

## **Messages of Child Drowning Prevention: A Review of Newspaper Coverage from Midwestern Regional Papers**

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### **Abstract**

**Background:** Drowning remains the second leading cause of injury-related death among children ages one to 14 in the United States. The media, such as newspapers, and health professionals often have the opportunity to disseminate drowning prevention tips, such as those presented in the Safe Kids campaigns. This study sought to understand the print media's inclusion of water safety and prevention message in stories related to child drowning.

**Methods:** A content analysis was conducted to identify the inclusion of prevention and water safety messages with child drowning and near-drowning incidents reported in newspapers from the Midwest US.

**Results:** Newspaper articles including specific prevention and water safety messages within the text were identified. About 50% of the child drowning articles did not contain a prevention or water safety message. At least one of the four primary safety messages proposed through Safe Kids was present in 29.52% of the reviewed articles, however, only 5.29% of the articles included all four water safety messages. Entrapment was noted in 3.52% of the articles; only one article (0.44%) contained a message advocating for policy change.

**Conclusions:** Drowning or near-drowning incidents provide an opportunity for the media to educate the public regarding drowning prevention and water safety. The lack of prevention information included in such articles suggests a need for media education on the benefit to accompany child drowning stories with appropriate prevention messages. *KJM 2009; 2(4):87-91.*

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### **Introduction**

Drowning remains the second leading cause of injury-related death among children ages one to 14 in the United States.<sup>1</sup> In 2003, 782 children ages 14 and under died as a result of unintentional drowning, and in 2005, an estimated 3,019 children in this age group experienced near drowning non-fatal injuries.<sup>2</sup> However, according to the 2008 World Health Organization's report on child injury prevention, "Recent community-based surveys indicate that the problem of drowning is likely to be much greater than present global estimates would suggest" (p. 72).<sup>3</sup>

In 2000, Kansas reported drowning deaths as the fourth leading cause of unintentional injury death for children ages

zero to 14 and 65% of unintentional drowning deaths were in the zero-to-four age group.<sup>4</sup> This age group also had the highest percentage of hospitalizations for near-drowning. Forty percent of deaths occurred in a swimming pool, 30% in a bath tub, 15% in a natural body of water, and in 15% the location was unspecified.<sup>4</sup> While the majority of incidents take place in residential swimming pools, children can drown in as little as one inch of water. Wading pools, bathtubs, buckets, diaper pails, and toilets can be unsafe for an unsupervised child.<sup>5</sup> Open water sites, such as lakes, rivers, canals, oceans, and drainage ditches, are also high-risk drowning sites.<sup>6</sup>

Although younger children involved in drowning incidents have a better survival rate than adolescents, the outcomes remain grim.<sup>7</sup> Children who survive face devastating health affects such as severe, permanent neurological disability, which often results in long-lasting psychological and emotional trauma. Near-drowning also takes a tremendous financial toll on the entire nation. Typical medical costs for a near-drowning victim range from \$75,000 for initial treatment to \$180,000 a year for long-term care.<sup>8</sup> The total cost of a single near-drowning resulting in brain injury can be more than \$4.5 million. The total annual lifetime cost of near-drowning among children ages 14 and under is approximately \$6.8 billion with children ages four and under accounting for half.

There are continued efforts to educate health professionals.<sup>9</sup> Those who treat pediatric drowning and near drowning victims continue to aid the prevention efforts.<sup>10</sup> However, primary prevention strategies are needed, such as targeted communication campaigns, to raise awareness in parents and caregivers about the dangers of drowning.<sup>3</sup> Such community-wide drowning prevention campaigns have demonstrated a significant, although modest, increase in reported life vest use and ownership among children,<sup>11</sup> and educational measures and messages have been reported to reduce the number of drownings in children.<sup>12</sup>

The most comprehensive primary prevention campaign for drowning was developed by Safe Kids Worldwide, a global network whose mission is to prevent accidental injury in children.<sup>13</sup> Founded in 1987 by the Children's National Medical Center and Johnson and Johnson corporation, Safe Kids is a grassroots organization that relies on local professionals and volunteers to increase injury prevention knowledge in parents,

caregivers, and children through public events and dissemination of prevention materials for a wide range of injuries including burns, falls, and drowning.

The Safe Kids campaign<sup>6</sup> offers four primary safety messages regarding accidental drowning:

- SUPERVISION – Designate a responsible adult to supervise kids around water.
- ENVIRONMENT – Ensure safe swimming environments by installing multiple layers of protection around pools and equipping all water recreation sites with appropriate signage and emergency equipment.
- GEAR – Make sure the right safety gear always is used.
- EDUCATION – Teach children to swim and educate them about water safety.

These messages are disseminated to parents through campaign activities to prevent drowning by increasing knowledge.

