

News Media Framing of Serious Mental Illness and Gun Violence in the United States, 1997-2012

Emma E. McGinty, PhD, MS, Daniel W. Webster, ScD, MPH, Marian Jarlenski, MPH, and Colleen L. Barry, PhD, MPP

Recent mass shootings by persons seemingly afflicted with serious mental illness (SMI) have received extensive news media coverage and prompted national dialogue about the causes of, and policy responses to, mass shootings. News media framing of SMI as a cause of gun violence may influence public attitudes about persons with SMI and support for gun violence prevention proposals. We analyzed the content of a 25% random sample of news stories on SMI and gun violence published in 14 national and regional news sources from 1997 to 2012. Across the study period, most news coverage occurred in the wake of mass shootings, and “dangerous people” with SMI were more likely than “dangerous weapons” to be mentioned as a cause of gun violence. (*Am J Public Health*. 2014;104:406–413. doi:10.2105/AJPH.2013.301557)

In recent years, mass shootings—in Blacksburg, Virginia (Virginia Tech); Tucson, Arizona; Aurora, Colorado; and most recently Newtown, Connecticut—have received extensive news media coverage and prompted a national dialogue about the causes of and appropriate policy responses to gun violence. Although mass shootings are rare compared with other forms of gun violence—65 000 persons in the United States are shot in criminal attacks each year¹—extensive news media coverage of mass shootings draws public attention to the problem in a way that “everyday” gun violence does not. Public concern about mass shootings is likely heightened by the apparently random nature of such events, which often occur in seemingly safe public places, such as schools.² The discussion of mass shootings in the news media has addressed a wide array of issues that may contribute to gun violence, including widespread availability of guns in the United States,³ violent video games,⁴ bullying,⁵ gang involvement,⁶ childhood neglect and abuse,⁷ and serious mental illness (SMI).⁸

The Virginia Tech, Tucson, and Aurora shooters appear to have had SMI,^{9–11} a category that includes conditions such as schizophrenia and bipolar disorder.¹² Even though these shootings have drawn public attention to an apparent link between SMI and gun violence, the vast majority of persons with SMI are not violent^{13,14} and a small proportion of gun

violence is committed by persons with SMI.¹⁵ The relationship between SMI and violence is complicated by factors such as substance abuse and trauma.¹³ Furthermore, existing risk-assessment tools do not accurately predict violence among persons with SMI, making it challenging to target policy initiatives to the small subpopulation at heightened risk of violence.¹⁶ Nonetheless, some policymakers at the federal and state levels have targeted policy interventions to reduce gun violence at persons with SMI, proposing policies to improve screening and treatment¹⁷ and prevent persons with SMI from having guns.¹⁸ In the wake of the Newtown shooting, several states—including Maryland¹⁹ and New York²⁰—passed laws restricting access to firearms among those with mental illness. These states also passed gun laws unrelated to mental illness, including assault weapon bans.

The recent focus on SMI as a potentially important factor in mass shootings has generated concern among some segments of the public health community. Mental health researchers have long suspected that news media portrayals of violent persons with SMI contribute to negative public attitudes about persons with serious conditions like schizophrenia.^{21–23} This suspicion is supported by results of a recent experimental study, which found that respondents who read a news story describing a mass shooter with SMI reported

higher perceived dangerousness of and desired social distance from persons with SMI, compared with respondents randomly assigned to a control group.²⁴ Communications research suggests that public attitudes about groups of people are heavily influenced by news media portrayals of specific individuals, particularly when the public has little experience with the group in question.²⁵ Given that the majority of the public has no personal experience with SMI,²⁶ news stories describing acts of gun violence by persons with SMI may exacerbate negative attitudes about an already stigmatized population. Although stigma surrounding depression and anxiety has decreased in recent years,²⁷ widespread negative public attitudes toward persons with conditions like schizophrenia have remained steady^{21,28} or by some measures increased.^{21,29} Experts have linked these negative public attitudes to the pervasive social problems affecting persons with SMI, including undertreatment,³⁰ poverty,³¹ and homelessness.³¹

