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The Impact of Stressful Life Events on Alcohol Relapse: Findings from the Collaborative Longitudinal Personality Disorders Study

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Abstract

Alcohol relapse is impacted by a variety of environmental, interpersonal, and intrapersonal factors. We examined the interaction between stressful life events, personality disorder subtype, and alcohol relapse among individuals enrolled in the Collaborative Longitudinal Personality Disorders Study (CLPS). Negative life events predicted relapse in all subjects. In individuals with a history of an alcohol use disorder prior to study entry, positive life events also predicted alcohol relapse. Individuals with Antisocial Personality Disorder (ASPD) were found to be twice as likely to relapse in response to life stressors compared to individuals with Obsessive-Compulsive Personality Disorder (OCPD), who were half as likely to relapse in response to life stressors. Further analysis revealed that individuals with OCPD and no history of an alcohol use disorder were almost 10 times more likely to relapse in the face of a stressful romantic problem, while those with ASPD and a history of an alcohol use disorder were six times more likely to relapse in response to a stressful financial event. These findings have implications for both the assessment and the treatment of individuals who present with co-morbid personality and alcohol use disorders.

While a growing literature exists regarding the implications for treatment and outcome of co-occurring Axis I and substance use disorders, relatively little has been written regarding the impact of co-occurring Axis II disorders on outcome and treatment efficacy. For most Axis I disorders, a category of 201Csecondary to...” substance use exists in the differential diagnosis: For some personality disorders, enduring patterns which may be secondary to substance abuse are among the exclusion criteria, and for others substance use disorders may be a common association. The impact of stressful life events on substance abuse and relapse is somewhat better understood, but still with mixed findings. In the following original article the authors suggest that some personality subtypes may place patients at higher risk for alcohol relapse, while others may in fact be protective. Clinical implications suggest a potential “emerging” best practice – that treatment centers begin to routinely screen for personality disorders, and that treatment planning considers relapse potential from the perspective of the individual’s personality profile.

Introduction

Theoretical models suggest that stress is major contributor to alcohol relapse (Cerbone and Larison 2000). The relationship between stress and relapse is mediated by a number of

Editor’s Note: “BEST PRACTICES FOR CO-OCCURRING DISORDERS”

(Introduction for “The Impact of Stressful Life Events on Alcohol Relapse: Findings from the Collaborative Longitudinal Personality Disorders Study” article, attached)

environmental, interpersonal, and intrapersonal factors. For example, the cumulative number and types of stressors may play a role (Brady and Sonne 1999). The onset of the alcohol use disorder (before or after a major stressor) can impact relapse rates (Veenstra et al. 2006). Personality disorder subtype and other co-morbid mental illnesses may also affect the relapse rate (Mueser et al 2003).

Prior research has produced mixed findings. In 1990, Cole and colleagues studied 6,700 male employees and found that the cumulative number of stressful life events correlated with an increased number of drinks. In 1992, Cooper et al. found a stronger link between stressful life events and alcohol use in specific subgroups, namely males, those with a high expectancy of alcohol effects, and those who used an avoidant coping style in dealing with emotions. In 1999, Droomers et al. studied an epidemiological sample of approximately 1800 adults and found no relationship between cumulative stressful life events and alcohol intake.

In general, prior study of relationship between SLE and relapse has been unable to to determine a causal link due to several methodological limitations. These include: retrospective design, brevity of follow-up, the use of primarily treatment-seeking samples, and imprecise measurement of stressful life events. Addressing this gap, this study employs a longitudinal, prospective design over a six year follow-up period, a non-treatment seeking sample, and fine-grain assessment of daily life stressors as they occur naturalistically among alcoholics with comorbid Axis II disorders. The purpose of this study is to examine the link between stressful life events and alcohol relapse. The strength of the SLE/relapse relationship is examined among subgroups of alcoholics with consideration of type of SLE, early versus late AUD onset, and co-occurring type of personality disorder.

Methods

The Collaborative Longitudinal Personality Disorders Study (CLPS) is a multi-site, naturalistic, prospective study of four personality disorders groups, including schizotypal, borderline, avoidant, and obsessive-compulsive. The overall aims, design, assessment methodology, and demographic characteristics are detailed elsewhere (Gunderson et al. 2000). Following is an overview of the study participants and assessment procedures relevant to the present study.

Subjects

573 personality disordered subjects were followed longitudinally for 6+years to determine the stability of symptoms, diagnoses, and predictors of clinical course. The subjects were divided into four groups based on primary personality disorder type; in this study, 86 subjects were in the schizotypal group, 175 subjects were in the borderline group, 158 were in the avoidant group, and 154 were in the obsessive-compulsive group. Subjects who met criteria for more than one personality disorder were grouped based on their primary personality disorder.

The average age of the subjects was 32.8 years. 64% of the sample was female and 76% of the sample was Caucasian. 39% of the sample was self-referred. On average, subjects had completed 13 years of education.

Individuals with any of the following were excluded from participation: acute substance intoxication or withdrawal; active psychosis; IQ less than or equal to 85; cognitive impairment; or a history of schizophrenia, schizophreniform, or schizoaffective disorders.

