Conclusion The rising national rate of TBI-related deaths due to falls highlights an emerging priority area for prevention. Targeted interventions to reduce incidence of this health event, especially among older adults and those living in non-metropolitan counties is needed.

Spreading the word: health communication and education

Using content analysis and eye-tracking to understand injury prevention content dissemination on social media

Purpose We will provide information on two study branches: content analysis, showing the frequency and content of injury prevention social posts from key disseminators, and eye tracking experiment, examining the textual and pictorial factors of social posts that influence visual attention and correct safety behavior among parents of young children.

Methods First, we conducted a quantitative content analysis (May 2018-April 2019) of Instagram posts from 22 key pediatric injury disseminators. Next, parents (n=150) of young children (<7 years) completed an eye-tracking experiment, where they were exposed to six posts, three with imagery that matched the textual information explaining the recommended safety information (concordant) and three with imagery that did not (discordant). We examined the proportion of dwell time spent on textual and pictorial areas. We applied generalized estimating equation regressions to examine the relationship between concordant imagery and visual attention, accounting for frequency of social use and health literacy (Newest Vital Sign).

Results A total of 4,598 posts were analyzed, of which 754 had a pediatric injury focus. Pediatric injury content was posted in more than half (54%) of posts from pediatric injury organizations. More posts had images than videos, but videos were more likely to show safety recommendations. Participants spent an average of 5.3 seconds on the concordant image posts compared to 3.3 seconds on the discordant image posts (p<0.001). Each second of viewing time on concordant posts compared to 3.3 seconds on the discordant image posts was associated with a 2.8% increase in safety information knowledge (p<0.001).

Conclusion Visual attention to posts with the recommended safety behaviors attracted significantly higher visual attention and resulted in an increased recognition/identification of the optimal safety actions.

Significance Identifying the gaps in social media messaging and understanding how parents view these messages allows us to provide recommendations for injury prevention organizations to more effectively design and disseminate child injury prevention messages.

Opioids: epidemiology and interventions

Development of an evidence-based safer opioid prescribing toolkit for clinical care

Purpose Despite a 30% reduction nationwide in new opioid prescriptions since 2012, prescription opioid overprescribing, as well as opioid misuse and overdose remain significant U.S. public health issues. To address a deficit in educational resources/tools for clinical providers and their patients, the Injury Prevention Center (UM-IPC), in partnership with the Department of Health and Human Services (MDHHS), created the Michigan Safer Opioid Prescribing Toolkit – a comprehensive, evidence-based, on-line resource.

Methods/Approach A needs assessment was conducted, identifying knowledge/skills gaps among primary care providers across the state. Utilizing results, a comprehensive review of publicly available opioid prescribing resources and systematic literature review to identify up-to-date recommendations was conducted in key areas. Provider- and patient-focused educational content and resources were identified/curated from existing sources or newly developed for the toolkit. Resources were reviewed by expert researchers/clinicians for accuracy and by practicing primary care clinicians for usability and applicability/relevance.

Results Toolkit resources were developed across seven domains, including background resources on pain and pain management (managing acute/chronic pain, reducing stigma), management strategies for chronic opioid use and opioid use disorders (screening tools, naloxone, medication-assisted treatment), non-opioid/non-pharmacological pain management, opioid pain management (prescribing/tapering guidelines), prescribing laws (PDMPs, legal resources), just-in-time resources (clinical decision flowcharts, assessment tools, safe storage/safe disposal), and special populations (adolescents, LGBTQ, pregnant women, veterans, etc.). In the first two weeks since the November 2019 launch (michmed.org/optoolkit), website reach has included 1,846 unique visitors, suggesting high engagement with toolkit content.

Conclusions Development/dissemination of a just-in-time toolkit to guide evidence-based primary care pain management (i.e., safer opioid prescribing), harm reduction, and opioid use disorder treatment/linkage to care has potential for broad public health and clinical impact in addressing the opioid epidemic.

Significance/Contributions to Injury/Violence Prevention This toolkit is one of the first fully online, comprehensive, evidence-based clinical resources to address the opioid epidemic.