Mental health advocates have expressed concern that the news media’s focus on mass shooters with SMI could lead the public to view SMI as a common cause of gun violence.^{32–34} Social psychology research suggests that the torrent of news stories describing mass shooting events by persons with SMI could lead the public to wrongly view SMI as a primary causal factor in such shootings. In a series of randomized experiments investigating news media coverage of poverty, for example, Iyengar found that event-focused news coverage emphasizing specific individuals or events led respondents to blame impoverished individuals themselves for the problem of poverty.^{35,36} By contrast, thematic news coverage of poverty—which described the issue in broad, general terms—led respondents to more frequently attribute responsibility for poverty to societal factors. Importantly, Iyengar found that individual versus societal attributions of

responsibility for social problems led to differing support for public policy responses.^{35,36} For example, respondents who blamed societal factors for poverty were more likely to support poverty reduction initiatives.^{35,36}

In commentaries published in several prominent public health journals, experts have asserted that a misguided focus on SMI as an important cause of gun violence could lead the public to support policies that restrict the rights of persons with SMI without meaningfully reducing gun violence.³²⁻³⁴ In particular, experts have expressed concern that policymakers might promote policies to prevent persons with SMI from having guns, rather than policies to strengthen gun laws more broadly, as an appropriate means to reduce the likelihood or severity of gun violence in the United States.³⁴ In a 2011 commentary in *JAMA*, Gostin and Record argued that to reduce gun violence in the United States, policies should target the “dangerous weapons” used in all gun crime, not “dangerous people” with SMI, most of whom are not in fact violent.³⁴ Although dangerous-people causal framing implies that responsibility for gun violence lies with a select group of individuals with SMI, dangerous-weapons framing implies that responsibility lies with widespread access to guns in US society. In line with previous work suggesting that societal attributions of responsibility for social problems may raise public support for policy solutions,^{35,37} framing dangerous weapons as a principal cause of gun violence may heighten public support for meaningful reform of US gun laws.

To better understand how the relationship between SMI and gun violence has been framed in the public discourse, we conducted a content analysis of news media coverage of SMI and gun violence from a large sample of news outlets over a 16-year period from 1997 to 2012. To assess how news media portrayals of gun violence by persons with SMI may influence attitudes about this group, we evaluated the volume and content of event-focused news coverage describing specific shooters and shooting events, compared with thematic news coverage describing the issue of SMI and gun violence in broad terms. We hypothesized that thematic news coverage would be more likely than event-focused news coverage to mention key facts related to SMI and policy proposals to

reduce gun violence, respectively. To determine whether news media coverage differed during periods of heightened public attention to gun violence following mass shootings, we compared framing of causes of and policy responses to gun violence by persons with SMI in the weeks following mass shootings with news coverage during other periods. We hypothesized that news stories in the 2 weeks following mass shootings would be more likely to mention policy proposals to reduce gun violence than stories in other time periods. Finally, we examined whether news coverage mentioning specific causes of gun violence was correlated with coverage of specific types of gun violence prevention policy proposals. We hypothesized that news media mentions of the dangerous-people causal frame would be positively correlated with mentions of SMI gun restriction policy proposals, and that mentions of the dangerous-weapons causal frame would be positively correlated with mentions of other (non-SMI) gun policy proposals.

METHODS

To evaluate news media coverage of gun violence by persons with SMI, we analyzed a 25% random sample of news stories focused on SMI and gun violence from 1997 to 2012. We began our study period in 1997 to capture coverage of the school shootings in Columbine, Colorado, and elsewhere, during the late 1990s. News sources included 3 of the highest-circulation national newspapers in the United States in 2011 (*Wall Street Journal*, *USA Today*, and *Washington Post*) and 1 of the highest circulation newspapers in all 4 US census regions, including the Northeast (*New York Times*), South (*Atlanta Journal Constitution*), Midwest (*Chicago Tribune*) and the West (*Los Angeles Times*); the 2 highest circulation news magazines (*Newsweek*, *Time*); transcripts from evening news programs for the 3 major television networks (ABC’s “World News Tonight,” NBC’s “Nightly News,” and CBS’s “Evening News”); and transcripts from CNN and Fox News Network. The Audit Bureau of Circulation was used to identify newspaper and magazine circulation rates in 2011, and Nielsen Media Research was used to identify television viewership in the same year. We chose news outlets with high circulation or

