

Mechanisms of bodily harm in emergency department youths with ADHD

Spencer I. Evans^{1†}, Elijah W. Hale^{1*†} and Matt S. Silverman²

¹School of Medicine, University of Colorado Anschutz Medical Campus, Aurora, CO, United States,

²Department of Anesthesiology, Yale New Haven Health System, New Haven, CT, United States

Objectives: We sought to perform a review of emergency department data to illuminate whether there is a difference in the prevalence of severe injuries in patients with ADHD compared to patients without ADHD. We hope to illuminate whether providers should consider inquiring whether their pediatric patients have ADHD to improve long term outcomes.

Methods: This study is a retrospective cohort study of patient records contained in the TriNetX database, specifically of pediatric patients in this database who presented to an emergency department. We specifically looked at the risk difference in patients <25 years of age with ADHD, no ADHD, inattentive type ADHD, hyperactive type ADHD, and combined type ADHD who presented with any fracture, a central fracture, an upper limb fracture, a lower limb fracture, an accidental overdose, a burn injury, a drowning incident, a gunshot wounds, suffocation, and a suicide attempt.

Results: Comparison between the no-ADHD cohort and the inattentive, hyperactive/impulsive, combined, and overall ADHD cohorts revealed differences in the majority of outcomes studied. Patients with overall ADHD had significant differences in rates of all outcomes aside from the upper limb fracture. Patients with combined or hyperactive/impulsive ADHD had significant differences in all but drowning, and the inattentive cohort had significance all events.

Conclusion: The stark difference between severe injury presentations in the pediatric emergency department between children with ADHD and without ADHD suggests that providers should consider inquiring whether patients have ADHD to educate them on their risk for severe injuries.