016).

Overall, screening of new purchasers of firearms provides minimal incremental decreases in rates of gun violence by people with severe mental illness and a history of commitment. The coverage of screening practices and their impact are low. Further, such benefits may be comparatively small when one considers the relative ease with which a person can obtain firearms through private sales and Internet-facilitated sales without undergoing a background check.

4.2. Removal After a Prohibiting Event

Several states have statutory provisions that allow for removal of firearms from previously lawful gun owners after a disqualifying event, such as an involuntary hospitalization. Most states obligate a newly prohibited firearm owner to transfer any guns in their possession to a lawful owner within a certain time frame after an event, but there is usually no process to confirm that this transfer has occurred. Only four states—California, Connecticut, Texas, and Indiana—have provisions allowing law enforcement officers to proactively remove firearms at the time of or after a disqualifying event (e.g., an officer who takes a person into custody on an emergency commitment can confiscate firearms at that time) (**http://smartgunlaws.org/gun-laws/policy-areas/background-checks/categories-of-prohibited-people/**).

Removal of firearms by law enforcement after such disqualifying events is challenging. It is often unclear which agency—if any—would have the authority or responsibility to remove the firearms. There is significant variability in how different jurisdictions enumerate and enforce such laws, and many departments lack clear policies or standards that address this issue (Int. Assoc. Chiefs Police 2007).

Gun violence restraining orders (GVROs) are an alternate pathway to removal established recently in several states. This mechanism creates a specific court order for the removal of firearms from a person who may (*a*) be a prohibited possessor under state or federal standards who has not voluntarily released custody of their firearm or (*b*) have significant risk factors for harming themselves or others with a firearm but not be technically prohibited from having the firearm by other legal standards. Such orders serve as a complementary tool to other prohibitive laws and can be used for people who are identified as posing imminent risk but who do not meet involuntary commitment criteria (Frattaroli et al. 2015). In most instances, one individual seeks an order from a judge for removal of the firearm based on the current state and situation confronting another individual (e.g., heavy drinking with a history of gun-related violence when intoxicated). Additionally, GVROs are not predicated on the presence of a mental illness, which substantially mitigates some of the intrinsic stigma attached to mental illness–specific measures (Wiehl 2014). This innovative strategy for targeted removal requires adequate provisions for weighing the conditions needed to prompt removal and reasonable procedures for reinstating ownership rights (McGinty et al. 2014a). There are no current empirical studies on the effectiveness of this strategy.

A variant of screening and gun removal after a precipitating event is found in the New York Secure Ammunition and Firearms Enforcement Act of 2013 (the NY SAFE Act). This act amended the state mental health law, introducing a requirement for mental health professionals to report individuals to a state registry if, in treating that individual, they "conclude, using reasonable professional judgment, that the individual is likely to engage in conduct that would result in serious harm to self or others" [Ment. Health Proced. Act § 9.46(b)]. The report is reviewed by a county official. If approved by the county official, the database for gun permits is then searched to see if that individual has a current permit. If so, the permit is revoked and the gun is seized. The individual is then barred from obtaining a permit until it is reinstated in a revocation hearing.

Systematic research on the effectiveness of the provisions in the NY SAFE Act regarding mental health professionals' reporting of dangerous individuals has not been conducted. As emphasized above, the likelihood of such provisions having a significant impact on the overall level of gun violence is extremely low. Whether such a statute can have an impact on gun violence or suicide involving individuals with mental illness is the most logical, but methodologically thorny, question that must be addressed. There are also concerns about possible unintended effects, including an undermining of therapeutic relationships, reductions in high-risk individuals seeking treatment, restrictions on clinical discretion in handling potentially violent or suicidal situations, and increased

stigma of mentally ill individuals. Sound information about the overall effects of clinical reporting requirements, as exemplified in this law, would be a valuable addition to the current debate on the topic of mental illness and gun violence.