viewership across the country to assess news coverage that reached a large subset of the US public. Among newspapers and based on the most recent available data, 2012 circulation ranged from 150 000 (*Atlanta Journal Constitution*) to 1 480 000 (*Wall Street Journal*), with a mean circulation of 795 000.³⁸ *Newsweek* and *Time Magazine* were circulated to 1 500 000 and 3 300 000 readers in 2011.³⁹ Among evening news programs broadcast on the major television networks, 2011 viewership ranged from 5 970 000 (CBS “Evening News”) to 8 750 000 (NBC “Nightly News”), with a mean viewership of 7 500 000.⁴⁰ In 2012, CNN and Fox News Network had 689 000 and 1 900 000 viewers, respectively.⁴¹

News Coverage Selection

We used Lexis-Nexis and ProQuest online archives to collect news media stories. To generate a sample frame of news stories, we used the following search terms: “mental illness” or “mental disorder” or “mental health disorder” or “psychiatric disorder” or “psychiatric illness” AND “gun” or “gun control” or “gun violence” or “gun legislation” or “gun law” or “gun policy” or “gun regulation” or “firearm” or “firearm control” or “firearm violence” or “firearm legislation” or “firearm regulation” (n = 5199). We searched entire articles, including titles. From this sample frame, we selected a 25% random sample of news stories (n = 1280). We then reviewed each story and excluded those that were not focused on SMI and gun violence. News stories shorter than 100 words or classified as corrections, book reviews, letters to the editor, business or stock, obituaries, duplicate wire stories, story previews, or calendar reports were also excluded. The final analytic sample included 364 news stories and editorials.

Content Analysis

To analyze the content of news coverage of SMI and gun violence, we developed a 27-item coding instrument (Appendix 1, available as a supplement to the online version of this article at <http://www.ajph.org>). Two authors (E. E. M. and M. J.) piloted the instrument and refined item wording based on pilot results. A random sample of one third of the news stories (n = 127) was then independently coded by 2 authors (E. E. M. and M. J.) to assess interrater

reliability for each item. Reliability for each item was measured using κ statistics, which all met conventional standards for adequate reliability of 0.69 or higher.⁴² The majority of items had κ statistics of 0.80 or higher (See Appendix 1 for κ and raw agreement statistics for each item.)

Measures

Story focus. In light of previous research showing that event-focused news stories influence public attitudes and policy support differently than thematic news stories describing issues in broad terms, we measured whether news stories focused exclusively on a specific act of gun violence by a person with SMI, or on the general problem of gun violence by persons with SMI. Event-focused news stories were defined as those stories primarily describing a specific shooting event, meaning a news story describing a single shooter's history, actions, and victims. Thematic news stories were defined as stories describing the general problem of SMI and gun violence, for example a news story discussing the history of mass shootings by persons with SMI. News stories primarily about policy proposals to reduce gun violence, for example a news story describing legislation to ban assault weapons, were also considered thematic news stories.

News media portrayals of serious mental illness and gun violence. To learn how the association between SMI and gun violence is portrayed in the news media, we first measured whether news stories mentioned 5 facts, supported by previous research, about SMI:

1. people with SMI are often stigmatized;
2. negative public attitudes about SMI can lead to reluctance to seek treatment among persons with SMI;
3. negative public attitudes about SMI can lead to public desire for social distance (e.g. reluctance to live near or work with) persons with SMI;
4. most people with SMI are not violent; and
5. predicting violence among persons with SMI is difficult.

Mention of these facts in news stories about SMI and gun violence could shape public understanding of SMI. Second, we measured mentions of specific diagnoses in news stories

about SMI and gun violence, including schizophrenia, bipolar disorder, major depression, personality disorder, and psychosis. Mention of these diagnoses in association with violence could influence public attitudes toward persons with specific conditions. Third, we measured whether news stories mentioned additional factors the research suggests are associated with violence in persons with SMI, including substance use, history of abuse or trauma, bullying, stressful life events, homelessness, and unemployment. Mention of these evidence-based risk factors for violence could shape the public's understanding of the complex causes of gun violence.

