Communication Strategies to Counter Stigma and Improve Mental Illness and Substance Use Disorder Policy

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Despite the high burden and poor rates of treatment associated with mental illness and substance use disorders, public support for allocating resources to improving treatment for these disorders is low. A growing body of research suggests that effective policy communication strategies can increase public support for policies benefiting people with these conditions. In October 2015, the Center for Mental Health and Addiction Policy Research at Johns Hopkins University convened an expert forum to identify what is currently known about the effectiveness of such policy communication strategies and produce recommendations for future research. One of the key conclusions of the forum was that communication strategies using personal narratives to engage audiences have the potential to increase public support for policies benefiting persons with mental illness or substance use disorders. Specifically, narratives combining personal stories with depictions of structural barriers to mental illness and substance use disorder treatment can increase the public's willingness to invest in the treatment system. Depictions of mental illness and violence significantly increase public stigma toward people with mental illness and are no more effective in increasing willingness to invest in mental health services than nonstigmatizing messages about structural barriers to treatment. Future research should prioritize development and evaluation of communication strategies to increase public support for evidence-based substance use disorder policies, including harm reduction policies—such as needle exchange programs—and policies expanding treatment.

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Mental illness and substance use disorders are associated with significant societal costs (1). Yet despite the well-documented shortcomings of the public treatment systems for these conditions—including chronic underfunding and provider shortages (2–4)—less than half of Americans support allocating additional resources to mental illness and substance use disorder treatment. In 2016, just 42% of Americans reported that they were willing to pay $50 more per year in taxes to improve the mental health service system (5). In 2013, the most recent year for which data are available, 39% of Americans supported increasing government spending on treatment for substance use disorders (6). Other evidence-based policies—for example, expanded access to naloxone, a medication that can reverse the effects of an opioid overdose—are also supported by fewer than 50% of Americans (7).

In October 2015, the Johns Hopkins Center for Mental Health and Addiction Policy Research convened a policy forum in Baltimore to assess what is currently known about how communication strategies influence the public's support for mental illness and substance use disorder policies and to identify priorities for future research. The forum brought together 45 leading researchers, clinicians, foundation and government representatives, and consumer advocates interested in identifying evidence-based communication strategies to increase public support for policies benefiting people with mental illness or substance use disorder. The forum was initiated and led by the authors of this article.

The consideration of communication strategies was limited to available research evaluating the effects of communication strategies on attitudes toward mental or substance use disorder policy, and several attendees presented preliminary results from ongoing studies. One of the areas of discussion was a small but growing body of research that uses experimental methods to test the effects of communication strategies used in policy debates on the public's support for mental illness and substance use disorder policies. These strategies, which are used by political actors in policy debates, involve disseminating messages through the news media, advocacy campaigns, political advertising, and other avenues in hopes of garnering public support for a preferred policy position (8–10). Given that public stigma directed at people with mental or substance use disorders is a key driver of policy support, the forum participants also considered how these strategies influence stigma. Research evaluating the effects of communication strategies on stigma alone, independent of support for policy, was outside the scope of the forum.

This article reports the forum's conclusions and recommendations. It also summarizes preliminary results from several studies presented at the forum by the researchers

conducting the investigations. These studies were published after the forum.

THE ROLE OF STIGMA IN POLICY PREFERENCES

Mental illness and substance use disorders are among the most stigmatized health conditions in the United States. Public literacy about behavioral health conditions, including endorsement of the neurobiological causes of these disorders, has increased dramatically since attitudes about mental illness were first measured in the 1950s (11–13). However, public stigma toward people with these conditions has remained high (Figure 1) (6,11,12,14). Holding stigmatizing views about people with mental illness or a substance use disorder is correlated with lower support for many policies designed to benefit these groups (15–17).

Results from a national survey conducted in 2013 showed that stigma toward people with mental illness was associated with decreased support for insurance parity, a policy aimed at eliminating discriminatory coverage of mental and substance use disorder insurance benefits, and for allocating additional government funding to mental health services (15). In a 2014 study, Kennedy-Hendricks and colleagues (17) found that stigma toward individuals with prescription opioid use disorders was associated with decreased public support for increasing government spending to improve substance use disorder treatment. Stigma was also correlated with increased support for punitive policies, for example, arresting and prosecuting people who obtain multiple opioid prescriptions from different doctors (17).

Notably, these studies demonstrate a correlation between stigma and support for mental illness and substance use disorder policies, not a causal effect. Stigma is one of multiple factors influencing the public's support for various policies (16); as such, it is not necessarily the case that reducing stigma will increase support for beneficial mental and substance use disorder policies and decrease support for punitive policies. For example, conservative political ideology, with its focus on personal responsibility and limiting the role of government, is consistently associated with decreased support for mental illness and substance use disorder policies that require allocation of additional government funds (15,16). Reducing stigma may not be enough to overcome these ideologically driven attitudes in opposition to the use of governmental funds for mental illness and substance use disorder services.

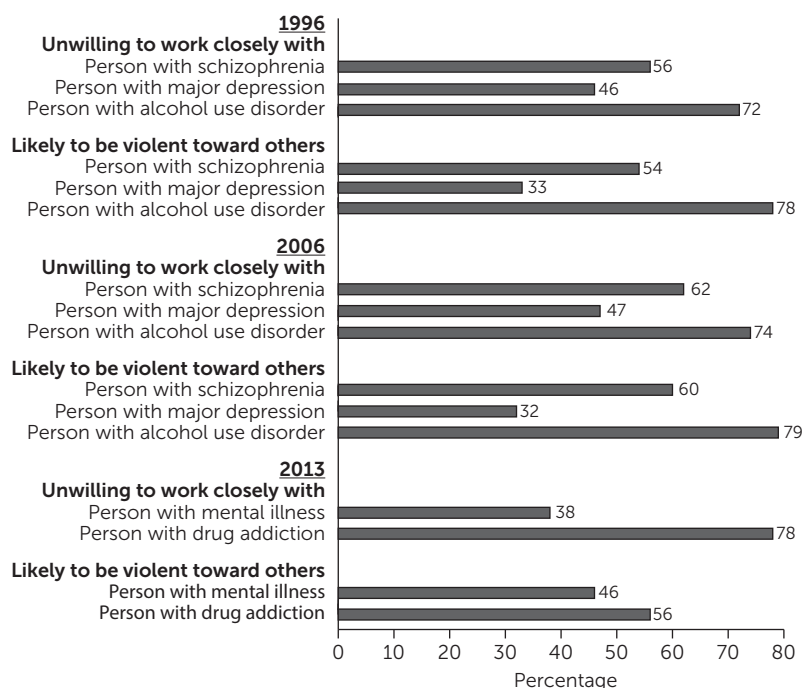Communication strategies may also increase public support for policies benefiting people with mental illness or substance use disorders without influencing stigma. Messages that affect audiences' perceptions of the causes, consequences, and salience of the policy problem can shift policy preferences (8,9,18–22), potentially without corresponding changes in stigma.

