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Title of Project: The impact of a brief educational module on the basic knowledge of emergency physicians in the identification of common patterns of pediatric genital injury derived from sexual assault.

Introduction: Previous studies have demonstrated that emergency medicine physicians have insufficient understanding of common patterns of injury secondary to child sexual abuse (Makoroff, 2002). Incorrect classification and diagnosis of abused patients often leads to an inaccurate identification and lack of investigation or in the reverse, unnecessary investigations, as well as a lack of prevention. This study was performed to help determine if residents and faculty in an emergency medicine residency program would benefit from an educational module regarding common patterns of injury as well as injuries mimicking child abuse.

Methods: A thirty minute educational power point based module highlighting common patterns of injury secondary to child sexual abuse was developed. This module was presented to a group of emergency medicine residents and faculty. A pre- and post-test assessment tool was used to evaluate the effectiveness of this module. Questions were presented on anatomy, common injuries known to mimic child sexual abuse, injury patterns associated with child sexual abuse, and the processing of child sexual abuse claims. Pre- and post- test data was used to evaluate the effectiveness of our module.

Results: The pre- and post-test assessment tool consisted of a total of 13 multiple-choice questions complete with image stimuli. There were 57 pre-tests were administered, and 55 post-tests were administered. Pre- and post-test response rates were calculated in order to evaluate the effectiveness of our module. One question with eight parts addressed knowledge of anatomy. The results revealed that 79% answered these questions correctly on the pre-test, while 98% answered these questions correctly on the post-test. Four questions addressed knowledge of injuries known to mimic child hood sexual abuse. The results revealed that 58% answered these questions correctly on the pre-test, while 85% answered these questions correctly on the post-test. Three questions addressed injuries associated with child sexual abuse. The results revealed that 73% answered these questions correctly on the pre-test, while 92% answered these questions correctly on the post-test. Five questions addressed the processing of child sexual abuse claims. The data revealed that 65% answered these questions correctly on the pre-test, while 90% answered these questions correctly on the post-test. When combining all of the questions the data revealed that 66% of pre-test questions were answered correctly. After administration of our thirty minute educational module, 89% of questions were answered correctly on the post-test.

Conclusion: An educational module on common patterns of injury associated with child sexual abuse directed towards emergency medicine residents and faculty showed improvement in their identification of common patterns of pediatric genital injury derived from sexual assault. Further investigation is warranted to assess true effect in the clinical environment.

PRE-TEST (57 tests total, (13x57=) 741 questions total) :

Total correct N: 486.25/741 Total Percent correct: 66%

Total Anatomy correct: 45.25/57 Total Percent Anatomy correct: 79%

Total Mimickers correct: 132/228 Total percent Mimickers correct: 58%

Total Associations correct: 125/171 Total percent Associations correct: 73%

Total Processing correct: 184/285 Total Percent Processing correct: 65%

POST-TEST (55 tests total, (13x55=) 715 questions total) :

Total Correct N: 637.88/715 Total Percent correct: 89%

Total Anatomy Correct: 53.88/55 Total percent Anatomy correct: 98%

Total Mimickers correct: 186/220 Total Percent Mimickers correct: 85%

Total Associations correct: 151/165 Total Percent Associations correct: 92%

Total Processing Correct: 247/275 Total Percent Processing correct: 90%

Anatomy (1 question with 8 parts)

Mimickers (4 questions)

Associations (3 questions)

Processing (5 questions)