News media mentions of the causes of and policy responses to gun violence by persons with SMI. To better understand the public's exposure to news media messages about causes of and policy responses to gun violence by persons with SMI, we first measured whether news stories mentioned dangerous people with SMI, dangerous weapons, or both as a cause of gun violence. Second, we measured whether news stories mentioned any policy proposal to reduce gun violence. We also examined mentions of 4 specific categories of gun policy proposals:

1. policies to restrict access to guns among persons with SMI (for example, a policy requiring health care providers to report people who threaten to harm themselves or others to the background check system used to identify prohibited purchasers),
2. policies to ban assault weapons or ammunition (for example, a policy to ban large-capacity ammunition magazines that allow some guns to shoot more than 10 rounds without reloading),
3. policies to expand the background check system for gun sales to the general public (for example, by prohibiting private gun sellers from selling a firearm to someone without proof that the purchaser had passed a background check), and
4. policies to allow concealed carrying of guns in public places or other policies to increase gun access (for example, policy to eliminate gun-free zones around schools).

In addition, we measured whether news stories mentioned any mental health system policy proposal, including policies to improve the mental health system and policies to

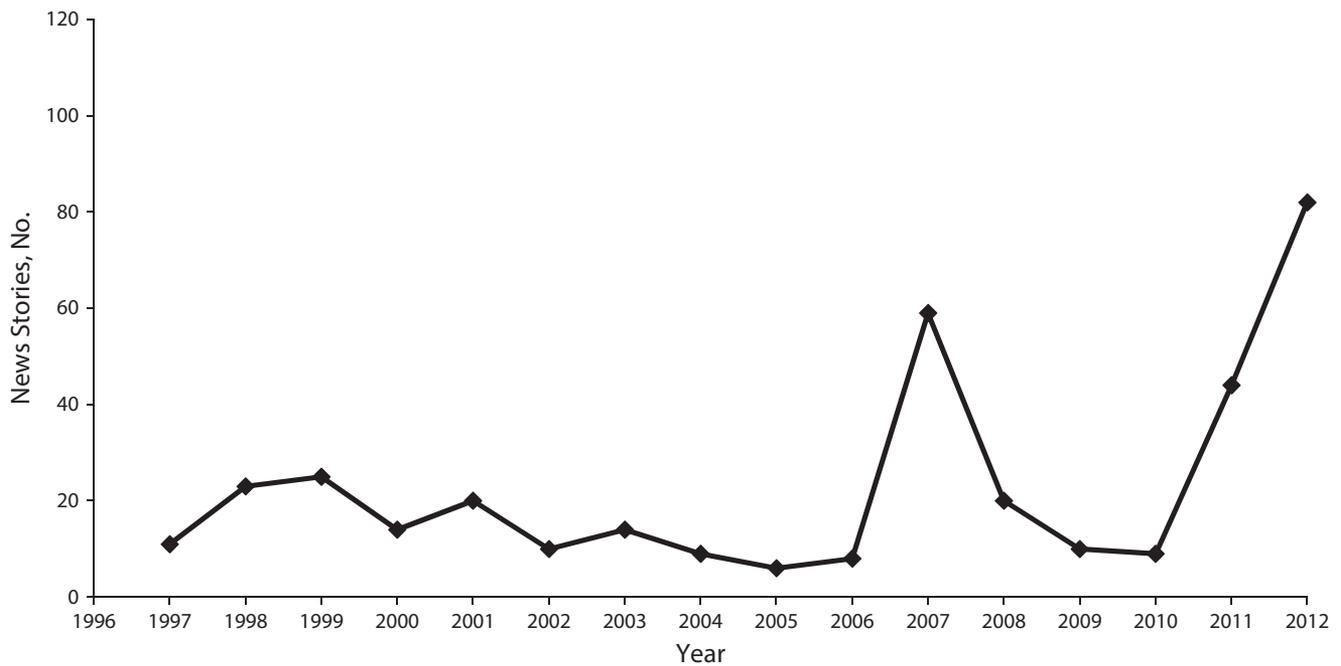
increase inpatient or outpatient involuntary commitment.

