Substance Use and Mental Health Stigma in Veterans with Co-occurring Disorders

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Abstract:

**Objective:** This pilot study examined whether substance use or mental illness was more stigmatizing among individuals with co-occurring mental health and substance abuse problems.

**Methods:** This study included 48 individuals with co-occurring substance use and mental health problems enrolled in a Substance Abuse and Mental Health Services funded treatment program. Subjects received a baseline assessment that included addiction, mental health, and stigma measures. **Results:** The sample consisted primarily of white males with an average age of 38 years. Substance abuse was found to be more stigmatizing than mental illness, $F(1,47) = 14.213$, $p < .001$, and stigma varied across four different levels of stigma (Aware, Agree, Apply, and Harm), $F(2.099, 98.675) = 117.883, p < .001$. The interaction between type and level of stigma was also significant, $F(2.41, 113.284) = 20.250, p < .001$ indicating that differences in reported stigma between types varied across levels of stigma. Post hoc tests found a significant difference between all levels of stigma except for the comparison between Apply and Harm. Reported stigma was significantly higher for substance abuse than mental illness at the Aware and Agree levels. Additionally, pairwise comparisons found significant differences between all levels of stigma with the exception of the comparison between Apply and Harm, indicating a pattern whereby reported stigma generally decreased from the first level (Aware stage) to subsequent levels. **Conclusion:** These results have important implications for treatment, suggesting the need to incorporate anti-stigma interventions for individuals with co-occurring disorders with a greater focus on substance abuse.

**Key Words:** Co-occurring disorders, Stigma, Mental Illness, Substance Abuse
Introduction

There is a profusion of research on the role stigma plays in healthcare initiation and ongoing treatment engagement among individuals with mental health or substance abuse problems. This is demonstrated in the public and self-stigma of mental illness literature, which includes a recent meta-analysis involving 49 studies (Corrigan, 2015). Public stigma refers to attitudes of the general public toward individuals with disorders (Corrigan & Watson, 2002), and the research on public stigma suggests people with mental illness are subjected to social rejection, especially in the form of social distancing (Lauber et al., 2004). People with mental illness are viewed as dangerous, disruptive, untreatable, inept, and unable to care for themselves (Feldman & Crandall, 2007). Many also experience discrimination, such as being denied housing, employment, and educational opportunities (Bordieri & Drehmer, 1986; Corrigan et al., 2004). Research has also focused on self-stigma, the internalization of society’s negative beliefs by an individual (Corrigan & Watson, 2002), and suggests individuals with a great deal of self-stigma suffer negative outcomes such as diminished self-esteem, self-efficacy, and psychological well-being (Corrigan et al., 2002, 2006, 2009, 2011, 2012; Watson et al., 2007; Rüsch et al., 2009, 2010; and Ritsher et al., 2003).

Compared to mental illness, less research has focused on public stigma of substance use issues, with only four existing reviews regarding addiction stigma. One review focused specifically on individuals with problematic drug use, another examined interventions for reducing addiction stigma, a third compared social perceptions of alcohol use with mental illness, and the fourth focused on the sociodemographic and psychiatric predictors of addiction (Lloyd, 2013; Livingston et al., 2012; Schomerus et al., 2011; Kulesza et al., 2013). These reviews suggest that individuals who abuse alcohol or drugs are held responsible for their
condition and their addiction is often perceived as a character flaw, resulting in more social rejection and discrimination (Dean & Rud, 1984; Schomerus et al., 2011; Corrigan et al., 2005). Individuals with substance use disorders experience more social disapproval compared to other stigmatized groups, including those who suffer from obesity, homelessness, have borderline intelligence, and, despite colloquial use of the term “leper,” people with leprosy (Room, 2005).

Other studies have more directly examined the difference in public stigma between those with substance use issues and individuals with mental health problems. One echoed themes above, suggesting addiction to cocaine was more stigmatizing than suffering from psychosis (Corrigan et al., 2000). Another suggested people with a drug addiction are viewed as more dangerous and blameworthy than someone with a mental illness (Corrigan et al, 2009).

Regrettably, there is less research about the difference between substance use disorders and mental illness in the realm of self-stigma. Despite high rates of co-occurring disorders (Regier, et al., 1990), there is a dearth of research on how a person with dual diagnosis contrasts the self-stigma of mental illness compared to substance abuse in himself/herself. One longitudinal study looked at the effect of public stigma pre and post treatment in a population of men with co-occurring disorders and found that while mental health and substance abuse issues improved, mental illness and addiction stigma continued to have a negative effect on individuals’ lives (Link et al., 1997). No other studies analyze this juxtaposition at the level of self-stigma. Therefore, the current study was undertaken to further examine contrasting self-stigma within individuals dually diagnosed with both mental health and substance use disorders and used a convenience sample of veterans admitted in a SAMHSA funded Jail Diversion treatment program. This study used a comprehensive multidimensional measure of stigma to uniquely examine which condition was more stigmatizing to the individual. The goal of this study was to
examine the four stages of stigma separately for mental illness and for substance use in a group of individuals with co-occurring mental illness and substance use disorders.

