



The influence of treatment attendance on subsequent aggression among severely mentally ill substance abusers[☆]



Yue Zhuo, Ph.D.^{a,*}, Clara M. Bradizza, Ph.D.^b, Stephen A. Maisto, Ph.D.^c

^a *Sociology and Anthropology Department, St. John's University*

^b *Research Institute on Addictions, State University of New York at Buffalo*

^c *Department of Psychology, Syracuse University*

ARTICLE INFO

Article history:

Received 31 October 2013

Received in revised form 18 June 2014

Accepted 30 June 2014

Keywords:

Treatment

Aggression

Severe mental illness

Substance abuse

Dual diagnosis

ABSTRACT

The interrelationships between severe mental illness, substance use, and aggression are of longstanding importance with implications for community treatment programs, treatment research and public policy. Through the analysis of longitudinal data collected from 278 patients over a 6-month period following admission to an outpatient dual diagnosis treatment program, this study examined the association between dual diagnosis treatment attendance and subsequent aggression among individuals diagnosed with both a severe mental illness and a substance use disorder. We also tested substance use and psychiatric symptoms as mediators of this treatment–aggression relationship. The results of structural equation modeling analyses indicated that dual diagnosis treatment was associated with lower levels of subsequent aggression. Mediation analyses indicated that greater treatment involvement was associated with reduced substance use, which was associated with lower levels of aggression; thus, substance use was found to mediate the relationship between dual diagnosis treatment and aggression. Surprisingly, severity of psychiatric symptoms did not predict later aggression. These findings suggest that targeting substance use reduction in treatment may have the additional benefit of reducing the risk of later aggression among dual diagnosis patients.

© 2014 Elsevier Inc. All rights reserved.

1. Introduction

The interrelationships between severe mental illness, substance use, and aggression are of longstanding importance with implications for community treatment programs, treatment research, and public policy. Effectively preventing and managing aggression not only benefits patients and their families, but also provides a safer environment for society as a whole, as aggression has the potential to escalate to violent crimes such as rape, manslaughter, and murder. Prior studies have explored the interrelationships among mental illness, substance use, and violent behavior (Boles & Johnson, 2001), but limited attention has been given to potential avenues for reducing aggression among patients with both a severe mental illness and a substance use disorder.

Aggression and violence among persons with a severe mental illness (SMI; e.g., schizophrenia, bipolar disorder) have received increasing attention both in the scientific community (Fazel, Gulati,

Linsell, Geddes, & Grann, 2009) and the mainstream media (e.g., Carey & Hartocollis, 2013). In most studies, aggressive behavior has been found to be more common among individuals with an SMI than among those without an SMI (Link, Andrews, & Cullen, 1992; Silver, 2006); however, empirical findings challenge the notion that mental illness inevitably leads to aggression and violence (Buckley, Noffsinger, Smith, Hrouda, & Knoll, 2003; Sirotych, 2008). Among SMI patients, the prevalence of violence varies greatly. Epidemiological and clinical studies alike suggest that among individuals dually diagnosed with a mental illness and a substance use disorder, violence and aggressive behavior is more closely associated with substance use than with mental illness (Cheung & Schweitzer, 1998; Erkiran et al., 2006; Fazel et al., 2009; Swanson, Holzer, Ganju, & Jono, 1990; Swanson et al., 2002). Substance abuse has been shown consistently to be a significant risk factor for aggression and violence among people with a mental disorder (Sirotych, 2008; Soyka, 2000). Among individuals without substance abuse histories, few differences in rates of violence and aggression have been found when comparing mentally ill individuals with matched non-mentally ill samples from the same neighborhood (Steadman et al., 1998). Although most studies involve cross-sectional data, there is some evidence from longitudinal studies to support the positive relationship between substance abuse and aggression among mentally ill persons (Hodgins, Lapalme, & Toupin 1999; Steadman et al., 1998). In a systematic review of the literature, Fazel et al. (2009) examined factors associated with violence among individuals diagnosed with schizophrenia and other psychoses. They concluded

[☆] This research was supported by Grant R01 AA12805 awarded to Clara M. Bradizza from the National Institute on Alcohol Abuse and Alcoholism. Views expressed in this article are those of the authors.

* Corresponding author at: Sociology and Anthropology Department, St. John's University, 8000 Utopia Parkway, Queens, NY 11439, USA. Tel.: +1 718 990 1919; fax: +1 718 990 5878.

E-mail address: zhuoy@stjohns.edu (Y. Zhuo).

that, although SMI individuals were significantly more likely to exhibit violent behavior, most of the risk appeared to be mediated by substance abuse comorbidity. As a result, they proposed that public health strategies for violence reduction should consider focusing on the prevention and treatment of substance abuse among SMI individuals.

Several studies have shown that involvement in treatment is associated with lower risks of aggression among persons with an SMI (Skeem, Monahan, & Mulvey, 2002; Swanson et al., 2000; Swanson, Swartz, & Elbogen 2004; Swartz et al., 2001). For example, Swanson et al. (1997) found that the absence of ongoing mental health treatment was associated with a significantly increased risk of aggressive behavior among people with mental disorder. These same investigators examined the impact of involuntary outpatient commitment combined with regular outpatient service utilization on aggression and found that it was effective in reducing violence among persons with an SMI (Swanson et al., 2000). Similarly, on the basis of a longitudinal analysis of 871 civil-commitment psychiatric patients, Skeem et al. (2002) found that patients who received more treatment sessions during a 10-week intervention period were approximately three times less likely to be violent during a subsequent 10-week period than those who received fewer sessions, even after controlling for substance use. These results suggest that treatment, even if administered involuntarily, can be effective in reducing rates of violence and aggression among SMI individuals.