Data Analysis

For each measure related to news media portrayals of the association between SMI and gun violence, we used the χ^2 test to compare the proportion of news stories mentioning facts about SMI, specific diagnoses associated with gun violence, and additional factors associated with SMI and gun violence in event-focused versus thematic news coverage. We used the χ^2 test to compare the proportion of news stories mentioning a given cause or policy response in the 2 weeks after the Virginia Tech, Tucson, Aurora, and Newtown mass shootings versus other time periods. In addition, we examined mentions of causal frames and gun violence prevention policies in the 2 weeks following the Virginia Tech, Tucson, Aurora, and Newtown shootings individually to assess news coverage of different mass shooting events. We also used logistic regression models to examine correlations between the mention of causes of gun violence and specific types of gun violence prevention proposals in news stories. Specifically, we examined whether news media mentions of dangerous people as a cause of gun violence were correlated with mentions of SMI gun restriction policies, other gun policies, and mental health policies. We also examined whether news media mentions of dangerous guns as a cause of gun violence were correlated with mentions of these 3 types of policies. Logistic regression models controlled for news story word count and adjusted standard errors to account for lack of independence within news sources. To illustrate the results of logistic regression models, we calculated the predicted probability of news stories mentioning SMI gun restrictions, other gun policies, and mental health policies, with story word count held at its mean.

RESULTS

Of the 364 sampled news stories about SMI and gun violence, 36% ($n = 132$) were television stories, 62% ($n = 227$) were print newspaper stories, and 1% ($n = 5$) were news magazine stories. Percentages do not total 100% because of rounding. Television news stories tended to be longer (mean word length = 5034 words) than newspaper



Note. News outlets were chosen based on high circulation or viewership across the country.

FIGURE 1—News stories (n = 364) about serious mental illness and gun violence, by year: United States, 1997–2012.

(mean word length = 942 words) and news magazine (mean word length = 2435 words) stories. This finding was largely driven by CNN, which had the longest news segments on SMI and gun violence in our study sample. Figure 1 shows the volume of sampled news stories about SMI and gun violence from 1997 to 2012. Of the 364 sampled news stories over the 16-year study period, 51% (n = 285) were published in 2007, 2011, and 2012, coinciding with the Virginia Tech, Tucson, Aurora, and Newtown shootings. The volume of sampled news coverage about SMI and gun violence was consistently low in other years.

Sixty-nine percent of news stories were event focused and 31% were thematic (Table 1). Overall, fewer than 10% of news stories mentioned key facts about SMI. Thematic news stories were significantly more likely to mention that SMI is often stigmatized, difficulty predicting future violence in persons with SMI, and any policy proposal to reduce gun violence than event-focused news stories. Twelve percent of thematic news stories mentioned that SMI is often stigmatized, versus 4% of event-focused news stories ($P < .001$), and 19% of thematic news stories mentioned that most persons with SMI are not violent,

compared with 2% of event-focused news stories ($P < .001$). The proportions of news stories mentioning specific diagnoses were similar in event-focused and thematic news coverage: overall, stories were most likely to mention schizophrenia (26%) and psychosis (29%). As expected, significantly more thematic news stories mentioned policy proposals to reduce gun violence (81%) than event-focused news stories (17%, $P < .001$).

Table 2 compares news media portrayals of the causes of and policy responses to gun violence by persons with SMI in the 2-week aftermaths of the Virginia Tech, Tucson, Aurora, and Newtown shootings versus other time periods. It shows the proportion of news stories mentioning dangerous people with SMI and dangerous weapons as problems that cause gun violence. In time periods outside the 2-week aftermath of mass shootings, 17% of stories mentioned dangerous people with SMI and 9% mentioned dangerous weapons as causes of gun violence. In the 2 weeks after mass shootings, these proportions increased to 33% and 25%, respectively ($P < .01$). Among the 4 recent mass shootings that received extensive news media coverage, the proportion of news stories mentioning dangerous people with SMI

as a cause of gun violence was highest during the 2-week period following the Tucson shooting in 2011 (58%) and lowest following the Aurora shooting in 2011 (17%). The proportion of news stories mentioning dangerous weapons as a cause of gun violence was highest in the 2-week aftermaths of the Tucson (29%) and Newtown (29%) shootings.