**Methods**

This project was approved by the Department of Veterans Affairs (VA) Institutional Review Board, as well as multiple state and university Institutional Review Boards. All participants provided informed consent prior to completing a baseline interview. The study included males and females, 18 years of age or older with: (1) a history of military service (regardless of discharge status); (2) a recent arrest for which they were eligible by the prosecution to be redirected to the community in lieu of jail; and (3) a DSM-IV-TR Axis I psychiatric disorder including depression, anxiety, and/or a trauma-related issue, as well as current substance use or dependence. Veterans were excluded if they: (1) had schizophrenia or bipolar I disorder; (2) had a moderate to severe intellectual disability as a result of traumatic brain injury (TBI); (3) had acute suicidality; (4) needed immediate medical attention related to substance use (i.e., withdrawal); or (5) were not capable of providing informed consent. For this paper we analyzed data from a sample of this population.

Descriptive statistics were used to examine the demographic make-up and characterize the mental health and substance use issues of the sample. Cronbach’s Alpha was used to look at internal consistency of the substance abuse and mental health stigma scales. A 2x4 repeated measures ANOVA and corresponding post hoc tests were conducted to examine the differences in reporting stigma of substance abuse and stigma of mental health. Greenhouse-Geisser corrected values were used for the ANOVA where the assumption of sphericity was violated and post hoc tests were conducted using pairwise t-tests with a Bonferroni correction to account for multiple comparisons. Examination of the ANOVA residuals revealed a moderate deviation from
the assumption of normality when using the original stigma measures. Thus, we repeated the analysis with log-transformed stigma measures, and found no substantive differences from the results of the analysis conducted with the original measures. As such, we report the findings from the untransformed measures in our manuscript. All analyses were conducted using SPSS Statistics 22.

Measures

Baseline demographic mental health and substance use service, treatment history, military trauma, and criminal justice involvement was collected using the Government Performance and Results Act Questionnaire (GPRA) (SAMHSA, 2010). Two self-report stigma assessments were also used. This theoretically-based and validated stigma measure conceptualized stigma as a complex four stage regressive model that includes self and public stigma (Corrigan & Watson, 2002). In the first stage people are “Aware” of the stigma, known as public or perceived stigma. For example, “The public thinks people with mental illness are dirty and unkempt.” The second stage is “Agree,” “That’s right, people with mental illness are dirty and unkempt.” This may lead to the “Apply” stage, where people attribute these stereotypes to themselves: “I am mentally ill, so I am dirty and unkempt.” The fourth and final stage, “Harm,” in which the result of stigma is self-discrimination: “I am less of a person because I am mentally ill and dirty and unkempt.” This negatively impacts self-esteem and causes harm to the self. The first measure was the Self-Stigma of Mental Illness Scale (Corrigan et al., 2006), and the second measure was an adapted version of the Self-Stigma of Mental Illness Scale used to assess addiction stigma. The same words were used in both assessments, except in the latter, “mental illness” was substituted with “addiction.” This measure was previously used to examine the
relationships among the severity of substance abuse and mental health, self-esteem, and other components of self-stigma (Rodrigues et al., 2013).

**Results**

**Demographics**

Demographic data are presented in Table 1. Veterans were predominantly male (95.8%), Caucasian (83.3%), and had a high school diploma/GED or higher (95.8%). The mean age of the sample was 36.73 years (SD=11.75). More than half reported having stable housing (54.2%), nearly 7 out of 10 (68.8%) were unemployed, and of those unemployed 72.7% were disabled or looking for a job. All participants met screening criteria for co-occurring mental health and substance use disorders which was determined by a licensed clinician in conjunction with participants endorsing current mental health and substance abuse issues on the GPRA Questionnaire.

[INSERT TABLE 1 HERE]

**Mental Health and Substance Abuse Stigma**

Cronbach alpha scores for all four subscales of both the Self-Stigma Mental Illness and Self-Stigma Addiction Scale were above 0.8, indicating all have good internal consistency measuring perceived and self-stigma. The Self-Stigma of Mental Illness measure had high reliability for all four levels of mental illness stigma assessment, (Awareness $\alpha = 0.94$, Agreement $\alpha = 0.89$, Apply $\alpha = 0.83$, and Harm $\alpha = 0.90$), as did the adapted addiction scale at all four levels, (Awareness $\alpha = 0.93$, Agreement $\alpha = 0.87$, Apply $\alpha = 0.91$, and Harm $\alpha = 0.91$).
The repeated measures ANOVA identified a significant main effect for the type of stigma, [Greenhouse-Geisser corrected: $F(1,47) = 14.213, p < .001$], showing stigma ratings were significantly higher for substance abuse than for mental illness. There was also a significant main effect for level of stigma [Greenhouse-Geisser corrected: $F(2.099, 98.675) = 117.883, p < .001$], indicating that reported stigma differed across stigma levels from Aware to Harm. The stigma type x stigma level interaction was also significant [Greenhouse-Geisser corrected: $F(2.41, 113.284) = 20.250, p < .001$], indicating that differences in reported stigma between stigma types varied across levels of stigma.

