Analysis of Traumatic Brain Injury Coverage in Print and Social Media

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Learning Objectives

- Understand Traumatic Brain Injury (TBI) as a public health issue and NCIPC Focus Area
- Develop effective research methods to analyze print media articles related to specific public health topics as often as needed to determine trends, changes, and key findings on media coverage
- Identify strategies for analyzing and understanding the impact that print and social media coverage has on public perception and awareness of a public health topic
- Develop effective media tools that help to promote health promotion and prevention and maximize on opportunities to increase public health messages in social and print media
The Public Health Issue of TBI In the U.S

- 2.4 million emergency department visits, hospitalizations, or deaths were related to TBI, either alone or in combination with other injuries in 2009
- Of these, the vast majority (86%) were treated and released from hospital EDs. Another 12% were hospitalized but then discharged and 2% died.
TBI Costs and Effects

• The estimated economic cost of TBI in 2010, including direct and indirect medical costs, was estimated to be approximately $76.5 billion.
  - Based on lifetime estimates of the costs of TBI in the US for 2000, and adjusting for inflation

• Potential effects:
  - Cognitive function
  - Motor function
  - Sensation
  - Emotion
Traumatic Brain Injury In the U.S. Most Common Reported Causes

- Falls
- Motor vehicle accidents
- Struck by/against events
- Assaults

*Causes from TBI deaths, emergency department visits, and hospitalizations combined*
MEDIA ANALYSIS

Methods and Findings
Research Questions

- What are the trends in content over time?
- How do the media frame the public discussion and messages around TBI?
- Which audience appears most often in news media articles (e.g., survivors, athletes)?
- What key themes, topics, and terms are being covered, and what topics are being ignored?
Methods: Newspaper

- **Print media coverage between 2009 and 2011**
  - Compared to previous CDC TBI media analysis of articles published from 2004 to 2006.

- **Lexis-Nexis search**
  - Randomly selected 25 newspaper articles for each month during the study period
  - 900 articles

- **Qualitatively analyzed and coded on several items including** *whether TBI was the primary focus, TBI topics covered, and reported causes of TBI.*
Print Media: Newspapers Reviewed

- Atlanta Journal-Constitution
- Philadelphia Inquirer
- Boston Globe
- St. Louis Post-Dispatch
- Chicago Tribune
- Seattle Times
- Dallas Morning News
- USA Today
- Houston Chronicle
- Wall Street Journal
- Los Angeles Times
- Washington Post
- New York Times
Methods: Social Media

- Social media posts and trends on keywords “traumatic brain injury” and related keywords such as concussion
- Includes all major social media networks, including Twitter, Facebook, YouTube, blogs, and forums.
- Analysis period: June 14-September 14, 2012.
- VOCUS Public Relations software tool and Radian 6.
Social Media Coverage Trends

- 2,000: Average number of daily posts about TBI across all channels equaled
- 155,101: Total posts during period
- Adjusted Reach – 3,437,357
Findings: Newspaper Coverage Trends

- Majority of the newspapers (77%) increased coverage of TBI between 2009 and 2011
- Primary focus on TBI increased nearly 33 percent
- 69% of articles appeared in the sports section and coverage of TBI became more sports focused
  - Mainly occurrence and return-to-play status for athletes.
Most Common Topics in Newspaper

- Occurrence (61%)
- Return to play (55%)
- Treatment/recovery/ rehabilitation (28%)
- Symptoms of injury (26%), and
- Outcomes (23%)
Findings: Newspaper

- “Concussion” is most commonly used term in news articles
- Print articles *rarely* reported on TBI prevention or causes of TBI other than sports injuries.
Conclusions

Media coverage on TBI is increasing both in terms of quantity and focus.

• Media interest in issues related to TBI is growing, and content primarily focus on sports.
• Falls are the leading cause of TBI; however, they were rarely identified as such in the media.
• Coverage of TBI increased substantially within the most current analytic timeframe (2009-2011).