MENTAL ILLNESS AND SUBSTANCE USE DISORDER POLICY COMMUNICATION STRATEGIES

Forum participants identified five key findings regarding communication strategies for mental illness and substance use disorder policy (Table 1). Because four of the five communication strategies identified have been evaluated for both mental illness and substance use disorder policies, we discuss results for both conditions together. However, forum participants emphasized the importance of considering differences in the effectiveness of policy communication strategies for these two conditions. Although mental illness and substance use disorders are highly comorbid and increasingly viewed together as "behavioral health conditions" by clinicians and researchers, the public views them differently. The number of Americans who endorse neurobiological causes of substance use disorders is smaller than the number who endorse neurobiological causes of mental illness, with substance use disorders more likely to be viewed as a moral or character failure (12,23).

FIGURE 1. Public attitudes about persons with mental illness and substance use disorders, 1996–2013[a]

[a] Sources: Barry et al., 2014 (6); Pescosolido et al., 2010 (12); Barry et al., 2013 (14); Kennedy-Hendricks et al., 2016 (31)

TABLE 1. Five key findings regarding communication strategies for increasing support for policies associated with mental illness and substance use disorders

Strategy	Conclusion	Evidence base
Sympathetic narratives (stories that humanize the experiences and struggles of individuals with mental illness or substance use disorder)	A promising technique for reducing stigma and increasing support for beneficial policies	Narratives can increase audiences' receptivity to messages by enhancing engagement and eliciting emotional responses. A key strength of narratives is their ability to blend stories about individuals with contextual information about policy issues. By themselves, stories about individuals can prevent audiences from understanding the societal causes of policy problems and decrease support for beneficial public policies.
Messages blaming people with mental illness or substance use disorder for their condition	Can decrease the public's willingness to help these groups and increase support for punitive policy options	Public perception that the affected group is responsible for the problem they face can lead to lower support for policies benefiting and higher support for policies punishing that group. In contrast, when the public views the cause of the problem as outside of individual control, they are more likely to support beneficial policies. Studies show that messages blaming individuals with mental illness and substance use disorders for their conditions are associated with negative emotions, including increased anger and decreased pity; increased desire for social distance and acceptance of discrimination; and increased support for coercive treatment, segregated treatment, and other punitive policies.
Messages highlighting structural barriers to mental illness and substance use disorder treatment	Can raise support for beneficial policies without increasing stigma	Messaging strategies highlighting structural barriers to treatment, such as inadequate insurance coverage, provider shortages, and lack of availability of evidence-based services, can increase the public's willingness to allocate additional resources to mental illness and substance use disorder treatment and do not elevate stigma.
Messages emphasizing violence by people with mental illness	May increase public support for expanding mental health services but are stigmatizing; equally effective alternative strategies exist	Messages linking mental illness with interpersonal violence increase public stigma toward this group. Although such messages may increase public support for expanding mental health services, nonstigmatizing messages emphasizing structural barriers to mental illness treatment are equally effective. To date, no experimental studies have examined how depictions of violence by people with substance use disorders influence public stigma and policy attitudes.
Messages focused on treatment effectiveness	May reduce stigma associated with mental illness and substance use disorders, but effects on policy preferences are uncertain	Narratives portraying individuals with untreated and symptomatic mental illness and substance use disorders increase public stigma; compared with these depictions, portrayals of people experiencing successful treatment recovery decrease stigma. Studies suggest that on their own, messages about treatment effectiveness may not increase support for expanding mental illness and substance use disorder treatment, potentially because depictions of individuals successfully accessing services fail to convince the public of the need for treatment expansions. Future studies should test narratives combining messages highlighting treatment effectiveness, which may reduce stigma, with messages about structural barriers to treatment, which appear to increase support for expanded services.

Likewise, the public has expressed higher levels of stigma toward and less support for policies benefiting people with substance use disorders versus those with mental illness (6,12,24). In our discussion of findings, below, we highlight similarities and differences in results for mental illness as opposed to substance use disorders.

Sympathetic Narratives

Communication strategies that employ sympathetic narratives, or stories that humanize the experiences and struggles of individuals with mental illness or substance use disorder, are a promising technique for reducing stigma and increasing support for policies that benefit people with behavioral disorders. Policy makers, advocates, and journalists have long used stories about individuals to illustrate policy problems and potential solutions. Communication research empirically demonstrates the persuasive power of narratives, which blend stories about individuals, or "individual depictions," with broader contextual information about the problem at hand. In the absence of contextual information, individual depictions can prevent audiences from understanding the role of societal drivers of the policy problem and instead suggest that the individual depicted is to blame for the problems he or she faces (25). This is problematic from a policy support perspective given research demonstrating that the public is more likely to support policies benefiting individuals whose problems are perceived as stemming from societal causes outside of individual control rather than policies benefiting individuals

who are perceived to be responsible for causing their own problems (25–27).

Narratives help to overcome concerns about the role of individuals in their own misfortune by blending engaging stories about individuals with contextual information about a larger social problem. For example, a narrative tells a story about a specific individual with drug dependence but also describes the social and environmental risk factors that contributed to that individual's condition and places the individual's story in the larger context of the problem of drug dependence in the United States. Sympathetic narratives have been shown to enhance audiences' engagement with the issue being described and elicit emotional responses, both of which may enhance receptivity to the narrative's message (28–30). Although limited, the existing research suggests that narratives are a promising strategy for improving support for both mental illness and substance use disorder treatment policies (5,31,32).

Messages Blaming People for Their Condition

Messages that blame people with mental illness or substance use disorder for their condition decrease the public's willingness to help these groups and increase support for punitive policy options. Attribution theory suggests that when considering the causes of social problems, people typically exaggerate the role of individual responsibility and underestimate the importance of factors outside of individuals' control, such as community resources and exposure to environmental factors (33,34). This "fundamental attribution bias" can influence the public's policy preferences. Public perception that an affected group is responsible for the problem it faces can lead to lower support for policies benefiting the affected group and higher support for policies punishing the affected group. In contrast, when the public views the cause of the problem as wholly or mostly outside of individual control, it is more likely to support policies benefiting the affected group. Based on existing research, this concept appears relevant for both mental illness and substance use disorders.