Table 2 also shows the proportion of news stories mentioning policy responses to SMI and gun violence. Gun policy proposals were significantly more likely to be mentioned in news stories in the 2 weeks following mass shootings (57%) versus other time periods (19%, $P < .001$). Among the 4 mass shootings that received extensive news media coverage, the proportion of news stories mentioning any gun policy proposals was similar in the 2 weeks following Virginia Tech (45%), Tucson (50%), and Aurora (44%), but increased to 76% in the 2 weeks following the Newtown shooting. Across all time periods, SMI gun restriction policy was the most commonly mentioned policy in all sampled news stories (18%), and was most frequently mentioned in the 2 weeks following the Virginia Tech (32%) and Tucson (42%) shootings. Mental health system policy proposals were also significantly more likely to

TABLE 1—News Media Portrayals (n = 364) of the Association Between Serious Mental Illness and Gun Violence, by Story Focus: United States 1997–2012

Mentioned in News Story	All Stories (n = 364), %	Event-Focused News Stories (n = 250), %	Thematic News Stories (n = 114), %
Mention of facts about SMI			
SMI is often stigmatized	7.1	4.4	12.4***
Negative public attitudes may lead to reluctance to seek treatment among persons with SMI	1.4	0.8	1.8
Negative public attitudes may lead to public desire for social distance from persons with SMI	0.6	0.4	0.9
Most people with SMI are not violent	7.7	2.4	18.6***
Predicting violence among persons with SMI is difficult	3.0	1.6	6.2
Mention of specific diagnoses associated with gun violence			
Schizophrenia	26.4	26.4	25.7
Bipolar disorder	6.9	6.8	6.2
Depression	14.8	16.4	10.6
Personality disorder	15.7	17.6	11.5
Psychosis	29.1	32.4	21.2*
Mention of additional factors associated with SMI and gun violence			
Substance use	10.7	12.0	8.0
History of abuse or trauma	4.4	5.2	2.7
Bullying	4.4	4.8	3.5
Stressful life event precipitating gun violence	3.0	3.2	2.7
Unemployment	4.5	6.0	1.8
Mention of any policy proposal to reduce gun violence	36.8	16.8	81.4***

Note. SMI = serious mental illness. Event-focused news stories are defined as those with a focus on a specific shooting event by a person with serious mental illness. Thematic news stories are defined as those with a focus on the general problem of serious mental illness and gun violence. News outlets were chosen based on high circulation or viewership across the country. * $P < .05$; *** $P < .001$; vs news stories focused on specific shooting events by persons with serious mental illness using the χ^2 test.

be mentioned in news stories in the 2 weeks following mass shootings (24%) versus other time periods (6%; $P < .001$). A total of 8% of news stories mentioned any policy to improve the mental health system, and 5% mentioned any policy to increase involuntary commitment. Overall, news stories mentioned gun policies more frequently than mental health policies (33% vs 12%) and only 7% of all sampled news stories mentioned both a gun policy and a mental health policy proposal.

Results of logistic regression showed that news media mentions of dangerous people with SMI as a cause of gun violence were significantly correlated with mentions of SMI gun restriction policy proposals but not with mentions of other gun policy proposals. In news stories that mentioned dangerous people with SMI as a cause of gun violence, the

predicted probability (adjusted for story word count) of the same news stories mentioning an SMI gun restriction proposal was 57% ($P < .001$), compared with a 10% probability of mentioning any other gun policy proposal, including policy to ban assault weapons or ammunition, policy to expand the background check system for gun sales and policy to allow concealed carrying of guns in public places ($P > .05$). News stories mentioning dangerous people with SMI as a cause of gun violence were more likely than other news stories to mention any mental health system policy proposal (predicted probability = 21%; $P < .01$). In news stories that mentioned dangerous weapons as a cause of gun violence, the predicted probability of the same news stories mentioning an SMI gun restriction proposal was 20%, compared with a 48% probability

of mentioning any other gun policy proposal ($P < .001$). News media mentions of dangerous weapons as a cause of gun violence were not significantly correlated with mentions of mental health system policy proposals.

