Non-Fatal Strangulation Injuries: Improving Physician Knowledge and Attitudes

Sarah Pankratz¹, Christine Motzkus²

¹Indiana University School of Medicine, ²Indiana University School of Medicine Department of Emergency Medicine

Background and Objective:
In the emergency department, providers are expected to evaluate patients who have experienced strangulation resulting from sexual assault or interpersonal violence. Non-fatal strangulation can lead to significant injuries, including carotid artery dissection. Given the prevalence of strangulation injuries, providers must feel confident in their decision-making for this population. Previous educational interventions effectively improved provider knowledge of sexual assault and domestic violence patients, however, no studies have been conducted with the goal of improving provider knowledge about strangulation injuries in this population. We aimed to assess and improve emergency department provider knowledge surrounding nonfatal strangulation injuries.

Project Methods:
Preintervention and postintervention surveys were administered to emergency department physicians and advanced practice providers assessing both provider comfort and knowledge regarding treatment of survivors of sexual assault, domestic violence, and strangulation. Key content areas included: physician comfort in treating sexual assault survivors, understanding of trauma-informed care, satisfaction with prior training regarding nonfatal strangulation, and physician attitudes. 6 vignette-style questions designed to evaluate knowledge in clinical scenarios were also administered. A 15-minute, interactive, educational presentation was administered during the pre-existing departmental meeting. Survey responses were collected via email and data was stored in REDCAP. Preintervention and postintervention results were compared via t-tests.

Results:
There were 22 pre-intervention and 10 post-intervention responses. Median years of practice were 8. Survey participants tended to rate awareness of imaging recommendations and resources, decision-making, history taking, and use of trauma-informed care higher than preintervention participants. Postintervention participants tended to answer more clinical vignettes correctly than preintervention participants.

**Conclusion and Potential Impact:**

A 15-minute educational intervention was effective in improving provider knowledge, confidence, and comfort in treating patients who have experienced non-fatal strangulation. In the future, similar interventions may be implemented in other emergency departments to increase awareness about the evaluation and treatment of nonfatal strangulation injuries.