Portraying mental illness and drug addiction as treatable health conditions: Effects of a randomized experiment on stigma and discrimination

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A R T I C L E I N F O	A B S T R A C T
	Despite significant advances in treatment, stigma and discrimination toward persons with mental illness and drug addiction have remained constant in past decades. Prior work suggests that portraying other stigmatized health conditions (i.e., HIV/AIDS) as treatable can improve public attitudes toward those affected. Our study compared the effects of vignettes portraying persons with untreated and symptomatic versus successfully treated and asymptomatic mental illness and drug addiction on several dimensions of public attitudes about these conditions. We conducted a survey-embedded randomized experiment using a national sample ($N = 3940$) from an online panel. Respondents were randomly assigned to read one of ten vignettes. Vignette one was a control vignette, vignettes 2—5 portrayed individuals with untreated schizophrenia, depression, prescription pain medication addiction and heroin addiction, and vignettes 6—10 portrayed successfully treated individuals with the same conditions. After reading the randomly assigned vignette, respondents answered questions about their attitudes related to mental illness or drug addiction. Portrayals of untreated and symptomatic schizophrenia, depression, and heroin addiction heightened negative public attitudes toward persons with mental illness and drug addiction. In contrast, portrayals of successfully treated schizophrenia, prescription painkiller addiction, and heroin addiction led to less desire for social distance, greater belief in the effectiveness of treatment, and less willingness to discriminate against persons with these conditions. Portrayal of persons with successfully treated mental illness and drug addiction is a promising strategy for reducing stigma and discrimination toward persons with these conditions and improving public perceptions of treatment effectiveness.

1. Introduction

Stigma and discrimination toward persons with mental illness and substance abuse are substantial and widespread. In the United States (US), national surveys have shown that many Americans are unwilling to have a person with mental illness or substance abuse as a work colleague or neighbor (Pescosolido et al., 2010; Link et al., 1999; Barry et al., 2013), and more than half of Americans believe that persons with schizophrenia, alcohol addiction, and drug addiction are likely to be violent toward others (Pescosolido et al., 2010). Compared to prior generations, Americans today are more willing to disclose personal mental illness and substance abuse problems and seek medical treatment for these conditions (Mojtabai, 2007; Pescosolido et al., 2013). Despite these improvements, stigma toward persons

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with mental illness and substance abuse in the US has remained constant − or by some measures increased − over past decades (Phelan et al., 2000; Pescosolido et al., 2010). Public stigma toward persons with mental illness and substance abuse is not limited to the US (Evans-Lacko et al., 2012; Griffiths et al., 2006; Mojtabai, 2010; Pescosolido et al., 2013; Sartorius and Schulze, 2005; Thornicroft et al., 2009; Wahlbeck and Aromaa, 2011). A recent study documented widespread negative attitudes toward persons with schizophrenia and depression in 16 countries in Europe, South America, Asia, Australia and Africa (Pescosolido et al., 2013). Compared to other nations, fewer members of the American public were willing to have a person with schizophrenia as a neighbor than were respondents from Argentina, Belgium, Brazil, Germany, Iceland, New Zealand, and South Africa (Pescosolido, 2014). On the same measure, the US public reported similar levels of stigma as citizens in Great Britain and Hungary, and lower stigma than respondents in Bangladesh, Bulgaria, Cyprus, the Philippines, and Spain (Pescosolido, 2014). This enduring social stigma is linked to discrimination and poor health and social outcomes among those with mental illness and substance abuse, including under-treatment (Gaudiano and Miller, 2012; Sirey et al., 2001) and difficulty finding and maintaining housing and employment (Frank and Glied, 2006; Link et al., 1987; Mueser and McGurk, 2004).

Much of our current knowledge about public stigma toward persons with mental illness and substance abuse comes from the General Social Survey (GSS), which in 1996 and 2006 asked respondents to report their attitudes toward persons − portrayed in vignette format − with untreated and symptomatic schizophrenia, major depression, alcohol dependence, and cocaine dependence (Link et al., 1999; Pescosolido et al., 2010). These four mental illness/substance abuse vignettes engendered different levels of negative response from the American public, with substance abuse eliciting higher levels of stigma than mental illness. For example, one-third of Americans thought that persons with untreated and symptomatic major depression were likely to commit violence toward others, compared to much larger proportions of respondents who believed that persons with untreated and symptomatic schizophrenia (60%), alcohol dependence (65%), and cocaine dependence (87%) were likely to be violent (Link et al., 1999; Pescosolido et al., 2010). The GSS vignette methodology has also been used to measure stigma toward persons with mental illness − but not substance abuse − outside the US. A consistent finding across countries is that the public holds higher levels of stigma toward persons with schizophrenia than toward persons with depression (Pescosolido et al., 2013).

