The relationship between child abuse and negative outcomes among substance users: Psychopathology, health, and comorbidities ☆

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HIGHLIGHTS

- DSM-IV disorders were examined as a function of child abuse in substance users.
- Substance users who had been abused had a greater number of DSM-IV disorders.
- They also had increased rates of comorbidities as a function of abuse.

ARTICLE INFO

ABSTRACT

Background: Adults with substance use disorders (SUDs) report higher rates of child abuse than adults without SUDs. Prior work suggests that this abuse is associated with higher rates of psychosis, posttraumatic stress disorder, physical health problems, alcohol dependence, and cannabis dependence among substance users. Little is known about other problems associated with child abuse experienced by substance users. We hypothesized that among adults with SUDs, child abuse would be associated with elevated rates of all Diagnostic and Statistical Manual (DSM-IV-TR) psychiatric disorders, substance dependencies, and comorbidities assessed.
Method: We assessed 280 inpatients in substance use treatment with the Structured Clinical Interview for the DSM-IV-TR, the Diagnostic Instrument for Personality Disorders, and Childhood Trauma Questionnaire (CTQ). We used chi-square and regression analyses to establish whether rates of psychiatric disorders, substance dependencies, and comorbidities differed as a function of child abuse.
Results: Consistent with our hypotheses, higher scores on the CTQ were associated with elevated rates of psychiatric disorders (mood disorders, anxiety disorders, psychotic symptoms, and personality disorders) and substance dependencies (alcohol dependence and cocaine dependence). Moreover, higher rates of all comorbidity patterns (e.g. comorbid alcohol dependence and anxiety) were observed among individuals who reported experiencing child abuse. Across all substance dependencies examined, individuals who had been abused had significantly higher rates of all psychiatric disorders assessed.
Conclusions: Individuals with substance use disorders who have been abused have particularly elevated rates of psychiatric and substance use disorders as a function of their abuse experiences. These findings have important treatment implications for individuals in residential substance use treatment settings.

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1. Introduction

Child abuse and trauma are important public health problems associated with increased rates of psychiatric disorders, substance use disorders, and physical health problems among survivors (Green et al., 2010; Huang et al., 2011; Kessler, Crum, Warner, & Nelson, 1997; McLaughlin et al., 2010; Scott et al., 2010). It has been estimated that 30% of psychiatric disorders diagnosed in adults can be directly linked to these childhood experiences (Afifi et al., 2008; Green et al., 2010), with abuse accounting for an increased persistence of mood, anxiety, and substance use disorders across the lifespan (McLaughlin et al., 2010). Based on a rich body of literature, child abuse appears to represent a particularly potent risk factor for psychopathology in adulthood.

Substance users as a group report particularly elevated rates of child abuse (Hefferman et al., 2000; Kendler et al., 2000; Rohsenow, Corbett,

& Devine, 1988) and abuse has been shown to be robustly associated with increased odds of being diagnosed with DSM-IV-TR substance use disorders (Afifi, Henriksen, Asmundson, & Sareen, 2012). This abuse is associated with earlier substance use initiation, greater functional impairments, and increased odds of substance dependencies (Nomura, Hurd, & Pilowsky, 2012). Further, individuals with substance use disorders who experienced child abuse have higher rates of posttraumatic stress disorder, psychosis, alcohol dependence, and cannabis dependence (Wu, Schairer, Dellor, & Grella, 2010). These results suggest that child abuse not only increases the likelihood individuals will use substances, but also that these individuals will be dually diagnosed with comorbid psychopathology. Although prior work demonstrates increased rates of some psychiatric disorders among substance users who have experienced child abuse, the full range of DSM-IV-TR psychiatric and substance use disorders has not previously been examined as a function of child abuse in this population. Moreover, although individuals in the general population who have been abused are more likely to have comorbidities (e.g. multiple psychiatric and/or substance use disorders; Scott, Smith, & Ellis, 2010), rates of these comorbidities have not been previously examined among substance users as a function of abuse. An exploration of these relationships would enhance our understanding of the high rates of psychiatric disorders observed among substance users (e.g. Chen et al., 2011) and would be relevant to developing treatments addressing comorbid psychiatric and substance use disorders.

The current study aims to examine the relationships between child abuse, psychiatric disorders, substance dependencies, comorbidities, and health problems among individuals in residential substance use treatment. We hypothesized that more severe child abuse would be associated with elevated rates of a variety of psychiatric disorders and substance dependencies in adult substance users (Brems, Johnson, Neal, & Freemon, 2004), with the expectation that more severe abuse would be associated with higher rates of these disorders (Edwards, Holden, Felitti, & Anda, 2003). Further, we hypothesized that substance users who had been abused would have greater odds of being dually diagnosed with comorbidities (e.g. both alcohol dependence and major depressive disorder) and with health problems.