Corrigan and colleagues (35,36) and Weiner and colleagues (37) have demonstrated that blaming individuals with mental illness for their condition is associated with negative emotions and attitudes, including increased anger, decreased pity, and support for mandatory and segregated treatment. It is important to note that although mandatory treatment policies, such as assisted outpatient treatment, are viewed as punitive by some stakeholders, who perceive such policies as restricting civil liberties (38,39), other groups view policies that expand mandatory treatment as a beneficial approach that helps people with mental illness and substance use disorders get needed treatment (40,41). In the context of substance use disorders, an analysis of 2013 national survey data found that attributing responsibility for prescription opioid use disorders to the people experiencing such disorders was correlated with increased desire for social distance, acceptance of discrimination, and support

for punitive policies—for example arresting individuals who obtain multiple opioid prescriptions from different doctors—and with lower support for increasing government spending on substance use disorder treatment (17).

Although these studies suggest that communication strategies blaming people with a mental illness or substance use disorder for their condition can have detrimental effects on stigma and policy attitudes, increasing the degree to which the public attributes responsibility for these conditions to factors outside of affected individuals' control may be insufficient to reduce stigma and increase support for beneficial policies. In the latter half of the 20th century, many consumer advocates believed that educating the public on the neurobiological causes of mental illness was the key to stigma reduction (12). This idea informed the design of communication campaigns. In the 1990s and early 2000s, the predominant stigma reduction strategy in the United States was the "Disease Like Any Other" campaign. Led by the National Alliance on Mental Illness, the campaign equated mental illnesses and substance use disorders with other biological conditions like diabetes (12).

As a result of this and other education efforts, Americans' endorsement of the neurobiological causes of both conditions increased from 1996 to 2006, but corresponding decreases in public stigma toward individuals with these conditions did not occur (12). Some evidence suggests that endorsement of the biological disease model may increase stigma, potentially as a result of increased perceptions of the permanence of mental illness and substance use disorders, which may produce pessimism about the potential for recovery (42,43).

The public endorses multiple causes of mental illness and substance use disorders. Some Americans recognize a neurobiological component of substance use disorder etiology and endorse poor character as a cause of the condition (12,44). Therefore, it is possible that in order to decrease stigma, it is not sufficient to increase public endorsement of causal factors outside of the control of individuals with mental illness and substance use disorders, such as neurobiological causes. We may also need to decrease endorsement of causal factors within the affected individuals' control. Although endorsement of neurobiological causes increased from 1996 to 2006, the proportion of Americans who viewed poor character as a cause of schizophrenia and major depression remained unchanged (31% and 32%, respectively, in 2006), and the percentage of U.S. adults attributing alcohol use disorder to poor character increased, from 49% in 1996 to 65% in 2006 (12).

Increased endorsement of neurobiological factors may increase public support for expanding mental health and substance use disorder treatment independent of stigma, but this relationship has not been directly tested. National survey results showed an increase of 9 percentage points in public support for increasing government spending on mental health services from 1996 to 2013, from 50% in 1996 to 59% in 2013 (14,16), but it is unclear whether this increase was attributable to parallel increases in endorsement of

neurobiological causes of mental illness during this period. Furthermore, these survey results should be interpreted with caution: the 2013 survey was conducted in the month following the mass shooting at Sandy Hook Elementary School in Newtown, Connecticut, by an individual widely believed to have a serious mental illness. This shooting prompted a national dialogue on mental illness and may have led to a temporary increase in the proportion of Americans supporting increased investment in mental health treatment (45,46).

Messages Highlighting Structural Barriers to Treatment

Messages highlighting structural barriers to mental illness and substance use disorder treatment can raise support for beneficial policies without increasing stigma. These messages have the potential to counter the public's propensity to form opinions consistent with fundamental attribution bias theory. Communication strategies emphasizing structural barriers to treatment—such as inadequate insurance coverage, provider shortages, and lack of availability of evidence-based services, for instance, supported employment—are one of the most common messaging strategies used by consumer advocacy groups hoping to garner public support for improving the mental illness and substance use disorder service systems (47–49). This strategy emphasizes the structural shortcomings that contribute to poor outcomes among people with mental illness or substance use disorders and that are directly addressable through public policy.

A limited body of experimental research suggests that this approach holds promise for improving support for public policies benefiting those with a mental illness or substance use disorder. A randomized message-framing experiment conducted in 2016 showed that compared with a control arm, a short narrative describing an individual with schizophrenia who faces multiple structural barriers to treatment, including inadequate insurance coverage and provider shortages, increased the public's willingness to pay taxes to improve the public mental health service system and their support for expanding a range of service options, including community-based outpatient treatment, supportive employment, and long-term hospitalization (5).

In a 2014 study conducted by using a national online survey panel, Kennedy-Hendricks and colleagues (31) tested the effect of a brief written narrative describing the barriers to accessing evidence-based opioid use disorder treatment faced by a low-income pregnant woman, such as a long waiting list for methadone treatment. Compared with both the control arm and a narrative describing the same woman without mentioning barriers to treatment, messages about barriers to treatment did not change social distance attitudes but were associated with increased feelings of sympathy and pity, as well as greater support for beneficial policies, including expanding Medicaid health insurance benefits to cover prescription opioid use disorder treatment. Barriers-to-treatment messages were also associated with decreased support for punitive policies, including a policy requiring

health care providers to report pregnant women with opioid use disorders to the state's child welfare agency (31).

Messages Emphasizing Violence by People With Mental Illness

Messages that emphasize violence by people with mental illness may increase public support for expanding mental health services, but such messages are stigmatizing and should be avoided, especially considering that equally effective alternative strategies exist. Multiple experimental studies have shown that messages emphasizing acts of violence by people with mental illness increase public stigma toward this group (5,50–53). Until recently, less was known about how violence-focused messages influence support for expanding mental health treatment. In the previously mentioned experimental study of a narrative describing structural barriers to treatment faced by an individual with schizophrenia, a version of the narrative was tested where the same individual went on to commit a public shooting (5). Unlike the narrative that did not involve violence, this narrative increased stigma compared with the control group of individuals exposed to no narratives. Both narratives were equally effective in increasing the public's willingness to pay additional taxes to improve mental health services and their support for expanding all of the mental service options measured. That suggests that messages about barriers to care, opposed to the depiction of violence, drove public support for allocating additional resources to expand public mental health services (5). This study built on a prior study by Corrigan et al. (51) of a college student sample. In that study, messages linking mental illness with violence were delivered in a face-to-face educational intervention. Compared with a control group, participants in the intervention had elevated stigma toward persons with mental illness, but the intervention did not increase willingness to allocate resources to psychiatric rehabilitation or mandated care.