The GSS has also provided critical information about how Americans perceive the causes of mental illness and substance abuse. A study comparing the results of the 1996 and 2006 surveys showed that in 2006, Americans increasingly identified biomedical and neurobiological factors − opposed to family upbringing or character defects − as important causes of mental illness and substance abuse (Pescosolido et al., 2010). Significantly, the same study found that increased endorsement of the biological basis of mental illness was not associated with corresponding decreases in stigma (Pescosolido et al., 2010). This finding failed to support the central tenet of the anti-stigma efforts of the 1990s and early 2000s, which focused on increasing public perceptions of mental illness and substance abuse as biologically based − and therefore on par with conditions like heart disease or cancer − as the pathway to reducing stigma (Pescosolido et al., 2010).

While the GSS has provided us with a comprehensive understanding of the stigma surrounding mental illness and substance abuse in the US, it is not without important shortcomings. In a 2010 editorial, one of us (HHG) posited that the abnormal behaviors portrayed in the vignettes (such as deterioration of personal hygiene, loss of interest in work and leisure activities, and failure to fulfill work and family commitments) represent the sources of stigma (Goldman, 2010). The GSS vignettes were designed to portray persons experiencing the onset of a mental illness or substance abuse problem. In reality, many people with these conditions − for whom effective treatment has led to symptom control and recovery − bear little resemblance to the untreated, symptomatic individuals portrayed in the vignettes. Portrayals of persons with untreated, symptomatic mental illness and drug addiction who do not recover from their condition may contribute to the widespread social stigma toward these groups. In contrast, portrayals of persons who undergo successful treatment for their condition may elicit more positive public attitudes. Research on other stigmatized health conditions, such as HIV (Abadia-Barrero and Castro, 2006; Wolfe et al., 2008) suggests that increased public recognition of these conditions as treatable has led to reduced stigma and discrimination toward those affected.

Importantly, portrayals of persons with untreated, symptomatic mental illness occur frequently in the mass media. Studies analyzing the content of news and popular media have shown that the majority of individuals with mental illness and drug addiction depicted in the media exhibit deviant or abnormal behavior, in particular violent behavior related to the psychotic symptoms (e.g. hallucinations and delusions) often associated with untreated serious mental illnesses like schizophrenia (McGinty et al., 2014; Olafsdottir, 2011; Wahl, 1995, 2003, 1992; Wahl et al., 2002, 2003). In contrast, few news stories, television programs or movies portray individuals who undergo successful treatment for mental illness and addiction (Olafsdottir, 2011; Wahl, 1995, 2003, 1992; Wahl et al., 2002, 2003). Research from the fields of communication and social psychology has shown that public attitudes about groups of people affected by health and social problems are strongly influenced by depictions − in the news media, popular media, and elsewhere − of specific individuals who "exemplify" the problem in question (Hamill et al., 1980; Iyengar, 1990, 1996; Zillman and Brosius, 2000). Media depictions of persons with mental illness and drug addiction may be an important contributor to public attitudes about these conditions, particularly given that the majority of the public has no direct personal experience with serious mental illness or drug addiction (Frank and Glied, 2006; Kessler et al., 2011) and instead gets most of their information about these conditions from the news media (Link et al., 1999; Yankelovich, 1990).

To our knowledge, no prior study has examined how GSS-style portrayals of persons with untreated, symptomatic mental illness and drug addiction who do not recover influence levels of stigma, willingness to discriminate, views about treatment effectiveness, or support for policies that benefit persons with mental illness and drug addiction among the general public. Nor has any prior research that we know of assessed how portrayals of persons who undergo successful treatment for mental illness and drug addiction influence these outcomes. In this study, we use a vignette-based randomized experiment to address these questions in the context of four important causes of disability and mortality in the US: schizophrenia, major depression, prescription painkiller addiction, and heroin addiction.

Our experiment tested three hypotheses. First, we hypothesized that portrayals of individuals with untreated, symptomatic mental illness and drug addiction would exacerbate negative public attitudes about and decrease public support for policies that benefit persons with these conditions, compared to a control group. Second, we hypothesized that portrayals of individuals who transition