4.3. Prohibitions on Asking About Access to Firearms

Other statutory efforts related to clinical practice and gun violence have been instituted, but primarily with the intent of limiting the intrusion of mental health professionals on this issue rather than encouraging their involvement. The Florida Firearm Owner's Privacy Act of 2011—colloquially known as the "Docs and Glocks" law—creates disciplinary sanctions for licensed health care professionals who ask about or document ownership of firearms by their patients. Part of the rationale for this law is the suggestion that firearm safety counseling by professionals may increase the risk of people being attacked by limiting an individual's access to a self-defense weapon (Paola 2001). The notion of widespread use of firearms in self-defense, however, has been widely and repeatedly debunked (e.g., Hemenway & Solnick 2015).

The main purported merit of such legislation is that it protects patient privacy around the Constitutionally protected and potentially stigmatized act of owning a firearm. It is unclear, however, why this specific line of inquiry would be prohibited while other inquiries about stigmatized acts, Constitutionally protected or otherwise, are routine. For example, inquiries about sexual orientation, gender identity, and drug and alcohol use are often routinely expected in clinical assessments.

The impact of legal curbs on health professionals asking and counseling about firearm safety remains unclear, but it seems unlikely that this policy will decrease firearm violence and other injuries in people with mental illness. The impact for mental health professionals seems obvious and substantial. Although it should generally be easy to justify such an inquiry, the potential threat of professional sanctions would seem to discourage it, even in the face of clear evidence that asking about guns and discussing safe gun practices can produce a significant reduction in suicides (Brent et al. 2000, 2013).

5. TOWARD SOUND POLICY

There are many well-considered policy recommendations in the clinical and legal literature about how to address the overlap of mental illness, firearms, and violence. This section examines some of the more common approaches in terms of their likely utility and justifications. There are still a number of unanswered questions to address in this area that could focus the next round of policy suggestions.

5.1. Characteristics of an Optimal Policy

Not all policies are created equal, and relative merit is not always obvious or disconnected from basic values. Although the major aim of public health policies is to reduce disability and illness or to promote positive outcomes within a specific population, these policies are often enacted in a way that curtails the liberties of members of that same population. Policies aimed at preventing gun violence are particularly complicated because they often promote broad public health benefit at the expense of some of the most basic liberties. As such, very specific criteria must be met a priori for a policy in this area to be both ethical and effective (Childress et al. 2002).

One requirement of an ethical public health policy is broad impact. Funding interventions that only address the needs of a small segment of the population are an expensive and inefficient use of

cognitive, political, and financial resources and should be avoided. One could reasonably suggest that an intervention that only targets firearm violence risk by people with severe mental illness but ignores or has no impact on the other health needs of people with mental illness or does not mitigate other types of violence would be narrowly targeted. That is not to say that such a narrow target is unreasonable, but limited resources may be better spent on interventions that would have broader impact. Ideally, policies directed at the intersection of mental illness and gun violence should have significant benefits along the fuller spectrum of needs of people with mental illness or reduce a broader swath of potential violence.

Interventions should ideally be evidence based or at least reflect the best understanding of existing evidence. When there are rapidly emerging threats to public health, there may be a clear and pressing need to provide interventions that are untested (e.g., in the response to rapidly emerging infectious diseases such as Zika). Firearm violence, however, is not a novel or rapidly emerging threat and would not seem to qualify for this exemption from the need to be grounded in—or at the very least not expressly contrary to—known empirical evidence.

Interventions should also recognize that implementation of some interventions proceed quite differently in the real world than in a lab. Interventions targeting mental health, firearms, and violence need to take into account the heterogeneity of violence, the importance of non-mental-health risk factors for violence in people with mental illness, and the political and practical challenges of any intervention attempting to shift the ownership or use of the 300 million privately owned firearms in the United States. The real-world constraints on fashioning effective policy on firearm violence and individuals with mental illness cannot be downplayed.

Finally, any intervention needs to be assessed in terms of the balance of potential clinical benefit against the abrogation of rights. Whether by utilitarian or deontological standards, a public policy to mitigate violence risk must have an acceptable cost in terms of the civil rights of individuals. The test is not whether the policy or intervention is cost free in terms of rights but, instead, how expensive and expansive it is in the limitations it might create.