To our knowledge, no experimental research has been conducted on the effects of communication strategies linking substance use disorder with violence. This topic warrants future study given survey research showing that the public perceives people with substance use disorder as more likely to be violent than those with mental illness (12,44).

Messages Focused on Treatment Effectiveness

Messages that focus on treatment effectiveness may reduce stigma related to mental illness and substance use disorders, but their effects on policy preferences are uncertain. Research has demonstrated that public stigma is tied, in part, to the symptoms and behaviors associated with untreated mental illness and substance use disorders, particularly positive psychotic symptoms and related behaviors, such as talking to oneself and a decline in personal hygiene (12,44,54). Limited existing research suggests that communication strategies focused on disseminating messages about successful treatment and recovery—a strategy credited with major reductions in the public stigma surrounding

HIV/AIDS (55)—may reduce the public stigma surrounding both mental illness and substance use disorder, although in the experimental studies conducted to date such messages have not influenced public support for mental illness or substance use disorder policy.

Using data from a telephone survey of a nationally representative sample of youths ages 14 to 22, Romer and Bock (56) found that youths reported less stigma toward an individual of their own age described as having been treated for depression versus the same individual with untreated depression. In a 2013 experiment using a nationally representative online survey panel, McGinty et al. (54) found that short narratives describing individuals experiencing successful treatment for and recovery from schizophrenia, prescription opioid use disorder, and heroin use disorder reduced stigma compared with depictions of untreated individuals with the same conditions. Comparing depictions of successfully treated versus untreated mental illness or substance use disorder is valid, given that such portrayals are often pitted against one another in policy debates. However, when measures of stigma are compared between respondents exposed to portrayals of successful treatment versus a control group of respondents exposed to no messages, stigma reduction effects largely disappear (5,54).

Two large national experiments have shown that compared with a control arm, depictions of successful treatment and recovery do not increase public support for allocating resources to expanded mental and substance use disorder services (5,54). Given studies showing that narratives describing barriers to treatment increased support for expanding mental and substance use disorder services (5,31), narratives depicting successful treatment, which show people with mental illness or substance use disorders accessing and benefiting from services, may fail to convince audiences of the need to improve the existing treatment system.

FUTURE RESEARCH

Forum participants identified five priorities for new research to improve communication about policy associated with mental illness and substance use disorders. (Table 2). The first two research priorities are specific to substance use disorders, and the final three priorities apply to both mental illness and substance use disorders.

Increasing Public Support for Expanding Treatment

Given the high prevalence of and low rates of treatment for substance use disorders in the United States, communication strategies should aim to improve support for policies that expand access to evidence-based treatment for this group. To succeed, such strategies may need to overcome the dominant public perception that people with a substance use disorder have a high degree of control over their substance use behaviors and, therefore, are able to stop using substances without the help of medical or psychosocial treatment (6,17,23). Available evidence suggests that communication strategies emphasizing the neurobiological causes of mental illness and substance use disorders do not decrease stigma (12), but these strategies may increase support for expanding treatment independent of stigma. Communication strategies designed to increase public support for expanded substance use disorder treatment by improving the public's understanding of substance use disorder treatment options and the efficacy of those options should be explored. A 2015 public opinion survey found that only 19% of Americans surveyed thought methadone—the gold standard for opioid use disorder treatment (57)—was the best way to treat heroin dependence, instead endorsing strategies like Narcotics Anonymous that involve being completely drug free (58). This suggests that communication strategies dispelling myths and emphasizing the efficacy of medication-assisted treatments like methadone may increase public support for expanded funding and delivery of such treatments.

Increasing Public Support for Harm Reduction Approaches

"Harm reduction" refers to strategies aimed at reducing negative consequences associated with drug use (59). Harm reduction strategies such as syringe exchange programs and safe consumption sites have been shown to reduce HIV transmission and increase engagement with drug treatment and other social services (60,61). Another harm reduction strategy, administration of naloxone, can save lives by reversing the course of opioid overdose (62). Harm reduction strategies have not been widely implemented in the United States, in part because of low public support for policies designed to reduce the negative consequences of drug use without eliminating drug use itself (63). However, the ongoing opioid crisis may be increasing Americans' openness to this type of strategy. As of November 2016, 45 states had passed policies designed to increase access to naloxone (64).

Although a window of opportunity for enactment of harm reduction approaches may be opening, little is known about which communication strategies increase public support for such strategies. To our knowledge, only one message-framing experiment has focused on harm reduction. In a 2015 study, Bachhuber and colleagues (32) tested a narrative describing a young woman who died from a prescription opioid overdose. The narrative combined a sympathetic description of the woman with educational messages about naloxone, including messages refuting the idea that use of naloxone encourages people to continue using prescription opioids by providing a "safety net" from overdose (32). The narrative went on to counterargue that, in fact, many people whose lives are saved by naloxone view the experience as a wake-up call and enter treatment (a point supported by research) (32). Compared with a control arm, this narrative raised public support for policies that would train first responders to use naloxone, provide naloxone to friends and family members of people at risk of opioid overdose, pass

TABLE 2. Five priorities for research on communication strategies for increasing support for policies associated with mental illness and substance use disorders