Post hoc tests comparing stigma type at each of the stigma levels found that reported stigma was significantly higher for substance abuse than for mental illness at the Aware and Agree levels, as shown in Figure 1. Additionally, pairwise comparisons found significant differences between all levels of stigma with the exception of the comparison between Apply and Harm, indicating a pattern whereby reported stigma generally decreased from the first level (the Aware stage) to subsequent levels. This same pattern of significance held true when looking at differences across level of stigma specifically for substance abuse. However, the effect of level was less pronounced for mental illness, with reported stigma at the Aware level significantly higher than at the Agree, Apply and Harm levels, but with no significant differences across any of these latter three levels.

[INSERT FIGURE 1 HERE]

Discussion

This is the first study to report specifically on stigma among individuals with co-occurring disorders, using a comprehensive stigma measure. This questionnaire is based on a regressive model of self-stigma (Corrigan & Watson, 2002), which includes four hierarchical
stages that traditionally follow a pattern in which endorsement of the individual stages decreases as the participant progresses from the first stage (Awareness) to the final stage (Harm) (Watson et al, 2007; Corrigan & Rao, 2012), so it is expected to see significant differences at the levels of “Aware” and “Agree,” but not at the levels of “Apply” and “Harm.” This study found that substance abuse was more stigmatizing than mental illness with the most robust differences at the levels of “Aware” and “Agree.” It is not entirely surprising to find that substance abuse is more stigmatizing than mental illness because addiction discrimination is often legally sanctioned and culturally supported (Corrigan et al., 2016). For example, one socially sanctioned prevention approach includes public service announcements about the negative legal consequences of substance misuse, which, while well intended, likely increase public stigma. Comparatively, individuals suffering from mental health disorders have built-in support systems in the public health field, reasonable accommodations are legally required, and hope and optimism are key components of recovery (Corrigan et al., 2016).

This issue of legally sanctioning stigma against people with substance use disorders is an important issue and should be more directly studied in future research. Interestingly, the current opiate epidemic as well as legislation through the Affordable Care Act has increased public awareness in regard to substance use disorders. Legislation included a greater sensitivity to parity in addressing addiction. While it is likely that this increased attention is generally helpful in combating stigma, the true effects are unclear and should certainly be considered in future research.

With regard to treatment engagement, research suggests stigma acts as a barrier to seeking out and utilizing care for people struggling with mental health issues and, separately, for individuals with addiction problems, but there is no research about the barriers for those with
both, which needs to be rectified (Corrigan, 2004; Kim et al., 2011; Luoma et al., 2007; Schuler et al., 2015). Others note that stigma can continue to have a negative effect on individuals’ lives, despite improvement in their mental health and substance abuse problems (Link et al., 1997). Individuals in the present study reported previously receiving on average 12.8 years of traditional services for treating mental health issues as well as averaging about 12.8 years for treatment of substance use problems. Despite being in treatment for many years, they still experienced public and self-stigma. Given that traditional treatment might not be most effective at addressing stigma, a critical question for the field is when and how to incorporate anti-stigma interventions in care and whether or not they should be differentially applied to treat substance abuse compared to mental illness.

Despite these preliminary findings, this research has a number of limitations to acknowledge. First, the sample consisted entirely of veterans and it is unclear if non-veterans would show a similar pattern of stigma. Second, this study also did not include many women. While little research has focused on gender differences in self-stigma related to substance abuse, one study examines women’s social attitudes about male and female intoxication as well as their own opinions about female drunkenness and attitudes regarding the effects of maternal and paternal alcoholism (Gomberg, E.S.L., 1988). This study suggests, from a women’s perspective, that alcoholism is more stigmatizing for women than for men. Additionally, some research suggests that women are less likely than men to use services specific to the treatment of alcoholism (Schober & Annis, 1996), which has important implications for service providers and for combatting stigma. Third, the sample included individuals who were criminally justice involved and who may experience stigma differently as a result of their criminal justice involvement. Fourth, the study included a convenience sample and general mental health and
substance abuse measures. Including more formal diagnostic assessments for each issue would have been more informative and should be utilized in future studies. Nonetheless, these findings are important, as they suggest a differential pattern of endorsing public and self stigma in a sample of individuals with co-occurring mental health and substance abuse issues. Future research should utilize a longitudinal design to confirm these preliminary findings and their differential impact on treatment outcomes.

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References


Table 1: Demographics of the Study Sample

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Figure 1: Stigma of Substance Abuse Compared to Stigma of Mental Illness at the Levels of Aware, Agree, Apply, and Harm

* Aware, Agree, Apply, and Harm are the four stages of stigma as described by the complex regressive model, on which the stigma measures are based.

** Numbers listed in parentheses represent the standard deviation scores.

*** All comparisons across levels of stigma were significant except for the comparisons between Apply and Hurt-self.

**** For substance abuse, pairwise comparisons found significant differences across all levels of stigma except for Apply and Harm and for mental illness, pairwise comparisons found that Aware was significantly higher than Agree, Apply, and Harm.

**p < .001