5.2. Ineffective Approaches

Many commonly proposed interventions for firearm violence fail to meet the above criteria for sound policy investments. Some interventions have a focus that is too narrow. Bans on assault weapons and large-capacity magazines would have a small, though delayed, impact on some mass shootings but only a negligible impact on most firearm violence. Achieving these meager benefits would require significant political and fiscal outlay to enact legislation and craft restrictions that could not be easily bypassed by manufacturers.

Some proposed policies are largely shaped by stigma or inflame stigma to such a degree that the ethical costs would outweigh any nominal benefit. Proposals for blanket bans of access to firearms for people with mental illness or extended hospitalization fail to pass the aforementioned criteria at multiple levels. The interventions are overly broad given the rarity of violence by people with mental illness; the net effect would be broad denial of rights to most people with mental illness who are not dangerous while leaving most firearm violence unaddressed. Such policy proposals scapegoat people with mental illness and have the potential to expand rather than correct stigma and bias (Corrigan et al. 2005).

Similarly, calls to broadly ban or abolish firearms are also grossly impractical for the United States. Although state-sponsored gun buyback programs have been successful in Australia (Chapman et al. 2016), they seem unlikely to be even remotely successful in the United States. In addition to the constitutional protection of ownership and high numbers of firearms in civilian hands, which create practical obstacles, a buyback program would also be unlikely to have

a substantial impact on violent crime. While studies are challenging to conduct, most firearms intercepted in criminal investigation appear to have been illegally acquired (Fabio et al. 2016) and, thus, seem unlikely to be easily surrendered.

Some interventions, though, may be more promising. There are several policy changes that could affect the level of firearm violence by people with mental illness and have a potentially positive impact on other types of violence and other risks such as suicide.

5.3. Potentially Effective Interventions

Several interventions would appear to meet Childress et al.'s (2002) criteria for effectiveness and proportional impact. Outlined in the following sections are potential public policy initiatives based in evidence and specifically intended to target the intersection of mental illness, firearms, and violence.

5.3.1. Expanded funding streams for well-designed objective research on firearm violence and violence prevention. It is difficult to take informed action when there is so little information about gun violence in general and gun violence in individuals with mental illness in particular. The ban on federally funded research on firearm violence in the United States has left many critical questions unanswered. Careful evaluation of comparative efficacy of firearm legislation in different jurisdictions is promising (Rostron 2016, Swanson et al. 2016) but often underfunded. Prospective studies to evaluate violence and suicide risk factors among firearm owners could help clarify the processes of gun ownership and use and identify potential high-risk groups. Improved legal and funding structures to promote and simplify retrospective evaluation of how people engage in violence, looking for differences relating to mental illness and other factors, could provide guidance for more refined clinical practice.

5.3.2. Promotion of safer storage as a standard goal. Much as reproductive health education professionals have moved from the overly reassuring notion of safe sex in favor of that of safer sex, professionals should shift from the idea of safe storage and removal to that of safer storage. These discussions have already occurred regarding ways to reduce suicide risk (Mann & Michel 2016, Stanley et al. 2016), with many clinicians—and, for that matter, firearm owners, policy makers, and other stakeholders—presenting gun access in stark and realistic terms. Guns, if present in the home, are dangerous; absence of guns in the home is not dangerous. The reality is that, in a nation with 300 million firearms, guns are easily accessed through dealers, private sales, or sharing among friends. The absence of a gun in a patient's home should provide little assurance that the patient would have any difficulty accessing firearms elsewhere. Improving tools and practices for safer storage (e.g., locks, safes, or even use of smart gun technology) may limit impulsive acts of aggression or suicide, but can still be breached by a determined actor.

The resistance to these initiatives is strong. Most firearm owners identify personal or family safety as a factor in gun ownership (Swift 2013), and even a simple lock or safe can impede access to a firearm in an emergency. This resistance, however, does not make the discussion of such issues futile. Open and frank discussion of relative risks and benefits may be useful in clinical settings, introducing the issue of safe storage as a reasonable compromise to competing needs. This is the basic building block of a series of reasonable changes in clinical care that could promote reductions in firearm violence in individuals with mental illness.