Priority	Evidence base
Increase public support for expanding evidence-based substance use disorder treatment	Given the high prevalence and low treatment rates of substance use disorders in the United States, development of communication strategies to increase support for evidence-based policies to prevent and treat substance use disorders is a priority. To succeed, such strategies need to overcome the dominant public perception that people with substance use disorders are to blame for and are in control of their condition.
Assess communication strategies to increase public support for harm reduction approaches	Harm reduction strategies aim to reduce negative consequences associated with drug use. Evidence-based harm reduction strategies such as needle exchanges, safe injection facilities, and naloxone administration have been shown to decrease overdose, decrease transmission of HIV and other diseases, and increase rates of treatment. With the exception of naloxone, however, these strategies have not been widely implemented in the United States, in part because of low public support for policies designed to reduce the negative consequences of drug use without eliminating drug use itself.
Disentangle the role of race and socioeconomic status in public stigma and support for policies involving mental illness and substance use disorders	Mental illness and substance use disorders are linked in the public's mind with racial, ethnic, and class characteristics that independently engender stigmatizing attitudes. One of the challenges of overcoming public stigma toward people with mental illness and substance use disorders and garnering public support for policies benefiting these groups is our lack of understanding regarding how much stigma and support for beneficial policies is related to mental illness and substance use disorders themselves versus race, class, or other stigmatizing characteristics.
Understand policy feedback—how do perceptions of existing mental illness and substance use disorder policies influence public stigma and support for further policy enactment?	The policy feedback literature shows that enactment of public policies can lead to shifts in public perceptions of the worthiness of the population targeted by the policy and shift political power by creating new constituencies. For example, Medicare is widely credited with increasing public perceptions of older adults as deserving of significant public investment and creating a powerful interest group of beneficiaries. In the mental illness and substance use disorder context, it is particularly important to understand how the growing number of policies designed to ensure equity in how the medical and insurance sectors approach mental illness and substance use disorders relative to other medical conditions, like insurance parity, and how shifts away from punitive drug control policy and toward increased emphasis on prevention and treatment influence public attitudes.
Test the effects of rights-oriented messages on public stigma and mental illness and substance use disorder policy preferences	The major mental illness and substance use disorder policy initiatives of the past century, including deinstitutionalization, passage of the Americans with Disabilities Act, and the federal insurance parity law have shared a civil rights orientation, seeking to prohibit discrimination on the basis of mental illness or substance use. To date, however, little is known about how rights-oriented messages influence public stigma and support for mental and substance use disorder policies. Rights-oriented messages have most commonly been applied to mental illness, but the potential for such messages to shift public attitudes about substance use disorder policy issues should also be considered.

laws to protect people if they call for medical help for an opioid overdose, and pass laws to legally protect people who administer naloxone (32). This study suggests that a sympathetic narrative combined with educational messages about harm reduction approaches, including messages that refute common misconceptions about that approach, may hold promise for increasing public support for evidence-based harm reduction strategies.

Disentangling the Role of Race and Socioeconomic Status

Mental illness and substance use disorders are linked in the public psyche with racial, ethnic, and class characteristics that independently engender stigmatizing attitudes (23,65,66). However, there is a lack of understanding regarding the extent to which stigma and reluctance to support beneficial policies are related to race, class, or other stigmatizing characteristics. This lack of understanding is one of the challenges with overcoming public stigma toward people with mental illness or substance disorders and garnering public support for beneficial policies. This issue is often

highlighted in the context of the current prescription opioid epidemic. Opinion leaders assert that because the current epidemic affects whites living in nonurban areas, unlike the prior heroin and crack cocaine epidemics, which predominantly affected low-income, urban communities of color (67,68), policy responses have shifted toward a more helpful and less punitive approach (69–71).

Limited experimental research has examined these issues. In a nationally representative experiment conducted in 2014, Kennedy-Hendricks et al. (31) tested two versions of a narrative depicting a pregnant woman who had prescription opioid use disorder, one version in which she was portrayed as having low socioeconomic status and another version in which she was portrayed as having high socioeconomic status. Respondents who read the high–socioeconomic status narrative were less likely than those who read the low–socioeconomic status portrayal to blame people with prescription opioid use disorders for their condition and were less likely to support punitive policies targeting pregnant women with prescription opioid use disorders (31). Further work is needed to understand how stigma and policy

attitudes related to race and class interact with attitudes about substance use disorders and whether these interactions vary by specific substance use disorder. For example, because crack cocaine has long been associated with urban, poor, African-American communities, the interaction of stigma and policy attitudes related to race and class with public attitudes about substance use disorders may be different for cocaine use disorder than for other conditions like opioid use disorder or cannabis use disorder.

Given the need for policy solutions to address significant racial disparities in drug-related arrests, prosecution, and incarceration in the United States, research to disentangle the role of race and socioeconomic status in public attitudes toward substance use disorders is particularly important for illicit drugs. No prior studies have examined these issues in the context of mental illness. Given significant racial and ethnic disparities in diagnosis of conduct and oppositional defiant disorder, one avenue for future research might consider how public attitudes about race influence the effectiveness of communication strategies designed to improve public support for allocating resources to services for children with these conditions.

Understanding Policy Feedback

The past decade has witnessed major changes at the national and state levels in the mental illness and substance use disorder policy landscape, including but not limited to passage of the federal Mental Health Parity and Addiction Equity Act (72); the multiple mental illness and substance use disorder provisions of the Affordable Care Act (73); the Office of National Drug Control Policy's allocation of significant new resources to expand medication-assisted opioid treatment (74); and state-level legalization of marijuana for medical and, in some cases, recreational use (75). Currently, very little is known regarding how public perceptions of these policies affect public stigma and policy attitudes. The policy feedback literature suggests that enactment of public policies can lead to changes in public perceptions of the worthiness of the population targeted by the policy and shift political power by creating new constituencies (76). These factors, along with perceptions of the effectiveness of these public policies, can also influence public attitudes regarding enactment of new public policies. For example, over the past 60 years, deinstitutionalization of state psychiatric hospitals and commitment laws emphasizing civil liberties over medical need have contributed to high rates of homelessness and criminal justice involvement among people with serious mental illness (2,77). Mental illness policy scholars have asserted that these policies increased public stigma toward mental illness by increasing the likelihood of the public's exposure to negative examples of people with conditions like schizophrenia—either in person or through the news media. Scholars suggest that this stigma, along with recognition of the problems of homeless and criminal justice involvement resulting from deinstitutionalization, has galvanized state efforts to enact assisted outpatient treatment laws (2,78–82).

Communications research focused on policy feedback is of particular interest in two domains. First, research should consider how the policies designed to ensure equity in how the health insurance and health care delivery sectors approach mental illness and substance use disorder compared with general medical conditions influences public stigma and support for other mental illness and substance use policies. These policies include insurance parity regulations and efforts to improve integration in the financing and delivery of mental illness and substance use disorder and general medical services. Second, future research should assess the influence of messages emphasizing shifts away from punitive policy approaches on public stigma and policy preferences. For example, the prescription opioid epidemic has contributed to a shift away from punitive, criminal justice–oriented drug control and toward an increased public health emphasis on prevention and treatment (74). To date, little is known about how this type of policy shift influences public attitudes about mental illness and substance use disorders and whether policy feedback operates differently for mental illness than for substance use disorder. Future policy feedback research should also consider how the policies of interest influence self- and structural stigma and how those dimensions of stigma in turn influence public stigma and support for policy.

