

**AWARD FOR BEST RESEARCH PRESENTATION AT THE WCMSR ORIGINAL RESEARCH BASED ON JUDGE SCORES, 1ST PLACE****40. PAIN SEVERITY RATINGS AMONG PATIENTS WITH COMORBID CHRONIC PAIN AND PTSD**Lily Charron<sup>1</sup>, Eduardo Espiridion<sup>2</sup><sup>1</sup> Second-year Medical Student, Drexel University College of Medicine at Tower Health, West Reading, USA.<sup>2</sup> MD, Drexel University College of Medicine at Tower Health, West Reading, USA. <https://www.youtube.com/live/fSpXH-3Xy5w?t=21703s>

**BACKGROUND:** Posttraumatic stress disorder (PTSD) is a psychiatric disorder that may occur after experiencing or witnessing a traumatic event. PTSD is associated with many physiological symptoms, including sleep disturbances and hyperarousal. One understudied symptom in PTSD patients is chronic pain (CP). Acute pain can lead to CP when it persists beyond adaptation. The interconnection between stress and pain has been well-established in fields of neuroscience

and psychology. Though the association is well-documented in literature, there are still gaps in our understanding of the nature of this clinical relationship. **METHODS:** In the current study, we use a retrospective cohort of patients with PTSD and CP through a database of numerous healthcare organizations called TriNetX. We compare the reported pain severity rating between three groups: those with PTSD and no CP, those with CP and no PTSD, and those with comorbid PTSD and CP. The summary data was compared using a one-way analysis of variance. **RESULTS:** The average reported pain severity was significantly different between all three groups. The patients with comorbid PTSD and CP reported the highest average pain severity, followed by patients with only CP and then patients with only PTSD. **CONCLUSION:** Our results demonstrate a need to further investigate the complex relationship between PTSD and CP. That the patients with both disorders reported a higher average pain severity indicates that pain management and psychiatric care should become a focus for this population.

**Key Words:** Stress Disorders, Post-Traumatic; Chronic Pain; Pain Measurement; Stress Disorders, Traumatic.