5.3.3. Assessment of firearm access and effective counseling about risk as a standard of care. It has become increasingly accepted that firearm access, as an element of general health and

mental health assessment, is an ethically and clinically appropriate domain of interest for health care professionals (Betz & Wintemute 2015, Butkus et al. 2014, Laine et al. 2013, Wintemute et al. 2016). Formal enumeration and acceptance of this principle in the form of practice guidelines from major mental, public, and physical health institutions would certainly promote this reform in practice.

5.3.4. Development and distribution of evidence-based education on effective firearm safety counseling practices for clinicians. Establishment of gun safety counseling as part of core or continuing educational requirements for licensed practitioners could promote such efforts. For example, requirements to have a minimal level of education time spent on firearm safety or violence management or minimum standards for new trainees relating to firearm safety and violence management would promote the acceptance of firearm safety counseling being a standard of care.

One of the common critiques of counseling on firearm safety by health professionals is that high-quality training on such activities is difficult to find (Price et al. 2015), even though appropriate and effective educational strategies and resources have been developed (Brown & Goldman 1998, McGee et al. 2003, Rozel et al. 2015, Slovak & Brewer 2010). Getting these methods into the hands of clinicians and endorsing their use are essential steps toward reducing firearm violence in cases appearing in the mental health system.

5.3.5. Evidence-based education on effective firearm safety practices for gun owners and family members of persons with mental illness. Although the effectiveness of widely available firearm safety training for youth is questionable (Gatheridge et al. 2004, Himle et al. 2004, Jackman et al. 2001), this does not eliminate the need to develop more sound approaches for enlisting and educating those closest to individuals at risk. All of these efforts would benefit from explicit statutory protection for health professionals' freedom of speech when they communicate evidence-based information and their interpretation thereof to patients.

5.3.6. Development of evidence-based education on effective firearm safety practices and on recognizing mental illness and acute mental health emergencies for firearm dealers. We have limited systematic data on the link between recent firearm purchase and suicide risk (Wintemute et al. 1999); we have even less on the link between recent firearm purchase and violence toward others. It is possible, however, that interventions aimed at processes other than just screening at the point of purchase might reduce dangerous sales. For example, the expansion of mental health training for firearm dealers—programs such as those implemented by the New Hampshire Firearms Safety Coalition (Vriniotis et al. 2015) or Mental Health First Aid training—could promote screening and intervention by licensed dealers in situations where a sale might be related to a mental health crisis.

5.3.7. Establishment of gun safety counseling as part of core or continuing educational requirements for licensed practitioners. States have an array of continuing education requirements for licensed health professionals; common required topics may include child abuse, safety and quality, pain management, or other topics often stipulated by state legislatures. Enacting requirements to spend a minimal level of education time on firearm safety or violence management may be beneficial. Additionally, agencies responsible for the national accreditation of training programs might consider developing minimum standards for new trainees relating to firearm safety and violence management.

5.3.8. Establishment of national best practices guidelines on evaluation for expungement. Many states provide a legal pathway for a person prohibited from owning or acquiring a firearm to have those rights restored. Not all of these states, however, require any type of mental health evaluation as part of that process. Clarifying and routinizing these procedures can provide safeguards for appropriate gun access, promotion of safe storage, and conditions for continued ownership related to clinical concerns.

It may seem counterintuitive to think that promoting restoration of firearm rights to people previously excluded from firearm ownership for mental illness reasons could be seen as a prevention initiative. However, given the earlier observation that individuals with mental illness go through periods when risk of violence may be reduced or elevated, it is reasonable to see the restoration process as an opportunity to promote safe practices and monitoring for such periods. In addition, reasonable restoration procedures might enhance reporting. Clinicians—as well as law enforcement officers, hospital administrators, and judges—may be reticent to involuntarily hospitalize a person out of a concern that such a commitment may infringe on that individual's right to firearms. Although this may be a concern about Second Amendment rights in the abstract, it may also be a more specific concern about the negative effect that a commitment might have on a gun enthusiast or a person who has or aspires to a career in law enforcement or the military. Such reticence may ensure that an untreated or undertreated person with mental illness still has largely unfettered access to firearms, an obviously counterproductive outcome. A consensus-based standard for restoration of rights to gun ownership, if reasonable and practical, could better protect the rights of people with mental illness and potentially decrease the stigma attached to involuntary hospitalization.