DISCUSSION

The results of our study suggest that the public is often exposed to the issue of SMI and gun violence in the context of mass shootings. From 1997 to 2012, 51% of news media coverage about SMI and gun violence occurred in the 3 years encompassing recent mass shootings: 2007 (Virginia Tech), 2011 (Tucson), and 2012 (Aurora and Newtown). Furthermore, 35% of news stories about SMI and gun violence from 1997 to 2012 occurred in the 2-week periods following these 4 mass shootings, suggesting a very limited window of time in which the issue of SMI and gun violence is at the forefront of the public's agenda. Previous work found a high volume of in-depth news stories about youth violence following the 1999 high school shooting in Columbine, Colorado.⁴³ By contrast, we noted little change in volume of coverage following the Columbine shooting, suggesting that SMI was rarely mentioned in news stories about that event.

Across the 16-year study period, nearly 70% of news coverage of SMI and gun violence was event-focused, describing specific shooting events by persons with SMI. Previous work has found that news stories about mass shooters with SMI heighten negative public attitudes about persons with SMI in an experimental setting,²⁴ suggesting that the high volume of news coverage describing violent persons with SMI could lead the public to view the population with SMI as a threat to public safety. Even in thematic news coverage focused on describing the general problem of SMI and gun violence, the majority of news stories did not mention that most people with SMI are not violent or that we lack tools capable of accurately identifying persons with SMI who are at heightened risk of committing future violence. Our findings suggest that news media portrayals of persons with SMI as violent may contribute to the seemingly intractable negative public attitudes toward persons with serious conditions such as schizophrenia, which

TABLE 2—News Media Portrayals (n = 364) of the Causes of and Policy Responses to Gun Violence by Persons With Serious Mental Illness, by News Story Time Period: United States, 1997–2012

Mentioned in News Story	All News Stories (n = 364), %	News Stories Not in the 2 Weeks After Recent Mass Shootings (n = 235), %	News Stories in the 2 Weeks After Recent Mass Shootings, %				
			Total (n = 129)	Virginia Tech, April 16, 2007 (n = 38)	Tucson, AZ, January 8, 2011 (n = 24)	Aurora, CO, July 20, 2012 (n = 18)	Newtown, CT, December 14, 2012 (n = 49)
Mention of problems that cause gun violence							
Dangerous people with SMI	22.5	17.0	32.6**	42.1	58.3	16.7	18.4
Dangerous weapons	14.6	8.9	24.8***	18.4	29.2	22.2	28.6
Both dangerous people with SMI and dangerous weapons	5.0	3.4	7.8	5.3	16.7	5.6	6.1
Mention of gun policy proposals							
Any gun policy proposal	33.0	19.6	57.4***	44.7	50.0	44.4	75.5
SMI gun restrictions	18.1	13.6	26.4**	31.6	41.7	22.2	16.3
Assault weapon or ammunition ban	6.3	1.7	14.7***	2.6	16.7	22.2	20.4
Expanded background check system	11.3	7.7	17.8**	2.6	16.7	16.7	30.6
Concealed carrying of guns in public places, or other policy to increase gun access	6.0	3.4	10.9**	2.6	4.2	0.0	24.5
Mention of mental health policy proposals							
Any mental health policy proposal	12.4	6.0	24.0***	21.1	29.2	16.7	26.5
Improvement of mental health system	8.2	4.7	14.7**	13.2	20.8	5.6	16.3
Increase involuntary commitment	5.2	2.1	10.9***	10.5	12.5	11.1	10.2
Mention of both gun policy and mental health policy proposals	7.4	3.8	14.0***	7.9	16.7	11.1	18.4

Note. SMI = serious mental illness. News outlets were chosen based on high circulation or viewership across the country. ** $P < .01$; *** $P < .001$; vs news stories in other time periods using the χ^2 test.

have remained steady over the past 6 decades,²¹ even as social acceptability of less severe conditions, such as depression, appears to have improved.²⁷ Of additional concern, previous work has shown that individuals with negative attitudes toward those with SMI are less likely to support policies—such as increased government spending on mental health services—that benefit this vulnerable population.⁴⁴

Our study results suggest that there is a limited window of opportunity in which gun violence prevention is on the political agenda in the aftermath of mass shootings. News stories in the 2 weeks following mass shootings were significantly more likely to mention policy proposals than news stories about SMI and gun violence during other time periods. News media mentions of gun policies were particularly frequent in the 2 weeks following the Newtown shooting, when 76% of news stories mentioned a gun policy proposal. This finding suggests that the Newtown shooting, unique among recent mass shootings in that the majority of victims were young children,⁴⁵ prompted

debate about gun policy in the United States in a way that the Virginia Tech, Tucson, and Aurora shootings did not.