Testing the Effects of Rights-Oriented Messages

The consumer mental health movement in the United States has long framed its mission and values in terms of civil rights and citizenship. The major mental illness and substance use disorder policies of the last century, including deinstitutionalization, passage of the Americans with Disabilities Act, and the federal insurance parity law, have shared this antidiscrimination, full-citizenship orientation, seeking to prohibit discrimination on the basis of mental illness and substance use disorder and ensure that people with these conditions have the same rights as all other citizens. To our knowledge, no large-scale experimental studies have tested how messages framing public policies as designed to protect the rights of people with mental illness or substance use disorder influence public stigma and policy support. In addition, little is known regarding whether and how rights-oriented messages, which have most commonly been applied to mental illness, can be used to shift public attitudes about issues related to substance use disorders.

Other Topics for Future Research

Future research should also test the persuasiveness of messages in competition with each other. Most current experimental research compares attitudes among respondents exposed to a single messaging strategy compared with those of respondents assigned to a control arm. In reality, mental illness and substance use disorder policy debates expose the public to multiple competing messages simultaneously. In particular, future research on competitive framing in the mental illness and substance use disorder policy context

should examine inoculation and preemptive refutation strategies. A growing body of communications research suggests that inoculation strategies, which present audiences with weakened forms of competing messages, help audiences to develop counterarguments to offset future competing messages (83–85). Inoculation strategies often include refutational messages that explicitly point out the flaws in competing arguments. For example, a message tested by Bachhuber et al. (32) refuted the idea that naloxone availability encourages continued opioid use.

Future research should also assess the duration of effects of mental illness and substance use disorder policy communication strategies. Most existing experiments have tested effects at a single point in time, immediately following message exposure. In one exception, Niederdeppe and colleagues (30) compared the effects over time of inoculation messages refuting pharmaceutical industry arguments against policies to curb prescription opioid misuse and a narrative combining a description of a woman experiencing prescription opioid use disorder and arguments in favor of the policies. They found that the narrative had stronger effects than the inoculation messages on respondents' attitudes over time.

Future research should also consider how communication strategies influence support for beneficial mental illness and substance use disorder policies among specific stakeholders, including policy makers and interest groups. Although public opinion is a key driver of policy development and policies with strong public support are most likely to be enacted (86), support from policy makers and interest groups—as opposed to the general public—is the impetus for some mental illness and substance use disorder policies. More than half of Americans are not aware of the provisions of the Mental Health Parity and Addiction Equity Act (87), suggesting that the dedicated efforts of consumer advocacy groups and leading political proponents, such as former Congressman Patrick Kennedy, drove parity enactment (72). Similarly, public opinion may not have played a major role in Congress's decision to pass the uncontroversial 2016 21st Century Cures Act, which received little public debate and includes provisions to expand mental illness and substance use disorder treatment. It is worth noting, however, that public demand for solutions to the opioid epidemic is high (7), and expanded opioid use disorder treatment is a key component of the 21st Century Cures law (88).

CONCLUSIONS

Mental illness and substance use disorder policy communication research is an emerging field, and the evidence described in this article is based on a relatively small number of published studies. Nonetheless, a growing body of research demonstrates that policy communication strategies can increase support for policies that benefit people with mental illness or substance use disorders. Of the communication strategies identified, strategies that use personal narratives to engage audiences and highlight structural barriers to treatment are particularly promising; the current research suggests that such strategies can increase the public's support for policies benefiting people with mental illness or substance use disorders without increasing stigma (5,31). Communication strategies linking mental illness with violence increase Americans' willingness to pay taxes to improve the public mental health system, but they also elevate stigma (5). Yet these messages are no more effective than messages focused on structural barriers. Thus messages focused on barriers to treatment offer advocates and policy makers who are interested in promoting policies to strengthen the treatment system a compelling alternative to stigmatizing, violence-focused messaging.

Considering the high burden of substance use disorders in the United States, in particular the ongoing opioid epidemic, it is critical to develop new communication strategies capable of increasing public support for evidence-based public health and medical policies to prevent and treat morbidity and mortality associated with substance use disorders. Communication efforts should focus on specific policies with proven benefits. These include harm reduction policies, such as efforts to create or expand safe consumption sites and syringe exchange programs, and policies to increase medication-assisted opioid use disorder treatment.

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REFERENCES

1. Roehrig C: Mental disorders top the list of the most costly conditions in the United States: $201 billion. Health Affairs 35:1130–1135, 2016
2. Frank RG, Glied SA: Better but Not Well: Mental Health Policy in the United States Since 1950. Baltimore, Johns Hopkins University Press, 2006
3. Cummings JR, Wen H, Druss BG: Improving access to mental health services for youth in the United States. JAMA 309:553–554, 2013
4. Dick AW, Pacula RL, Gordon AJ, et al: Increasing potential access to opioid agonist treatment in US treatment shortage areas. Health Affairs (Project Hope) 34:1028, 2015
5. McGinty EE, Pescosolido BA, Goldman HH, et al: Communicating about mental illness and violence: balancing increased support for services and stigma. Journal of Health Politics, Policy and Law, in press
6. Barry CL, McGinty EE, Pescosolido BA, et al: Stigma, discrimination, treatment effectiveness, and policy: public views about drug addiction and mental illness. Psychiatric Services 65:1269–1272, 2014

7. Barry CL, Kennedy-Hendricks A, Gollust SE, et al: Understanding Americans' views on opioid pain reliever abuse. Addiction 111: 85–93, 2016

8. Entman RM: Framing: toward clarification of a fractured paradigm. Journal of Communication 43:51–58, 1993

9. Chong D, Druckman JN: Framing theory. Annual Review of Political Science 10:103–126, 2007

10. Graber DA, Dunaway J: Mass Media and American Politics. Washington, DC, CQ Press, 2014

11. Phelan JC, Link BG, Stueve A, et al: Public conceptions of mental illness in 1950 and 1996: what is mental illness and is it to be feared? Journal of Health and Social Behavior 41:188–207, 2000

12. Pescosolido BA, Martin JK, Long JS, et al: "A disease like any other"? A decade of change in public reactions to schizophrenia, depression, and alcohol dependence. American Journal of Psychiatry 167:1321–1330, 2010

13. Pescosolido BA: The public stigma of mental illness: what do we think; what do we know; what can we prove? Journal of Health and Social Behavior 54:1–21, 2013

14. Barry CL, McGinty EE, Vernick JS, et al: After Newtown—public opinion on gun policy and mental illness. New England Journal of Medicine 368:1077–1081, 2013

15. Barry CL, McGinty EE: Stigma and public support for parity and government spending on mental health: a 2013 national opinion survey. Psychiatric Services 65:1265–1268, 2014

