

# EVIDENCE OF SECONDARY TRAUMATIC STRESS IN MEDICAL STUDENTS OVER THE COURSE OF CLINICAL CLERKSHIPS

KA Grush<sup>1</sup>, W Christensen<sup>1</sup>, T Lockspeiser<sup>1</sup> and J Adams<sup>1,2</sup>

1. University of Colorado School of Medicine
2. Denver Health

## ABSTRACT

### Background

Medical providers working with patients experiencing traumatic events have been shown to be a risk for development of secondary traumatic stress (STS). Data assessing the presence of these symptoms in medical students is lacking. This prospective study aimed to assess for the presence and evolution of STS in medical students over a clinical year. Secondly, we aimed to identify any differences among medical students participating in traditional clerkship curricula versus longitudinal integrated clerkships (LICs).

### Methods

All third-year medical students at the University of Colorado School of Medicine were eligible to participate in the year-long study (n=190). The study utilized a validated secondary traumatic stress scale (STSS) (Bride 2007), which was administered through a secure online software system quarterly during the study period (July 2020-May 2021). Both the values and trajectories in student STSS scores across the four survey periods were modeled using multilevel growth modeling.

### Results

All 190 students responded to at least one survey. In July, 10.6% of participants had STSS scores indicating high or severe STS. This rose to 28.8% in October, 26.5% in January, and ultimately trended to 23.1% in May. While there was a statistically significant quadratic trend in STSS scores over the course of the year ( $p < 0.0001$ ), there was no evidence of slope differences between LIC and traditional clerkship students. Reported presence of a psychiatric condition significantly increased STSS score ( $p = 0.0005$ ), but no other covariate was significant.

### Implications

The impact of secondary trauma on trainees is under-appreciated in the literature. Overall rates of STS are higher than those reported for other medical professionals raising concern for burnout and secondary harm. Further research is needed to understand potential curricular factors and strategies to mitigate the development of these symptoms given the high prevalence of this condition in our study.