Although recent studies have evaluated unintentional-injury coverage on local television news,<sup>14</sup> a gap exists in the research of national and regional coverage of child drowning and specifically, print media support of prevention messages. The only recorded publication related to newspaper coverage and reporting of drowning incidents, to date, involves research conducted in Germany.<sup>15</sup> This study addressed these gaps by providing a review of prevention messages offered in newspaper coverage of child drowning in Kansas.

## Methods

Content analysis. A content analysis of articles from midwestern regional newspapers was conducted to analyze large volumes of data in a systematic fashion and to discover trends and patterns related to drowning prevention messages. Specifically,

reviewed articles included newspaper stories regarding unintentional deaths of children under the age of 15 (as is typically reported for child drowning) in water-related accidents.

The selection criterion for articles was decided prior to the review process and emergent coding procedures were established.<sup>16</sup> Search terms were selected and information was retrieved through the LexisNexis Academic database. Search terms included drowning, children; water safety campaigns; near drowning, children; and drowning, prevention. The scope of the articles reviewed included “general news” in “major papers” and “U.S. News” in “Midwestern Regional Papers” as prompted by the “Guided News Search”. Two independent coders reviewed headlines for the retrieved articles and excluded articles not relevant to the research questions. Differences were reconciled by consensus. The second screen determined the message content (drowning prevention messages) based on a consolidated checklist and information included in the article.

Initially, 565 articles were retrieved from the Midwestern Regional Papers citation search locating articles from August 1, 2002 through August 1, 2006 related to drowning and children. Dates were selected to obtain five years of historical data beginning at the end of the summer swimming season. The preliminary screen excluded 336 articles including stories of intentional drowning, murders, or older children. The remaining 229 articles were screened, coded, and categorized using WEFT QDA software (<http://www.pressure.to/qda/>).

## Results

Newspaper articles including specific prevention and water safety messages within the text were identified. If the message was an explanation of how the drowning occurred (i.e., all four drowned in a nine-

foot-deep swirling pool after they apparently went to the water gardens to cool off) researchers did not consider the information to be sufficient, intended prevention message support, and those articles were coded as “No water safety or prevention message”. Additionally, some of the articles provided a short bulleted list of the four Safe Kids primary safety messages at the close of the article, therefore, were coded as “all primary safety messages”. Two other coding categories, “policy” and “entrapment” (i.e., filter suction and open water current dangers), were added.

About half (49.35%) of the child drowning articles did not contain a prevention or water safety message (Table 1). At least one of the four primary safety messages proposed through Safe Kids was present in 29.52% of the reviewed articles, however, only 5.29% of the articles included all four water safety messages. Entrapment was noted in 3.52% of the articles; only one article contained a message advocating for policy change.

## Discussion

This research systematically reviewed the coverage of drowning stories in Midwestern newspapers to serve as a barometer for the presence of prevention messages in print media stories. Results could be an indication of a need for increased prevention messages. Newspapers should be encouraged to include the prevention strategies provided by Safe Kids to each story they cover on drowning or near-drowning. Messages could be contained within less than one inch of column space and include a statement such as, “This is the XX unintentional child drowning in the state this year. Prevention is the key, be sure you know the most effective ways to keep your child safe. Contact your local Safe Kids office for more information.” By including such messages

Table 1. Child drowning articles from Midwestern newspapers results.\*

Primary Water Safety or Prevention Message	Number of Articles	Percent of total articles
Supervision	19	8.37%
Environment	18	7.93%
Gear	19	8.37%
Education	11	4.85%
Other - Policy	1	0.44%
Other - Entrapment	8	3.52%
No Water Safety or Prevention Message	139	49.34%
All primary safety messages	12	5.29%
<b>Total articles</b>	<b>227*</b>	

\* Some articles indicated two types of messages such as active supervision and swim lessons

in articles to increase the drowning prevention knowledge of parents and caregivers, newspapers have the opportunity to implement a primary prevention campaign with the potential of saving children's lives.

While the content analysis revealed specific gaps in reporting prevention messages that might reduce child drowning, it did not include a representative sample for print newspapers throughout the United States. It would be beneficial to include all national papers, because the Midwestern states are land-locked and national trends could differ.

Great hope remains for the continued advancement of drowning prevention for children. Technological advancements for products such as sensor systems capable of differentiating children from adults,<sup>17</sup> coupled with fence laws and local policy improvements continue to support the prevention of children drowning. Work

related to water safety continues to be conducted in the health education field. In addition, experts constantly are reviewing circumstantial evidence,<sup>18</sup> victim profiles, and location of incidence<sup>19</sup> to understand prevention measures better. As public health continues to address the global burden of drowning,<sup>20</sup> the print media must disseminate prevention messages that are relevant to health professionals, parents, and caregivers.

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