16. McSween JL: The role of group interest, identity, and stigma in determining mental health policy preferences. Journal of Health Politics, Policy and Law 27:773–800, 2002

17. Kennedy-Hendricks A, Barry CL, Gollust SE, et al: Social stigma toward persons with prescription opioid use disorder: associations with public support for punitive and public health–oriented policies. Psychiatric Services 68:462–469, 2017

18. Haidt J: The Righteous Mind: Why Good People Are Divided by Politics and Religion. Visalia, CA, Vintage, 2012

19. Nelson TE, Garst J: Values-based political messages and persuasion: relationships among speaker, recipient, and evoked values. Political Psychology 26:489–515, 2005

20. Gross K: Framing persuasive appeals: episodic and thematic framing, emotional response, and policy opinion. Political Psychology 29:169–172, 2008

21. Iyengar S: Is Anyone Responsible? How Television Frames Political Issues. London, University of Chicago Press, 1991

22. Scannell L, Gifford R: Personally relevant climate change: the role of place attachment and local versus global message framing in engagement. Environment and Behavior 45:60–85, 2013

23. Morone JA. Enemies of the people: the moral dimension to public health. Journal of Health Politics, Policy and Law 22:993–1020, 1997

24. Corrigan PW, Kuwabara SA, O'Shaughnessy J: The public stigma of mental illness and drug addiction: findings from a stratified random sample. Journal of Social Work 9:139–147, 2009

25. Iyengar S: Framing responsibility for political issues: the case of poverty. Political Behavior 12:19–40, 1990

26. Iyengar S: Framing responsibility for political issues. Annals of the American Academy of Political and Social Science 546:59–70, 1996

27. Iyengar S, Kinder DR: News That Matters: Television and American Opinion. Chicago, University of Chicago Press, 1987

28. Frank LB, Murphy ST, Chatterjee JS, et al: Telling stories, saving lives: creating narrative health messages. Health Communication 30:154–163, 2015

29. Murphy ST, Frank LB, Chatterjee JS, et al: Narrative versus nonnarrative: the role of identification, transportation, and emotion in reducing health disparities. Journal of Communication 63: 116–137, 2013

30. Niederdeppe J, Heley K, Barry CL: Inoculation and narrative strategies in competitive framing of three health policy issues. Journal of Communication 65:838–862, 2015

31. Kennedy-Hendricks A, McGinty EE, Barry CL: Effects of competing narratives on public perceptions of opioid pain reliever addiction during pregnancy. Journal of Health Politics, Policy and Law 41:873–916, 2016

32. Bachhuber MA, McGinty EE, Kennedy-Hendricks A, et al: Messaging to increase public support for naloxone distribution policies in the United States: results from a randomized survey experiment. PLoS One 10:e0130050, 2015

33. Manusov V, Spitzberg B. Attribution theory: finding good cause in the search for theory; in Engaging Theories in Interpersonal Communication: Multiple Perspectives. Edited by Baxter LA, Braithwaite DO. Washington, DC, Sage, 2008

34. Weiner B: On sin versus sickness: a theory of perceived responsibility and social motivation. American Psychologist 48:957–965, 1993

35. Corrigan P, Markowitz FE, Watson A, et al: An attribution model of public discrimination towards persons with mental illness. Journal of Health and Social Behavior 44:162–179, 2003

36. Corrigan PW, Rowan D, Green A, et al. Challenging two mental illness stigmas: personal responsibility and dangerousness. Schizophrenia Bulletin 28:293–309, 2002

37. Weiner B, Perry RP, Magnusson J: An attributional analysis of reactions to stigmas. Journal of Personality and Social Psychology 55:738–748, 1988

38. Action Alert–Tell Your Senators: Take Forced Treatment Out of Doc Fix Bill. Alexandria, VA, Mental Health America, 2014. http://www.mentalhealthamerica.net/action-alert-tell-your-senators-take-forced-treatment-out-doc-fix-bill. Accessed Feb 23, 2017

39. Outpatient and Civil Commitment. Washington, DC, Judge David L Bazelon Center for Mental Health Law, 2017. http://www.bazelon.org/where-we-stand/self-determination/forced-treatment/outpatient-and-civil-commitment.aspx. Accessed Feb 23, 2017

40. Promoting Assisted Outpatient Treatment. Arlington, VA, Treatment Advocacy Center, 2017. http://www.treatmentadvocacycenter.org/fixing-the-system/promoting-assisted-outpatient-treatment. Accessed Feb 23, 2017

41. Call to Action–Assisted Outpatient Treatment. Austin, National Alliance on Mental Illness–Texas. 2013. https://namitexaspolicy.wordpress.com/category/assisted-outpatient-treatment/. Accessed Feb 23, 2017

42. Mehta S, Farina A: Is being "sick" really better? Effect of the disease view of mental disorder on stigma. Journal of Social and Clinical Psychology 16:405–419, 1997

43. Schnittker J: An uncertain revolution: why the rise of a genetic model of mental illness has not increased tolerance. Social Science and Medicine 67:1370–1381, 2008

44. Link BG, Phelan JC, Bresnahan M, et al: Public conceptions of mental illness: labels, causes, dangerousness, and social distance. American Journal of Public Health 89:1328–1333, 1999

45. McGinty EE, Webster DW, Jarlenski M, et al: News media framing of serious mental illness and gun violence in the United States, 1997–2012. American Journal of Public Health 104:406–413, 2014

46. Glied S, Frank RG: Mental illness and violence: lessons from the evidence. American Journal of Public Health 104:e5–e6, 2014

47. Reasserting the Role of Community Mental Health. Washington, DC, Judge David L. Bazelon Center for Mental Health Law, 2011. http://www.bazelon.org/News-Publications/Publications/List/1/CategoryID/8/Level/a/ProductID/62.aspx?SortField=ProductNumber%2cProductNumber. Accessed May 20, 2016

48. Position Statement 11: In Support of Recovery-Based Systems Transformation. Alexandria, VA, Mental Health America, 2016. http://www.mentalhealthamerica.net/position-statements. Accessed Sept 6, 2016

49. Mental Health Care: NAMI Report Finds Insurance Discrimination, Lack of Transparency Under Parity Laws. Arlington, VA, National Alliance on Mental Illness, 2015. http://www.nami.org/Press-Media/Press-Releases/2015/Mental-Health-Care-NAMI-Report-Finds-Insurance-Di. Accessed Sept 6, 2016

50. Corrigan PW, Powell KJ, Michaels PJ: The effects of news stories on the stigma of mental illness. Journal of Nervous and Mental Disease 201:179–182, 2013