2. Material and methods

2.1. Participants

As a part of a larger study, we recruited 280 participants (M age = 43.3; S.D. = 9.79; 69.7% male; 88.4% African American) from a residential substance use treatment center in inner city Washington D.C. As part of the treatment center requirements, participants were required to evidence a negative urine drug screen; those with positive urine screens entered a detoxification program before admittance. Typical inpatient treatment lasted between 30 and 180 days, depending on participants' treatment funding sources. During treatment, participants were only permitted to leave the center for scheduled appointments (e.g. appointments with psychiatrists, primary care physicians). Participants were involved in a variety of programs from 8 am to 9 pm daily, based on Alcoholics Anonymous and Narcotic Anonymous techniques, as well as on strategies focusing on the development of relapse prevention skills.

All participants were administered a standardized diagnostic assessment by our staff (graduate students and advanced post-baccalaureate research assistants) as a part of the treatment center's intake process. After completing this assessment, participants were given the option to become involved with our research study; informed consent was obtained after the study was explained (<5% refused to participate). The University of Maryland Institutional Review Board approved the study protocol. All paper-based assessments completed by participants were coded with a subject number so that the identities of participants were kept confidential.

2.2. Assessments

2.2.1. Childhood abuse

Childhood abuse was assessed using the *Childhood Trauma Questionnaire-Short Form* (CTQ-SF; Bernstein et al., 2003), which is a validated self-report retrospective questionnaire (Thombs, Lewis, Bernstein, Medrano, & Hatch, 2007). The CTQ-SF has satisfactory specificity and good sensitivity in comparison to reports from child welfare agencies (Bernstein, Ahluvalia, Pogge, & Handelsman, 1997), as well as convergent and discriminant validity with other trauma measures (Bernstein et al., 1994). The sexual, physical, and emotional abuse subscales were administered (Bernstein & Fink, 1998); the internal consistency was good to excellent (.88, .86, .96, respectively). We examined the CTQ total score continuously and based on established cutoffs (Bernstein & Fink, 1998).

2.2.2. Diagnostic assessments

The *Structured Clinical Interview for the DSM-IV-TR* was used to diagnose current and lifetime Axis I and II disorders (First, Spitzer, Gibbon, & Williams, 2010), including major depressive disorder, dysthymia, bipolar I disorder, substance-induced mood disorder, panic disorder, social phobia, specific phobia, obsessive compulsive disorder, posttraumatic stress disorder, generalized anxiety disorder, antisocial personality disorder (ASPD), and substance dependencies (alcohol, cannabis, opioid, hallucinogen/PCP, stimulant, crack/cocaine, and polydrug). We also assessed for the presence or absence of psychotic symptoms using a screener included in the SCID. Borderline personality disorder (BPD) was assessed using the *Diagnostic Instrument for Personality Disorders*, because it is a more precise measure of BPD than the SCID-IV (Zanarini, Frankenburg, Chauncey, & Gunderson, 1987).

2.2.3. Composite scores

We created several composite scores based on the number of current and lifetime DSM-IV-TR disorders endorsed; higher composite scores indicated a greater number of DSM-IV-TR Axis I and II disorders endorsed within the composite (range: 0–13 disorders). Separate composite scores were created for the number of substance use disorders (range: 0–12), mood disorders (range: 0–4), and anxiety disorders (range: 0–4) endorsed. Additionally, a composite score was computed to indicate the total number of DSM-IV-TR Axis I and II psychiatric disorders endorsed (Psychiatric disorder composite; range: 0–13; substance use disorders were not included in this composite), as well as the total number of psychiatric and substance use disorders (all disorder composite; range: 0–17). These four composite scores were examined within analyses continuously (number of disorders endorsed) and dichotomously (to indicate the presence or absence of a given disorder within a particular category).

2.2.4. Health and symptom-level assessments

Additional measures were included to better understand the range of problems experienced by individuals within residential drug treatment programs. Basic questions about demographic characteristics and health behaviors were assessed verbally during the intake assessment. The Hamilton Rating Scale for Depression (HAM-D; Hamilton, 1960) was used as an additional symptom-level measure of psychopathology.

2.3. Analytic strategy

Prior to data entry, the completed questionnaires and SCID interview sheets were checked for completeness or obvious errors. Data were double entered into SPSS (versions 14–20 over the course of the study) so potential inconsistencies or inaccuracies could be easily detected. There were occasional missing data points due to nonresponses such as: "don't know" or "refused" as participants could choose to not answer questions asked during the intake assessment. For example rates of missing data for psychiatric and substance use