CAP: Concussion Awareness Program

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Objectives

• At the end of this discussion, the participant should be able to:
  • Understand the health burden of concussions
  • Demonstrate how to effectively increase awareness of concussion knowledge
  • Explain how to successfully report concussions

• No disclosures to make at this time.
“If you had a son would you encourage or permit him to play football? The carefully considered answer has been: If the boy was of high school age, or older, and with the proper physique, conditioning, and balanced mental capacity; if the boy was supplied with the proper protective equipment; if he were to be taught the proper coaching techniques with the avoidance of stick-blocking or spearing; if his coach was a perceptive thoughtful man, who regarded each lad as his own son; if the boy had the desire- I would encourage him to play football.”

Richard C. Schneider, 1973
Background: Evolution of Concussion Understanding

• The relationship between contact sports and injury has been well accepted since late 1800’s
• Protective equipment
• Later half of the 20th century offered greatest advancements in understanding
• With improved insight came concussion education
Health Burden of Concussions

• Football
  • 3,000,000 youth
  • 1,000,000 high school
  • 70,000 college

• Reducing that burden
  • Change attitudes (playing through injury)
  • Sport rules
  • Institutional concussion management practices
  • Coaching behaviors
  • Individual athlete's safety behaviors
Purpose of the Project:

- To increase an athlete's intention to report
- Change the attitudes and culture surrounding concussions
  - Want to report to help their team
  - “Culture to report”
- Increase concussion knowledge
  - Already in place, but frequently not regarded as serious
- NCAA requires some form of concussion education
Mind Matters Grand Challenge

• Educational challenge aimed at changing concussion behaviors
• NCAA & Department of Defense
• Two-arms of the challenge
  • Research arm
  • Educational arm
Concussion Awareness Program: CAP

• Web-based module
  • Easily accessible
  • Comprehensive program housed on one site
Participants

- All males high school football players
- 9th-12th grades
- 10 Public schools
- English primary language
- 664 players initially
- 131 excluded-incomplete, missing data

- 9th-12th grade high school coaches
- Full-time employees of the county
- 46 total
Methodology:
CAP: The Program

- The website: www.concussionawarenessprogram.org
  - Neurocognitive testing
  - Educational video- “peer-to-peer”
  - Pre and post-test
  - Sideline assessment tool
  - Concussion clinic information and contacts
  - Return to play protocol
  - Comprehensive concussion clinic
CAP: Homepage

CAP™
CONCUSSION AWARENESS PROGRAM

We are creating awareness and prevention strategies for sports-related head injuries.

Take our concussion preparation test.

UNIVERSITY OF SOUTH ALABAMA
CAP: Coach Homepage

PROGRESS
- Concussion Awareness Pre-Test: ✔
- Concussion Stories Video: ✔
- Concussion Awareness Final Test: ✔

Pretest Results: 4/5
Final Test Results: 3/5
### Statistics

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<tr>
<th></th>
<th>Coaches</th>
<th>Players</th>
<th>Parents</th>
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<tbody>
<tr>
<td>Accounts</td>
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<tr>
<td>Avg. Age</td>
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<tr>
<td>Completed Quizzes</td>
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<td>0</td>
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<tr>
<td>Avg. Pretest Score</td>
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<tr>
<td>Avg. Posttest Score</td>
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<tr>
<td>Survey #1 Avg.</td>
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<td>2.46/166</td>
<td>0.00/0.00</td>
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<td>Survey #2 Avg.</td>
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<td>2.09/159</td>
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<td>Survey #3 Avg.</td>
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<td>2.79/250</td>
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<td>Survey #4 Avg.</td>
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<tr>
<td>Survey #5 Avg.</td>
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<td>4.17/443</td>
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Download Quiz Data
CAP: On-Field Assessment
CAP: In Action

• Currently in Mobile County and Baldwin County, AL
  • Over 1000 athletes
  • 2016- present

• University of South Alabama athletes 2016
  • Pilot study
CAP Results

• Results indicated statistical significance ($p < .001$) when all scores for the attitude based questions

• They scored higher on the post-test ($M = 21.22$) than the pretest ($M = 19.69$).

• Knowledge based questions only ($N=556$) indicated statistical significance ($p < .001$) with an increase in the scores from prior to the program ($M = 4.06$) to after the education program was completed ($M = 4.44$).

• The athletes ($N=533$) reached statistical significance ($p < .001$) with an increase in the attitude and knowledge of the post-test compared to the pretest.

• The number of patients seen in the concussion clinic for the 2016 season was 22, an increase from the one reported concussion in two seasons prior. Of the athletes seen, 12 were released to start their progressive increase in activity to return to play at 1 week, 6 returned at 2 weeks, 2 returned at 3 weeks, and another 2 returned at 4 weeks.
CAP Results

Overall Attitude Test Score

- Pre
- Post
Limitations

CAP: How is it going?

• Technical difficulties
  • Computer availability
  • Audio
  • Blockage from school internet

• Time constraints
  • 20 minutes total for the education
  • Time for neurocognitive testing

• Community and school support
Future Implications CAP:

- More schools and athletes in Alabama
- Comprehensive Concussion Clinic at USA
- Break barriers to reporting concussions and improve the lives of young athletes