Quality Improvement of Emergency Department Child Sexual Assault Exams
Karis Kerbs, MN, RN, CPEN, CPNP-AC, Sharon Norman, DNP, RN, CCRN, CNS, CPNP, and Asma Taha, PhD, RN, CPNP-PC/AC

Background:
Pediatric sexual assaults number about 115,000 annually. Emergency departments (EDs) are often the site of acute child sexual assault/abuse (CSA) within 72-120 hours post-assault/abuse. The Harborview WA State guidelines for child sexual assault/abuse and the expert consensus-based Adams Guidelines are considered the standard for evidence-based CSA exams. Unfortunately, evaluation and treatment of acute CSA in EDs do not always adhere to these recommended guidelines. At the site of this project, only 9% of CSA exam met photo-documentation guidelines, 50% of exams met documentation guidelines, and 60% of exams included appropriate forensic evidence collection. As a result, it was often unclear if the child’s physical exam was normal and/or without injury, necessitating re-examination at a child abuse clinic. The purpose of this quality improvement (QI) project is to evaluate the impact of evidence-based staff education on ED CSA exams.

Details of Innovation:
An evidence-based educational intervention was developed for ED RNs and medical providers with a focus on exam documentation, photography technique, and evidence-based guidelines. Group sessions, face-to-face mini-sessions, and one-on-one photo coaching were implemented. Data from chart reviews was collected pre-and post-education to evaluate the impact of intervention on the quality of ED CSA exams.

Outcome:
Post-education data collection is in process. Data analysis will include descriptive and inferential statistics. Positive results will indicate an association between education and quality improvement of CSA ED exams. Negative results will indicate a need to find an alternative to traditional education to improve CSA ED exams.

Implications:
Improvement in CSA exam quality through education will support the use of the educational materials for review, annual updates, and new employee orientation. Future work could include the expansion of education materials to include child physical abuse exams in the ED and sharing the educational materials with other sites to improve the quality of CSA exams in other clinical settings.

Open-ended question: What impact do evidence-based educational interventions have on the quality of emergency department child sexual assault exams and photo-documentation?

Selected References:
115,000 annual child sexual assaults
Acute child sexual assault/abuse (CSA) exams ideally occur within 72-120 hours post-assault
Evidence-based practice guidelines for CSA exams include:
- Forensic evidence collection (if within 72-120 hours)
- Physical exam with documentation of injuries
- Detailed anogenital exam
- Photo-documentation
- Testing and prophylactic treatment
- Reporting to law enforcement (LE)
- Reporting to child protective services (CPS)
- Emergency departments (EDs) are often the site of CSA exams

**Background**

**Purpose**

- Improve CSA physical exam documentation
- Improve CSA photo-documentation quality and techniques
- Develop evidence-based educational intervention
- Evaluate the effect of educational interventions on exam quality

**Design**

This is a Quality Improvement (QI) project using a Plan-Do-Study-Act (PDSA) design

- **Plan**
  - Determine current practice and quality
  - Chart review:
    - Forensic evidence collection, if indicated
    - Photo-documentation performed with proper technique
    - Physical exam details documented
    - Reporting to LE and CPS
  - Develop evidence-based educational materials
    - CSA checklist
    - Forensic documentation for acute exams
    - Electronic template for provider physical exam
- **Do**
  - Education provided to ED RNs and providers
    - Group sessions
    - Face-to-face mini-sessions
    - One-on-one photography coaching
- **Study**
  - 6 weeks of data collection from QA chart reviews post-education
  - Forensic evidence collection, if indicated
  - Photo-documentation performed with proper technique
  - Physical exam details documented
  - Reporting to LE and CPS
- **Act**
  - If positive association
    - Utilize educational materials for review, annual and new staff orientation
  - Share educational materials with other clinical sites for QI of CSA exams
  - If negative association
    - Re-evaluate current practice and plan non-traditional methods for education
  - Include physical abuse in CSA education

**Results**

- Data collection from chart reviews is in process
- Analysis will include
  - Qualitative statistics
  - Inferential statistics
- Pre- and post-education collected data from ED CSA chart reviews will be compared to evaluate the effect of the educational intervention on CSA exam adherence to evidence-based guidelines

**Practice Implication**

- Positive results
  - Indicate association between education and improved exam quality
  - Include increases in:
    - Forensic swab collection
    - Proper photo-documentation technique
    - Detailed physical exam documentation
    - Reporting to LE and CPS
- Negative results
  - Indicate no association between education and improved exam
  - Indicates need for staff to explore non-traditional education

**Conclusions (Preliminary)**

- The assumption is that evidence-based educational materials presented in a variety of settings with one-on-one coaching available will have a positive impact on the quality of ED CSA exams and photography.

**Acknowledgements**

- Child Abuse Assessment Team (CAAT):
  - Kimberly Copeland, MD, FAAP, Jessica McGowan, Heather Zimmerman
  - ED staff:
    - Kelly Brady-Pevrek, Donna Mamaro, Merissa Skidmore, Sheri Wood

**Selected References**