Despite the increased attention devoted to understanding factors that reduce violence and aggression among SMI individuals, there has been little research devoted to exploring how treatment that includes interventions for both mental illness and substance abuse reduces aggression and violence in this population. Drake, O'Neal, and Wallach, (2008) conducted a systematic review of 45 controlled studies of psychosocial interventions for people with co-occurring substance use and SMI including individual counseling, group counseling, family intervention, case management, residential treatment, contingency management, and legal intervention. About half of the studies showed positive effects of interventions on substance use, and one-fourth reported positive mental health outcomes. Only four studies examined the impact of psychosocial interventions on aggression and/or criminal involvement outcomes (Aubry, Cousins, LaFerriere, & Wexler 2003; Carmichael, Tackett-Gibson, & Dell, 1998; Chandler & Spicer 2006; Mangrum, Spence, & Lopez, 2006). Two of these studies found evidence that integrated treatment was associated with decreased violence, namely a reduction in arrests (Carmichael et al., 1998; Mangrum et al., 2006); however, none of the studies explored how these psychosocial treatments exert their positive impact on reducing aggression and violence. That is, if treatment involvement is associated with subsequent aggression, does more treatment lead to lower levels of aggression and violence? If so, is this beneficial effect mediated by reduced substance use, psychiatric symptoms, or both? The current study represents an effort to fill this gap.

The present investigation involves the analysis of longitudinal data collected over a 6-month period as part of a study determining predictors of post-treatment initiation alcohol use among individuals dually-diagnosed with an alcohol use disorder and a severe mental illness (i.e., schizophrenia-spectrum or bipolar disorder), the vast majority of whom were also diagnosed with a co-morbid drug use disorder (Bradizza et al., 2009). The present aims were to examine the longitudinal relationship between dual diagnosis treatment attendance and subsequent aggression in this sample including whether earlier substance use and psychiatric symptoms mediated this treatment–aggression relationship (see Fig. 1). We hypothesized that dual diagnosis treatment participation would directly influence subsequent aggression but also indirectly influence aggression through reduced levels of substance use and improved mental health. Specifically, we predicted that 1) more days of dual diagnosis

treatment attendance (X_7) during months 1 to 4 would be related to lower levels of aggression during months 5 and 6 (X_{10}); 2) lower levels of substance use during months 3 and 4 following treatment initiation (X_8) would be associated with lower rates of aggression during months 5 and 6 (X_{10}); 3) higher levels of psychiatric problems during month 4 (X_9) would be associated with higher levels of aggression during months 5 and 6 (X_{10}); 4) more days of dual diagnosis treatment attendance (X_7) would be associated with reduced levels of aggression (X_{10}) by diminishing substance use (X_8); and 5) greater attendance at dual diagnosis treatment (X_7) would be associated with reduced levels of aggression (X_{10}) by improving mental health (X_9). Prior research has demonstrated that several demographic variables such as age, gender, and supervised residential settings are associated with substance use among the severely mentally ill (Bradizza et al., 2009; Buckley et al., 2003; Sirotych, 2008); as a result, these variables (X_1 , X_2 , and X_3) were included as control variables in our analyses.

2. Methods

2.1. Participants

This longitudinal study is described in detail elsewhere (Bradizza et al., 2009). Briefly, participants were 278 men and women dually-diagnosed with a schizophrenia-spectrum or bipolar disorder and alcohol abuse or dependence disorder who enrolled in treatment at a publicly-funded community mental health center in Buffalo, New York that provides integrated mental health and substance abuse services. Participants were all receiving outpatient individual and group treatments at the center, and the average duration of treatment during the study time period was 15.1 weeks.

The sample was 54% women and 46% men, with a mean age of 39.40 years ($SD = 8.35$; range: 18–60) and a mean of 11.64 years of education ($SD = 1.86$). Nearly two-thirds (65%) of participants were African American, 27% Caucasian, 4% Hispanic, 3% Native American, and 1% other ethnicities. The vast majority of participants were single (97%), unemployed (98%), and low income (85% reported annual incomes < \$10,000). During the past year, 64% of participants reported receiving public assistance, 17% disability income and 17% illegal (e.g., selling drugs, prostitution) income. At baseline, 41% lived in supervised settings (e.g., group home, halfway house) and 59% in unsupervised settings (e.g., apartment, private home).

Participants met criteria for current alcohol dependence (97%) or alcohol abuse (3%) and had high rates of comorbid drug use disorders with 86% meeting *DSM-IV* criteria (4th ed., *DSM-IV*; American Psychiatric Association, 1994) for at least one drug use disorder (76% cocaine abuse/dependence, 46% marijuana, 23% opiates, 16% sedatives/hypnotics and 9% amphetamines) in addition to their alcohol use disorder. All participants were diagnosed with either *DSM-IV* bipolar disorder (56%) or a schizophrenia-spectrum (32% schizoaffective, 12% schizophrenia) disorder. Patients had long treatment histories; on average, they had 8.19 ($SD = 13.42$; $Mdn = 4.00$) prior episodes of psychiatric treatment and 14.04 ($SD = 14.06$; $Mdn = 10.00$) prior episodes of substance abuse treatment.

2.2. Procedure

Approval for this study was obtained from the university at Buffalo's Institutional Review Board. Participants were recruited during the 2-week period following treatment admission asked regarding their willingness to participate in a 6-month study of substance use and mental health. Five hundred and nineteen (519) individuals were assessed for eligibility, and 224 (43%) were ineligible as they did not meet inclusion criteria. Therefore, 295 (57%) met all study criteria. Of these eligible individuals, 16 did not attend the baseline interview and 1 declined participation. As a result, 278

Download English Version:

<https://daneshyari.com/en/article/328130>

Download Persian Version:

<https://daneshyari.com/article/328130>

[Daneshyari.com](https://daneshyari.com)