

Influence of Alcohol Use on Psychological Response to Trauma among a Nationally Representative Community Sample

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By
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Posttraumatic Stress Disorder (PTSD) can develop in response to a trauma event and symptoms of PTSD (re-experiencing the event, avoidance of stimuli associated with the event, emotional numbing, hyper-arousal) may be associated with severe health consequences (suicide, substance misuse, and other psychiatric comorbidity), impaired functioning in work and social relationships, and increased medical and legal problems. PTSD affects an estimated 15 million Americans at any given time. The annual estimated cost to society of anxiety disorders, including PTSD, is \$42.3 billion. Most PTSD studies have been limited to small convenience samples, and little is known about factors that affect the longitudinal course of PTSD symptoms among large, representative community samples. Given this gap in the literature, this dissertation conducted a secondary data analysis of a large, representative community sample to examine the influence of disordered alcohol and drug use, additional life stressors, 12-step meetings, social support networks, and formal treatment strategies have on incidence and prevalence of PTSD symptoms.

Two theories guided the framework for this dissertation: the Self-Medication hypothesis, which predicts alcohol and drug misuse among people experiencing trauma, and Social Ecologic Theory, which predicts how person, event, and environment characteristics interact to affect individuals' psychological response to trauma.

This dissertation conducted a secondary data analysis of individuals assessed longitudinally in Wave 1 (2000-2001) and Wave 2 (2004-2005) of the National Epidemiologic Survey of Alcohol Related Conditions (NESARC), a nationally representative sample of non-institutionalized adults in the United States. This study exploited the prospective design of the NESARC by examining how factors reported at Wave 1 of the survey affect PTSD reported at Wave 2. Specifically, the study aimed to: 1) Examine the influence of substance use disorder or substance misuse on incidence and prevalence of PTSD; 2) Examine the influence of other potential risk and protective factors on incidence and prevalence of PTSD; and 3) Examine whether the influence of substance use disorder and/or substance misuse on incidence and prevalence of PTSD is mediated by other potential risk and protective factors, controlling for severity measures. Multivariate logistic regression was used to examine how key variables affect incidence and prevalence of PTSD.

Findings from this dissertation yielded three trauma typologies in the NESARC (witnessed trauma to others, early life interpersonal trauma, and adult interpersonal trauma) representing different profiles of mental health and substance abuse symptoms in this community sample. Trauma typologies had the

largest effects in the multivariate models. Reported rates of self-medication with alcohol were 30% and with drugs were 3%. Contrary to hypotheses, substance use disorder and substance misuse did not have a significant effect on incidence and prevalence of PTSD but self-medication did have a significant effect for prevalent cases. Findings from this dissertation identifying certain risk factors (self-medication with alcohol or drugs) and protective factors (social support) provide an evidence-base for policymakers and public health programs to target specific subpopulations in the community at risk for PTSD. The unexpected finding that self-medicating had a larger influence on PTSD than SUD suggests that motivation for why a person uses alcohol or drugs may be as important for prevention and treatment efforts to focus on as how much a person drinks. The large influence of the witness trauma to others typology shows that impact of trauma events can be far reaching, affecting not only the individuals experiencing the trauma but the family and friends of people experiencing trauma and the community at large. Findings that certain factors (e.g., stressful life events) were not statistically significant can help policymakers and public health programs to prioritize funding. To promote successful long-term outcomes, continued financial support is necessary for staff development, implementation of evidence-based practices for assessment and treatment, measures to ensure physical safety for patients in community and clinical settings, and procedures for cross sector collaboration.

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