Measures

The baseline evaluation consisted of a rater-administered interview, using the Structured Clinical Interview for DSM-IV Axis I Disorders (SCID-I/P) and the Diagnostic Interview for DSM-IV Personality Disorders (DIPD-IV). Study participants were interviewed again at 6 months, 12 months, and annually thereafter for a total of 6 years following the baseline assessment. The Longitudinal Interval Follow-Up Evaluation (LIFE) was utilized to track Axis I symptoms on a weekly basis.

The Life Events Assessment (LEA) was used to assess if any of a list of 82 events had occurred since the last follow-up interview. The start and end dates of stressful life events were also tracked. LEA items were grouped by stress domain categories: 27 items pertained to work or school (20 negative, seven positive); 16 items pertained to family or living circumstances (10 negative, six positive); 13 items pertained to love relations with a spouse or partner (eight negative, five positive); 12 items referred to crime and legal matters (10 negative, 2 positive); seven items referred to financial matters (five negative, two positive); four items pertained to physical health (three negative, one positive); and three items referred to social matters (three negative, zero positive). In summary, 59 items were considered to be negative events and 23 items were considered to be positive events.

Alcohol relapse was observed prospectively. For the purposes of this study, alcohol use disorder symptoms had to meet full DSM-IV criteria for alcohol abuse or alcohol dependence for 2 or more consecutive weeks in order to be coded as “new onset” alcohol use (in subjects with no alcohol use disorder history) or “relapse” on alcohol (in subjects with a history of alcohol use disorder).

Data analyses

Statistical analyses were conducted using SAS version 8.0 (SAS Institute Inc., 1999), using PROC FREQ, PROC ANOVA, and PROC PHREG. Depending on the variable type (continuous or discrete), analysis of variance (ANOVA) or chi-square analyses were performed to evaluate SLE levels between subgroups at baseline. Cox proportional hazards regressions were conducted to determine associations between time-varying levels of SLE in relation to the likelihood of alcohol relapse. Covariates in Cox regressions including OCPD, ASPD, and AUD history, and an interaction term between subgroup and SLE. Our dependent variable, alcohol relapse, was prospectively observed as meeting full DSM-IV criteria for alcohol abuse or alcohol dependence for two or more consecutive weeks. We reported all two-tailed tests with significance values greater than 95% ($P < 0.05$).

Results

Over the course of six years, 85% of the sample endorsed at least one positive life event and 96% of the sample had experienced at least one negative life event. Negative life events significantly predicted relapse in all subjects (hazard ratio=1.95, $p=.0001$). In subjects with a history of an alcohol use disorder, both positive and negative life events predicted relapse ($HR=3.13$ and $HR=3.02$, respectively). Subjects with Antisocial Personality Disorder showed a doubling of the risk for relapse in response to both positive and negative life events ($HR=1.94$ and 1.92 respectively; $p=.04$). In contrast, a history of Obsessive-Compulsive Personality Disorder seemed to confer a protective effect against relapse—in this subgroup, the risk of relapse was decreased by 50% in response to both positive and negative life events ($HR=0.57$; $p=.02$ and $.03$, respectively).

When the history of alcohol use disorder was analyzed by specific LEA domain, subjects without a history of an alcohol use disorder were five times more likely to relapse in response to a romantic stressor ($HR=4.91$, $p=.01$). Subjects with a history of an alcohol use

disorder almost six times more likely to relapse when faced with a financial stressor ($HR=5.51$, $p=.02$). When personality disorder subtype was factored into the analysis, subjects with OCPD and no history of alcoholism were almost 10 times more likely to relapse in the face of a romantic stressor ($HR=9.84$, $p=.005$). Individuals with ASPD and a history of an alcohol use disorder were six times more likely to relapse in response to a financial stressor ($HR=6.21$, $p=0.02$).

Discussion

Limitations

One limitation of this study is that it focused exclusively on alcohol use disorders and did not take into account the effects of nicotine dependence or dependence on illicit drugs. A second limitation is that the study did not explore the effects of comorbid Axis I disorders or comorbid personality disorders. Thirdly, this study provides an estimate of relative risk between diagnosis of personality disorder and subsequent alcohol relapse, but does not establish a causal link between these events.

Clinical implications

These findings have clinical implications in the areas of assessment and treatment of individuals with co-morbid alcohol use and personality disorders. At the present time, treatment centers do not routinely assess for personality disorders at the time of assessment. Knowledge about an individual's personality disorder subtype may be useful information because it can alert clinicians and patients to particular types of stressors that may increase the chance of alcohol relapse. It is particularly interesting to note that OCPD may be protective against alcohol relapse—clinicians may wish to use this knowledge for the benefit of their clients.

In terms of treatment, there are well-established evidence-based treatments for individuals with co-occurring severe mental illness and substance use disorders such as Integrated Dual Disorders Treatment (Mueser et al. 2003). An emerging area of research is the study of integrated treatments for co-morbid personality disorders and substance use disorders as described by Ball et al. and Nielsen et al. There is at least one European study already underway to evaluate whether systematic personality disorder assessment improves outcomes vs. assessment of Axis I disorders alone in a centralized intake unit for substance use disorders (Hesse and Pedersen 2008).

The present study aims to increase clinician and client awareness about the types of stressors that render personality-disordered patients particularly vulnerable to alcohol relapse. In this environment of increasing demands for treatment amid shrinking resources, relapse prevention techniques targeted toward specific personality disorder subtypes may prove to be effective and cost-effective strategies.

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