

Educational Intervention in Sentinel Injury Identification for Healthcare Students Emily Angell, PA-S3, Rashaan Ford, MD



RESULTS

BACKGROUND

- CPS receives an estimated 4.4 million yearly reports of child abuse, almost 2,000 of which result in death
- 30% of children with abusive head trauma have previous sentinel injuries that are not addressed
- Sentinel injury identification presents opportunities to prevent severe abuse
- Clear evidence-based guidelines exist for sentinel injury identification and reporting, but these are not emphasized in medical education

METHODS

Population

- First and second year Physician Assistant students at Anschutz Medical Campus
- Pre-intervention survey
 - Identification, workup, and reporting sentinel injuries of child abuse
- Interventional lecture
 - Delivered in person, using cases and current evidence-based guidelines
- Post-intervention survey
 - Evaluating same skills as initial survey

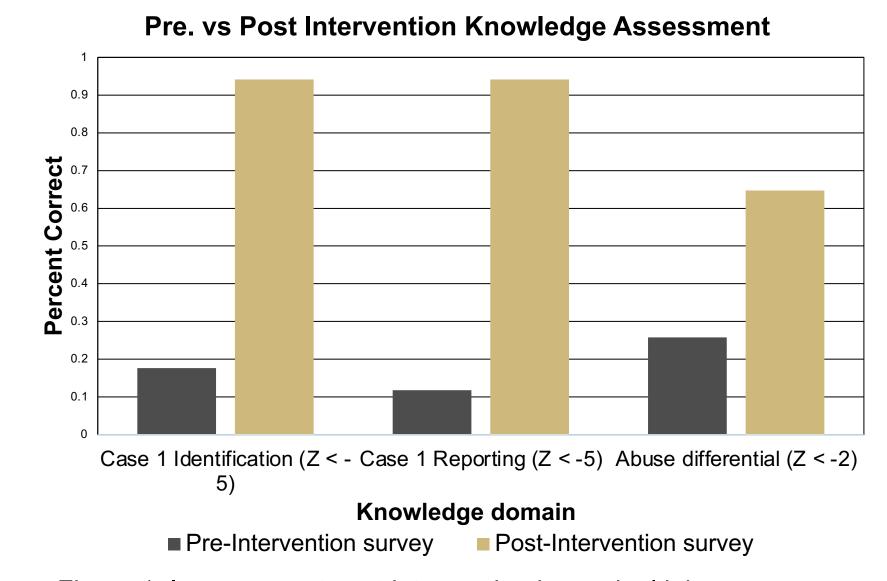


Figure 1. Improvement post-intervention in sentinel injury case questions and abuse differential knowledge. All improvements statistically significant

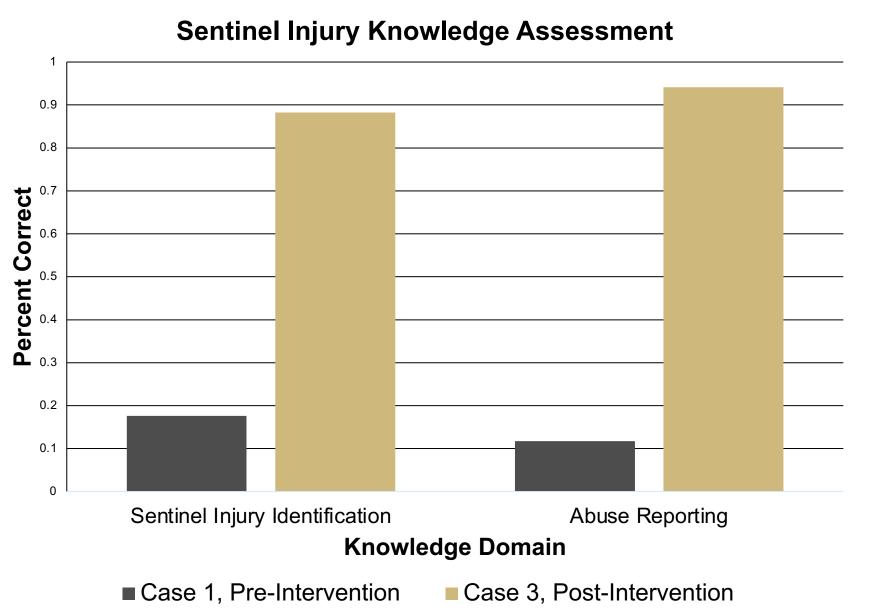


Figure 3. Improvement post-intervention in sentinel injury case knowledge comparing pre-survey abuse case with novel post-survey abuse case

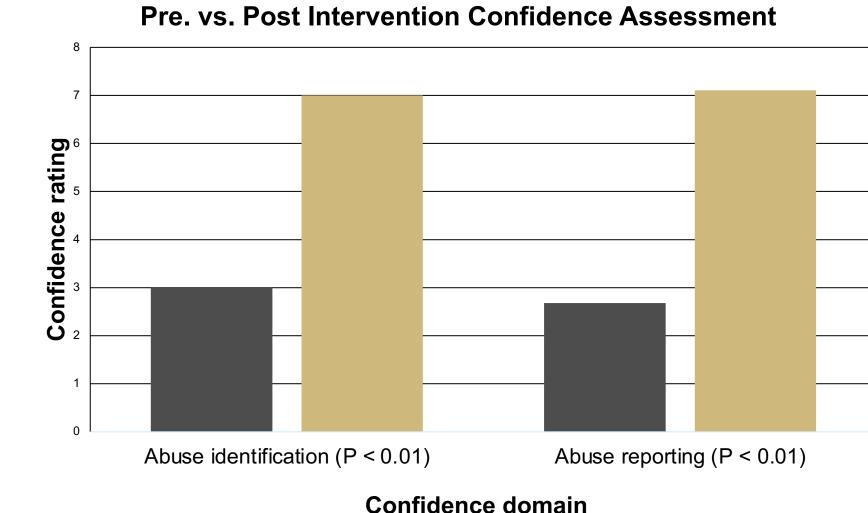


Figure 2. Improvement post-intervention in self-rated confidence to identify and report child abuse. All improvements statistically significant

■ Pre-Intervention Survey
■ Post-Intervention Survey

Qualitative: Intervention Feedback

- Helpful: learning smaller signs of child abuse, "easy cues" to follow in clinic, correlating injuries with ages and areas of the body
- Would like more: information on CPS process, practice on talking to victims/families, more cases

CONCLUSIONS

- Although PA students did not show deficits (performance < 70%) in all knowledge domains, they showed significant improvement in all areas with deficit following the intervention
- Students expressed a desire for further learning in these areas
- Results indicate that targeted education to address sentinel injuries has significant impact on student ability to identify and report these injuries
- Limitations include small sample size and lack of true control group

IMPLICATIONS

- Medical education may benefit from incorporating targeted interventions about sentinel injuries and child abuse
- **Future Work**
 - Expansion of intervention to full integration in PA curriculum, with more direct case-based practice for students in identifying injuries and discussing with families
 - Expansion of curriculum into other PA programs
 - Analysis of curriculum in MD and NP programs