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Educational Intervention on Pediatric Concussions for Providers

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Educational Intervention on Pediatric Concussions for Providers

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Population and Problem

• 3.8 million recreational and sports related concussions occur annually in children.
• Estimated to cost 17 million dollars annually
• Studies have shown that children who are seen in a specialty clinic have an overall faster recovery of post-concussive symptoms.

(Halstead, 2016)
Significance of the problem

- Data exists
- Non-compliance with return to play guidelines
- Underdiagnosis and underreported

(Halstead et al., 2010, 2016)
Purpose of Project

Use existing data to educate healthcare providers

Improve rates of appropriate diagnosis

Improved outcomes in children that have suffered a concussion
Theoretical Framework

(Graham, et al., 2006).
In providers who care for children experiencing a concussion, how does an educational program on post-concussion care, as compared to no intervention, affect providers' knowledge?
Supportive Evidence

SEARCH STRATEGIES

CRITICAL APPRAISAL - METHODS, TOOLS, LEVELING AND QUALITY GRADE
Records identified through database searching (n = 1098)

Additional records identified through other sources (n = 0)

Records after duplicates removed (n = 345)

Records screened (n = 345)

Records excluded (n = 322)

Full-text articles assessed for eligibility (n = 23)

Full-text articles excluded, with reasons (n = 17)

Studies included for critical appraisal (n = 6)

Studies included in synthesis of literature (n = 6)

(Adapted from: Moher et al., 2009)
## Synthesis Table - Interventions and Outcomes

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<tbody>
<tr>
<td>Concussion education</td>
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<tr>
<td>Concussion rates</td>
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<td>Recovery of post-concussion symptoms</td>
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*Note. + = Improved outcomes, - = decreased rates*
Patient and Family Preferences
1. Concussion education of providers continues to be a priority.

2. An emphasis should be made among initial assessors of concussions that rapid clinical follow-up is necessary.
Methodology

- Setting
- Barriers and facilitators
- Stakeholders
- Tools
- Intervention Implementation
Outcome measures

• Specific Outcomes measured
• Difference made in improving health, costs patient, family or community outcomes
• Data Collection and Security - collection procedure
Analysis of data

• Statistical tests
• Statistical platform
Significance and Implications

• Benefit to providers, patients, families and community
• Cost effectiveness
• Plan for sustainability
Findings

- Two-fold increase in knowledge post-education
- 7 participants
  - Two NPs
  - Two PAs
  - 3 Physicians
Implications for practice
Dissemination plan

(Graham 2006)

Disseminating
Applying Evidence
Clinical Decision Making

Pediatric Trauma Society’s Poster exhibition 2023 conference

YouTube for project’s stakeholders
Questions?
References


CDC Train. HEADS UP to healthcare providers online training for medical professionals. https://www.train.org/cdctrain/course/1091388/


https://doi.org/10.1370/afm.1239


https://doi.org/10.1097/01.HTR.0000327255.38881.ca

Google Maps. (n. d.) https://www.google.com/maps/dir/Las+Vegas,+Nevada/St.+George,+UT/@37.1041851,-113.7048906,10.87z/am=t/data=!4m13!4m12!1m5!1m1!1s0x80beb782a4f57dd1:0x3accd5e6d5b379a3!2m2!1d-115.1398296!2d36.1699412!1m5!1m1!1s0x80ca44d0984939e5:0x531707f2f8a11c1e!2m2!1d-113.5684164!2d37.0965278


Institute for Healthcare Improvement. Person- and Family- Centered Care. http://www.ihi.org/resources/Pages/ImprovementStories/AcrossTheChasmAim3HealthCareMustBePatientCentered.aspx


References continued


https://www.ncbi.nlm.nih.gov/books/NBK534786/


References continued