51. Corrigan PW, Watson AC, Warpinski AC, et al: Implications of educating the public on mental illness, violence, and stigma. Psychiatric Services 55:577–580, 2004

52. Angermeyer MC, Matschinger H: The effect of violent attacks by schizophrenic persons on the attitude of the public towards the mentally ill. Social Science and Medicine 43:1721–1728, 1996

53. McGinty EE, Webster DW, Barry CL: Effects of news media messages about mass shootings on attitudes toward persons with serious mental illness and public support for gun control policies. American Journal of Psychiatry 170:494–501, 2013

54. McGinty EE, Goldman HH, Pescosolido B, et al: Portraying mental illness and drug addiction as treatable health conditions: effects of a randomized experiment on stigma and discrimination. Social Science and Medicine 126:73–85, 2015

55. Chambers LA, Rueda S, Baker DN, et al: Stigma, HIV and health: a qualitative synthesis. BMC Public Health 15:848, 2015

56. Romer D, Bock M: Reducing the stigma of mental illness among adolescents and young adults: the effects of treatment information. Journal of Health Communication 13:742–758, 2008

57. Volkow ND, Frieden TR, Hyde PS, et al: Medication-assisted therapies—tackling the opioid-overdose epidemic. New England Journal of Medicine 370:2063–2066, 2014

58. Poll Results: Heroin. London, YouGov, 2015. https://today.yougov.com/news/2015/01/20/poll-results-heroin/. Accessed Feb 22, 2017

59. Marlatt GA, Larimer ME, Witkiewitz K: Harm Reduction: Pragmatic Strategies for Managing High-Risk Behaviors. New York, Guilford Press, 2011

60. Potier C, Laprévote V, Dubois-Arber F, et al: Supervised injection services: what has been demonstrated? A systematic literature review. Drug and Alcohol Dependence 145:48–68, 2014

61. Abdul-Quader AS, Feelemyer J, Modi S, et al: Effectiveness of structural-level needle/syringe programs to reduce HCV and HIV infection among people who inject drugs: a systematic review. AIDS and Behavior 17:2878–2892, 2013

62. Ritter A, Cameron J: A review of the efficacy and effectiveness of harm reduction strategies for alcohol, tobacco and illicit drugs. Drug and Alcohol Review 25:611–624, 2006

63. Beletsky L, Davis CS, Anderson E, et al: The law (and politics) of safe injection facilities in the United States. American Journal of Public Health 98:231–237, 2008

64. Map of State Laws Regulating Naloxone. New York, Drug Policy Alliance, 2016. http://www.drugpolicy.org/resource/map-state-laws-regulating-naloxone. Accessed Nov 8, 2016

65. Singer M, Page JB: The Social Value of Drug Addictions: Uses of the Useless, 1st ed. Walnut Creek, CA, Left Coast Press, 2014

66. Baglivio MT, Wolff KT, Piquero AR, et al: Racial/ethnic disproportionality in psychiatric diagnoses and treatment in a sample of serious juvenile offenders. Journal of Youth and Adolescence 46:1424–1451, 2017

67. Han B, Compton WM, Jones CM, et al: Nonmedical prescription opioid use and use disorders among adults aged 18 through 64 years in the United States, 2003–2013. JAMA 314:1468–1478, 2015

68. Cicero TJ, Ellis MS, Surratt HL, et al: The changing face of heroin use in the United States: a retrospective analysis of the past 50 years. JAMA Psychiatry 71:821–826, 2014

69. Cohen A: When heroin hits the white suburbs. New York, Marshall Project, 2015. www.themarshallproject.org/2015/08/12/when-heroin-hits-the-white-suburbs. Accessed Nov 8, 2016

70. Seelye KQ: In heroin crisis, white families seek gentler war on drugs. New York Times, Oct 30, 2015

71. Cohen A: How white users made heroin a public health problem. Atlantic Magazine, Aug 12, 2015

72. Barry CL, Huskamp HA, Goldman HH: A political history of federal mental health and addiction insurance parity. Milbank Quarterly 88:404–433, 2010

73. Mechanic D. Seizing opportunities under the Affordable Care Act for transforming the mental and behavioral health system. Health Affairs 31:376–382, 2012

74. Obama Administration Announces Additional Actions to Address the Prescription Opioid Abuse and Heroin Epidemic. Washington, DC, The White House, March 29, 2016. https://www.whitehouse.gov/the-press-office/2016/03/29/fact-sheet-obama-administration-announces-additional-actions-address

75. States That Have Decriminalized. Washington, DC, National Organization to Reform Marijuana Laws, 2016. http://norml.org/aboutmarijuana/item/states-that-have-decriminalized. Accessed March 10, 2016

76. Pierson P: When effect becomes cause: policy feedback and political change. World Politics 45:595–628, 1993

77. Grob GN: The Mad Among Us: A History of the Care of America's Mentally Ill. Cambridge, MA, Harvard University Press, 1995

78. Sharfstein SS: Status of stigma, 2012. Psychiatric Services 63:953, 2012

79. Link B, Castille DM, Stuber J. Stigma and coercion in the context of outpatient treatment for people with mental illnesses. Social Science and Medicine 67:409–419, 2008

80. Torrey EF: Deinstitutionalization and the rise of violence. CNS Spectrums 20:207–214, 2015

81. Torrey EF: Stigma and violence: isn't it time to connect the dots? Schizophrenia Bulletin 37:892–896, 2011

82. Torrey EF: The Insanity Offense: How America's Failure to Treat the Seriously Mentally Ill Endangers Its Citizens. New York, Norton, 2012

83. Niederdeppe J, Gollust SE, Barry CL: Inoculation in competitive framing: examining message effects on public strategies. Public Opinion Quarterly 78:634–655, 2014

84. Richards AS, Banas JA: Inoculating against reactance to persuasive health messages. Health Communication 30: 451–460, 2015

85. Compton J, Jackson B, Dimmock JA: Persuading others to avoid persuasion: inoculation theory and resistant health attitudes. Frontiers in Psychology 7:1–9, 2016

86. Stimson JA: Tides of Consent: How Public Opinion Shapes American Politics. New York, Cambridge University Press, 2004

87. Weldon K: Public attitudes about mental health. Huffington Post, April 29, 2015. http://www.huffingtonpost.com/kathleen-weldon/public-attitudes-about-me_b_7160960.html

88. Ackerman M: 21st century cures act promises $1 billion to address opioid epidemic. The Fix, Dec 7, 2016. https://www.thefix.com/21st-century-cures-act-promises-1-billion-address-opioid-epidemic