5.3.9. Improved legal tools for temporary removal and safe storage of firearms during periods of crisis. Clarifications in the procedures for reinstating rights to own a firearm would be most effective if they operated in conjunction with a clear set of rules about the removal and safe storage of firearms for individuals in times of emotional or psychiatric crisis. As mentioned above, some individuals in acute mental health crisis should not have access to firearms, and some individuals with a history of violence and repeated criminal acts should also be limited in their access (McGinty et al. 2014a). Prior violence in general, intimate partner violence in particular, and recurring substance use stand out as highly sensitive risk factors for people both with and without mental illness. Stricter processes to prohibit firearm access or trigger heightened review of potential mental illness in people with these risk factors may help curb access to firearms and mitigate future harm. For example, a misdemeanor DV charge in a person with known substance use or mental illness issues may be considered adequate for prohibiting—temporarily or permanently—that person from owning firearms even if the individual risk factors would not reach the threshold for firearm prohibition on their own.

The current, broad-brush approach of limiting gun sales to individuals with a history of commitment, however, does little to accommodate either the definition of people likely to use firearms violently or the reality of the fluctuating risk states of people who might do so. Legislation that allows for the removal of firearms during times of crisis in validated high-risk groups should produce a more targeted and effective use of the state's power. In addition, although individuals who have firearms removed can improvise arrangements with friends or family or place them in storage, they may still be relatively accessible, or the individual may not have such resources. Permitting law enforcement agencies or licensed gun dealers to temporarily store and secure firearms for such persons, in conjunction with well-delineated processes allowing input from mental health professionals on removal and return, could be significantly beneficial.

More focused efforts such as these would also require improved legal tools and incentives for active or confirmed removal of firearms after disqualifying events. Few law enforcement agencies

are permitted or willing to enter a person's home to search for or remove firearms after a disqualifying event, such as a DV arrest or terroristic threat. Legal requirements and adequate resources for law enforcement to actively remove firearms in such situations need to be in place to allow for targeted removal of firearms. If a person does not voluntarily give up possession of firearms within a reasonable time after a disqualifying event, application of civil forfeiture principles to confiscated firearms may provide added incentive to encourage active law enforcement intervention.

5.3.10. Exclusion of firearms from bars and other areas where alcohol or substance use is common or expected. Numerous studies, presented above, have identified strong links among substance use, particularly alcohol use (Mulvey et al. 2006), violence, and firearm violence. Oddly, some states have taken steps to expressly permit or encourage concealed or open carry of firearms in bars. The promotion of laws and policies with the exact opposite intent would seem to make sense in light of the weight of available evidence. Potentially, such efforts could take advantage of the integration of firearm and alcohol regulation through offices such as the Bureau of Alcohol, Tobacco, Firearms and Explosives.

5.3.11. Clear media reporting guidelines for major violent events. Although they were a long time in coming (Hunt 1845, Sonneck et al. 1994, Bohanna & Wang 2012), there are currently guidelines on reporting about suicides that minimize the risk of copycat suicides and contagion. Similar guidelines could be developed and adopted by major media outlets for ethical reporting of mass shootings and similar events. Links between sensational reporting of mass shootings and copycat events are becoming better established (Cantor et al. 1999, Towers et al. 2015), and early proposals for media guidelines are already being developed (Perrin 2016).

General considerations might include avoiding glamorization of assailants or speculation about motivations or the role of mental illness, as well as avoiding detailed descriptions of injuries or tactical methods that may provide practical guidance to potential copycats. Journalists may, instead, wish to consider emphasizing coverage about the victims and the impact of their loss; the acts of victims, bystanders, and law enforcement officers who intervened; or law enforcement investigation and prosecution of offenders. Task forces integrating media, mental health, violence, and health and media ethics experts would be useful in developing such formal guidelines.

