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Available online: 04 May 2009

To cite this article: Christina Delos Reyes MD, Maria Elizabeth Pagano PhD & Robert J. Ronis MD, MPH (2009): The Impact of Stressful Life Events on Alcohol Use Relapse: Findings From the Collaborative Longitudinal Personality Disorders Study, Journal of Dual Diagnosis, 5:2, 226-232

To link to this article: http://dx.doi.org/10.1080/15504260902886505

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Best Practices

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

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Alcohol use 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 use relapse among individuals enrolled in the Collaborative Longitudinal Personality Disorders Study. Negative life events predicted relapse in all participants. In individuals with a history of an alcohol use disorder prior to study entry, positive life events also predicted alcohol use 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

Editor's Note: 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 “secondary to…” substance use exists in the differential diagnosis. For some personality disorders, enduring patterns that 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 use 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.—Robert J. Ronis, MD, MPH

Acknowledgement: This research was supported in part by the following grants from the National Institute on Alcohol Abuse and Alcoholism: K01 AA015137, and the National Institute of Health: MH 50837, 50838, 50840, and 50850.

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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.

KEYWORDS Alcohol use disorders, stress, personality disorders, relapse, dual diagnosis

INTRODUCTION

Theoretical models suggest that stress is a major contributor to alcohol use relapse (Cerbone & Larison, 2000). The relationship between stress and relapse is mediated by a number of environmental, interpersonal, and intrapersonal factors. For example, the cumulative number and types of stressors may play a role (Brady & 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 relapse rates (Brown et al., 1990; Mueser, Noordsy, Drake, & Fox, 2003).

Prior research has produced mixed findings. In 1990, Cole, Tucker, and Friedman studied 6,700 male employees and found that the cumulative number of stressful life events (SLEs) correlated with an increased number of drinks. In 1992, Cooper, Russell, Skinner, Frone, and Mudar found a stronger link between SLEs 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, Schrijvers, Stronks, van de Mheen, and Mackenbach studied an epidemiological sample of approximately 1,800 adults and found no relationship between cumulative SLEs and alcohol intake.

In general, prior study of the relationship between SLEs and relapse has been unable to determine a causal link due to several methodological limitations. These include retrospective design, brevity of follow-up, use of primarily treatment-seeking samples, and imprecise measurement of SLEs. Addressing this gap, this study employs a longitudinal, prospective design over a 6-year follow-up period, a non-treatment-seeking sample, and fine-grained assessment of daily life stressors as they occur naturally among alcoholics with co-morbid axis II disorders. The purpose of this study is to examine the link between SLEs and alcohol use relapse. The strength of the SLE/relapse relationship is examined among subgroups of alcoholics with
METHODS

The Collaborative Longitudinal Personality Disorders Study is a multisite, naturalistic, prospective study of four personality disorder groups, including schizotypal, borderline, avoidant, and obsessive compulsive (Pagano et al., 2004). 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.

Participants

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

The average age of the participants was 32.8 years. Sixty-four percent of the sample was female, and 76% of the sample was Caucasian. Thirty-nine percent of the sample was self-referred. On average, participants 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 or 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 and the Diagnostic Interview for DSM-IV Personality Disorders. Study participants were interviewed again at 6 months, at 12 months, and annually thereafter for a total of 6 years following the baseline assessment. The Longitudinal Interval Follow-Up Evaluation was utilized to track axis I symptoms on a weekly basis.
The Life Events Assessment (LEA) was used to assess whether 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, 7 positive); 16 items pertained to family or living circumstances (10 negative, 6 positive); 13 items pertained to love relations with a spouse or partner (8 negative, 5 positive); 12 items referred to crime and legal matters (10 negative, 2 positive); 7 items referred to financial matters (5 negative, 2 positive); 4 items pertained to physical health (3 negative, 1 positive); and 3 items referred to social matters (3 negative, 0 positive). In summary, 59 items were considered to be negative events, and 23 items were considered to be positive events.

Alcohol use 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 participants with no alcohol use disorder history) or “relapse” to alcohol use (in participants 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 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 SLEs in relation to the likelihood of alcohol use relapse. Covariates in Cox regressions included obsessive compulsive personality disorder (OCPD), antisocial personality disorder, and alcohol use disorder history and an interaction term between subgroup and SLE. Our dependent variable was prospectively observed onset of meeting full DSM-IV criteria for alcohol abuse or alcohol dependence for 2 or more consecutive weeks. All onsets hereinafter referred to as relapse include either new–onset alcohol use or relapse to alcohol use. We reported all two-tailed tests with significance values greater than 95% (p < .05).

RESULTS
Over the course of 6 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 participants (hazard ratio [HR], 1.95; p = .0001). In participants with a history of an alcohol
use disorder, both positive and negative life events predicted relapse (HR, 3.13 and 3.02, respectively). Participants 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 OCPD 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 \( p = .03 \), respectively).

When the history of alcohol use disorder was analyzed by specific LEA domain, participants without a history of an alcohol use disorder were five times more likely to relapse in response to a romantic stressor (HR, 4.91; \( p = .01 \)). Those with a history of an alcohol use disorder were 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, participants 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 antisocial personality disorder and a history of an alcohol use disorder were six times more likely to relapse in response to a financial stressor (HR, 6.21; \( p = .02 \)).

**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 co-morbid axis I disorders or co-morbid personality disorders. A third limitation is that this study provides an estimate of relative risk between diagnosis of personality disorder and subsequent alcohol use 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 evaluation. Knowledge about an individual’s personality disorder subtype may be useful because it can alert clinicians and patients to particular types of stressors that may increase the chance of alcohol use relapse. It is particularly interesting to note that OCPD may be protective against alcohol use 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.,
An emerging area of research is the study of integrated treatments for co-morbid personality disorders and substance use disorders as described by Ball, Cobb-Richardson, Connolly, Bujosa, and O’Neall (2005), Ball (2007), and Nielsen, Rojskjær, and Hesse (2007). There is at least one European study already underway to evaluate whether systematic personality disorder assessment improves outcomes versus assessment of axis I disorders alone in a centralized intake unit for substance use disorders (Hesse & Pedersen, 2008).

The present study aims to increase clinician and client awareness about the types of stressors that render persons with personality disorders particularly vulnerable to alcohol use 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.

REFERENCES