News media coverage of gun violence by persons with SMI may lead the public to view SMI as an important cause of gun violence, when in reality other factors—such as criminals' easy access to firearms—are more strongly associated with violent crime. A higher proportion of news stories mentioned dangerous people with SMI as opposed to dangerous weapons as a cause of gun violence, and SMI gun restrictions were the most frequently mentioned policy proposal across the study period. Of the stories that mentioned SMI as a cause of gun violence, only 16% clarified that most people with SMI are not violent. Furthermore, we found that news stories mentioning SMI as a cause of gun violence were more likely to mention SMI gun-restriction policy than policy targeting dangerous weapons. The focus on SMI in news coverage of mass shootings may lead policymakers to emphasize addressing SMI as a solution to gun violence, as opposed to addressing other factors that

contribute to the high overall burden of gun violence in the United States—only a small portion of which involves mass shootings—such as substance abuse, concentrated poverty, gang activity, and gun availability.^{46,47}

Limitations

These findings should be considered in the context of several limitations. First, our sample frame did not include local newspaper, local television, or the Internet-only news sources through which the US public increasingly accesses news. It is unclear whether our findings are generalizable to news media coverage in other types of news sources read and viewed by many Americans. Second, although previous research has demonstrated a causal link between news media coverage of mass shootings and public attitudes about SMI and support for gun policies,²⁴ the nature of this study's methodology does not permit us to directly assess how the public's exposure to these news media frames shapes their attitudes about individuals with SMI or their support for policies aimed at reducing gun violence. In addition,

our analysis of the volume and content of news media coverage of SMI and gun violence does not permit us to identify explanations for the trends in news coverage, which may be driven by competing issues in the news cycle or the changing landscape of news media coverage in the Internet age. Finally, because our study sample only included news stories about SMI and gun violence, we were unable to assess news coverage of other topics related to SMI.

Conclusions

In the context of the ongoing national dialogue around mental health and gun policy following the Sandy Hook Elementary School shooting in December 2012, it is important to understand the public's exposure to news media messages about SMI and gun violence. The torrent of news media coverage around recent mass shootings has moved the issue of SMI and gun violence to the forefront of the public agenda at several points in the past 6 years. Even though this heightened public attention to the issue may raise public support for gun violence prevention policies, it may also exacerbate negative attitudes about persons with SMI. Future research should consider how public exposure to acts of violence by persons with SMI in the news media influences public support for improving public mental health services. ■

About the Authors

Emma E. McGinty is with the Department of Health Policy and Management, the Center for Gun Policy and Research, and the Institute for Health and Social Policy, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD. Daniel W. Webster and Colleen L. Barry are with the Department of Health Policy and Management, Center for Gun Policy and Research, Johns Hopkins Bloomberg School of Public Health. Marian Jarlenski is with the Department of Health Policy and Management, Johns Hopkins Bloomberg School of Public Health.

Correspondence should be sent to Emma E. McGinty, PhD, MS, Department of Health Policy and Management, Institute for Health and Social Policy, Johns Hopkins Bloomberg School of Public Health, Wyman Park Building, Room 523, 3400 N. Charles St., Baltimore, MD 21218 (e-mail: emcginty@jhsph.edu). Reprints can be ordered at <http://www.ajph.org> by clicking the "Reprints" link.

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Contributors

E. E. McGinty conceptualized the study, designed the coding instrument, coded news stories, analyzed and interpreted data, and led the writing and revisions of the article. D. W. Webster conceptualized the study, refined

the coding instrument, and helped write the article. M. Jarlenski refined the coding instrument, coded news stories, and helped write the article. C. L. Barry conceptualized the study, refined the coding instrument, and helped write the article.

Human Participant Protection

This study was deemed exempt from review as non-human subjects research by the Johns Hopkins Bloomberg School of Public Health institutional review board.

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