6. CONCLUSION

Guns are ubiquitous, easy to access, and intrinsically linked to both US culture and the risk of suicide, violence, and injury. However, they are not, by and large, a mental health problem. Any intervention focusing on the link between mental illness and violence will have limited impact on overall gun violence. The amount of violence in general, and gun violence in particular, involving mentally ill individuals is so small that focusing on this aspect of the problem is largely a distraction. It can even be argued that interventions for narrow problems like the link between mental illness and gun violence are so ethically and logistically unwieldy that they inevitably spawn inefficient and ineffective approaches to an important public policy and public health issue. It is likely that interventions targeting mental illness and firearm access could have substantial impact on suicide risk, and that benefit should not be minimized or discarded lightly. The focus on violence to others, however, seems misguided if the idea is to fashion broad policy reforms.

This does not mean that mental health professionals can simply ignore firearm policies. Mental health professionals are called upon to help in efforts to reduce the harms associated with firearms. As responsible professionals, we can introduce empirically sound evidence and evidence-based approaches as considerations in the ongoing and often heated dialogue on these issues. We

can provide perspective on clinical issues, respond firmly to policies driven by stigma, and promote reasoned and reasonable statutes grounded in our understanding of mental illness and the limitations and potentials of mental health services.

This review makes it clear that this role is likely to expand. Existing and proposed approaches to gun policy call for more refined determinations of the eligibility to access and retain firearms, and many of these determinations will involve mental health professionals. It is becoming increasingly clear that blanket provisions based on factors such as having a prior involuntary commitment are both expensive and ineffective. There are other risk factors that are far more predictive of future violence. Moreover, an examination of current research makes it clear that the link between mental illness and violence resides in fluctuating patterns of risk, not in static categorizations such as diagnosis. This implies that judgments about the current status of individuals will become more relevant to determinations about the ability to buy or retain possession of a firearm. Mental health professionals cannot evade their evolving role in assisting in the determination of useful risk factors and methods for making reasoned judgments about gun ownership.

Mental health professionals will also in all likelihood be called upon to help fashion more useful regulations regarding the provision of clinical care related to gun access and use. Health care professionals will likely be pushed to adopt standards of care related to screening for gun access and counseling about gun safety. Evidence-driven clinical interventions for assessing risk related to firearm access and counseling patients and families will need to be prioritized and disseminated. Evidence-based clinical practices will have to be mirrored and supported by evidence-based public policy. Neither can exist without adequately funded and carefully directed research to strengthen that evidence base.

The current research seems to indicate that mental health professionals must become more actively involved in the formulation of policies and changes in practice that recognize the realities and risk of gun ownership and access. Failure to do so will leave a looming vacuum, which will be readily filled by ill-informed and politically inspired policy makers, leaving our patients and communities vulnerable to ongoing violence.

SUMMARY POINTS

1. Firearms and firearm violence are ubiquitous in the United States.
2. The intersection of mental illness and firearm violence is limited, but public health opportunities relating to this intersection should not be ignored.
3. Media reporting on violence and mental illness drives stigma and misdirected policy efforts.
4. Mental illness alone is a weak predictor of violence and firearm violence risk.
5. Violence risk in mental illness is driven by active symptom states, comorbid addiction, prior victimization, and other psychosocial risk factors.
6. An expanded evidence base is needed to drive improved clinical interventions and health policy recommendations.
7. Mental health professionals need to take an assertive role in helping to shape public policy relating to violence, firearms, and mental illness.

FUTURE ISSUES

1. Improved research is needed on the pathways from firearm purchase to adverse outcomes such as violence.
2. The outcomes of varying firearm policies, as applied across different states and jurisdictions, need to be studied and disseminated.
3. Assessing access to firearms and effectively counseling patients and families on firearm safety are public health imperatives and will need to be protected from political incursion.
4. Improved health education research on effective strategies for educating clinicians, patients and families, and firearm dealers on safer storage and injury prevention needs to be developed.

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