Examining the Association between PTSD Symptom Heterogeneity and Alcohol Use Disorder in Veterans

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Introduction

Background:
• Veterans are at increased risk of comorbid posttraumatic stress disorder (PTSD) and alcohol use disorder (AUD) relative to civilians.
• Few studies have explored the association between distinct PTSD symptom clusters and AUD in veterans, and existing findings are highly discrepant.

Aim:
• Identify which PTSD symptom clusters are most associated with AUD in a nationally-representative veteran sample using the 7-factor ‘hybrid’ model of PTSD.

Method

Participants: 4,069 U.S. veterans (M_age = 56.4 years; 86.5% male; 74.9% Caucasian)

National Health and Resilience in Veterans Study (NHRVS): A nationally-representative, cross-sectional survey of veterans conducted between November 18, 2019 and March 8, 2020. Within this survey, self-report assessments were collected to evaluate:
• Sociodemographic and military characteristics
• Trauma history: Life-Events Checklist for DSM-5
• Depressive symptoms: Patient Health Questionnaire-2
• PTSD symptoms: Posttraumatic Stress Disorder Checklist for DSM-5. A score ≥ 33 was indicative of a positive screen for PTSD (Bovin et al., 2016).
• AUD: Alcohol Use Disorders Identification Test. A score of ≥ 8 was indicative of a positive screen for AUD (Crawford et al., 2013, Rumpf et al., 2002).

Main Findings

Current AUD: 10.5% (n=360); Current PTSD: 6.3% (n=217)

Associations between PTSD symptom clusters and AUD:

Full sample:
• Dysphoric arousal (β=0.16, p<0.001, OR (95%CI)=1.18 (1.08-1.29)
•Externalizing behaviors (β=0.13, p=0.04, OR (95%CI)=1.13 (1.01-1.28)

Veterans with PTSD:
• Externalizing behaviors (β=0.20, p=0.05, OR (95%CI)=1.22 (1.01-1.49)
• Anxious arousal (β=0.20, p=0.02, OR (95%CI)=0.82 (0.69-0.97)
• Dysphoric arousal (β=0.27, p=0.01, OR (95%CI)=1.32 (1.06-1.64)

Conclusion

• Dysphoric arousal symptoms drove PTSD-AUD association at population level
• Externalizing behaviors symptoms drove PTSD-AUD association in veterans with PTSD
• The 7-factor Hybrid model of PTSD provides a more nuanced understanding of PTSD-AUD associations than DSM-5 model