- During the monitored period, articles focused specifically on TBI increased from just 6% in the previous analysis to 38.6% during the current period.
Conclusions cont

The findings suggest that there is an opportunity to:

- Strengthen the way TBI is covered in the media;
- Broaden coverage of TBI beyond sports;
- Promote TBI prevention; and,
- Increase awareness of TBI as a public health issue.
Implications for Research and/or Practice

- Study is replicable.
  - Methods can be used again in the future
- Informed by the media analysis, CDC has developed a writing guide to help media writers to cover TBI more comprehensively.
  - Understanding how TBI is covered in the media, helped CDC to recognize the needs to provide the media with TBI messaging and writing tips to help to increase understanding of the public health concern.
  - Includes content on how to prevent, recognize, and respond to TBI injuries.
MEDIA TOOL DEVELOPMENT
NCIPC Previous TBI Related Media Guides

CDC Traumatic Brain Injury for Seniors Media Access Guide

A Journalist’s Guide to Shaken Baby Syndrome: A Preventable Tragedy
Gap/Opportunity

Previous TBI media tools are tailored to a specific population affected by TBI and do not focus on TBI as a public health issue overall and how to prevent TBI from all of the leading causes and among all populations.
Developing the Guide to Writing about TBI in News and Social Media

The goals of the guide are to:

- Strengthen the way TBI is covered in the media;
- Broaden coverage and content of TBI beyond sports;
- Promote TBI prevention; and,
- Increase awareness of TBI as a public health issue.
Content Overview

Guide to Writing about TBI in News and Social Media (in press)

- The What and Why: Traumatic Brain Injury Is a Preventable Public Health Issue
- The Who: TBI by Audience
  - Targeting TBI News by Audience
  - Information for Sports Writers
  - Awareness
  - Return to Play
Content Overview cont.

- The When & How: Tips for Accurate Reporting and Story Development
  - **When and How to Incorporate TBI Information into News Segments**
  - **Incorporating Key Prevention Messages to Build Awareness**
- The Where: Resources For More Information
- TBI in the News: The Lystedt Law: A Concussion Survivor’s Journey
Preventing Falls among Children

• Falls are the leading cause of TBI and are responsible for half of all TBIs among children. However, there are several simple ways parents and caregivers can prevent these injuries.

• Supervision is key. Supervise young children at all times around fall hazards such as stairs and playground equipment, whether you’re at home or out to play.

Incorporating Key Prevention Messages to Build Awareness

There are several evidence-based strategies for preventing TBI and incorporating these prevention strategies and messages into your articles will help to build awareness of TBI prevention and help reduce injury occurrence.

Preventing Falls among Children

Falls are the leading cause of TBI and cause half of all TBI among children. However, there are several simple ways parents and caregivers can prevent these injuries.

1. Supervision is key. Supervise young children at all times around fall hazards such as stairs and playground equipment, whether you’re at home or out to play.

2. Play safety. Be sure that the surfaces under playground equipment are soft, well maintained, and free from hazards.

3. Make your home safer. Use home safety devices such as guards on windows that are above ground level, stair gates, and guardrails, which help keep active kids from taking dangerous tumbles.

4. Keep sports safe.Always use good sportsmanship and make sure your children wear proper protective gear during sports and recreational activities. For example, when skateboarding, ensure that children use helmets— as well as wrist guards, knee and elbow pads—to prevent serious injuries.

Avoiding Falls among Older Adults

Preventing falls among older adults is absolutely important. Falls cause 61 percent of all TBIs among adults aged 65 years and older. The following strategies can help older adults avoid falls.

1. Get a regular exercise program. Improve your strength and balance. Restricting activity can decrease your quality of life and increase your chance of falling.

2. Have your health care provider review your medicines. Some medicines can cause dizziness and dizziness, which can cause falls.

3. Have your vision checked annually. Poor vision increases your chance of falling. Update your eyeglasses, and improve the lighting throughout your home, especially on stairs.

4. Make your home safe. Move items that can cause you to trip or fall. Place frequently used objects where they can be easily reached without using a stool.

Staying Safe on the Road

Both winter clothing and traffic-related incidents are the second-leading cause of TBI. The new messages should focus on how people can be safe on the road.

1. Use your seat belt. Using a seat belt every time is important, no matter how short the trip.

2. Make sure windows are properly blocked up. Children should be in a seat belt, booster seat, or car seat, whichever is appropriate for the child’s age, height, and weight.

3. Wear a helmet when riding a motorcycle, scooter, or bicycle.

4. Know your state’s Graduated Driver’s License system. Those licensing systems help keep teens safe on the road.

5. Don’t drive impaired. Choose not to drink and drive and help others do the same.
Next Steps

- Finalize design for the guide and post to CDC Web
- Disseminate key findings and resources to TBI and NCIIPC Partners and targeted news media
- Continue to monitor and measure media coverage and analyze content, coverage, and awareness
- Continue to promote TBI prevention messages in all CDC developed media materials and communication products
References

- Coronado, VG et al. The epidemiology and prevention of TBI, in press, 2012
Questions
Thank you!

For more information please contact Centers for Disease Control and Prevention

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Visit: www.cdc.gov | Contact CDC at: 1-800-CDC-INFO or www.cdc.gov/info

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.