

Title: "A content analysis of news media coverage of drowning events in Western Australia over two summers, 2014-2016"

Running title: *I read it in the news*

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Abstract

Drowning is a leading cause of death globally. Dissemination of drowning prevention messages is paramount with news media posited as influential. Opportunities to inform readers using drowning prevention expert commentary, and influence behaviour to prevent drowning may be overlooked for attention-grabbing headlines, imagery and narrative. This study examines new media coverage of fatal drowning events, in Western Australian (WA). **Methods:** Coronal data of fatal drowning events in WA were extracted for two summer time periods (2014-2016) by date, age, gender, location and description. Corresponding print and online news articles were captured using: (1) Media Alert; (2) Google News and (3) Factiva. A content and frame analysis protocol was used to code each article. A qualitative approach was taken to analyse the news angle. A sub-group analysis was undertaken for drowning focused articles. **Results:** The final sample comprised 50 news articles matched to 17 individual drowning events (T1, n=9; T2, n=8). Drowning stories rarely appeared on page one (n=2), but were located in the first 2-10 pages (n=20) (66.6%). In the sub-analysis, one fifth (22%) of the articles employed a news angle relating to *Community spirit* and *Celebration of life*. There were 32 mentions of 'who was responsible for the drowning event'. The Environmental factors were most cited for 'what was responsible' (20.4%). Experts were cited in 66.7% of articles and drowning prevention strategies were mentioned in 9 of the 50 articles. **Conclusion:** Drowning was considered newsworthy, however not front page news. Reporting infrequently prioritised drowning prevention or discussed prevention strategies.

Introduction

Globally, more than 370,000 people die from drowning each year with 42 deaths occurring every hour of every day.¹ In Australia, between July 2015 and June 2016, 280 drowning fatalities occurred² of which 37 drowning deaths were in the state of Western Australia (WA), representing an increase of 6% on the 10 year average.³ The highest number of deaths occurred in people aged 25-34 years (22%), with almost a third of people drowning in ocean/harbour locations (30%). Leading risk factors for drowning in high income country (HICs) such as Australia include age, proximity to water, supervision and swimming ability as well as social, environmental and structural factors.⁴ Recent drowning prevention interventions undertaken by national and international agencies suggests a need for a life-course and targeted approach.^{5,6} Therefore the dissemination of drowning prevention messages to a broad and diverse audience is paramount.

Mass media has the potential to reach large audiences and have been recognised as a significant source of public health information^{7,8} with the capability for consistently alerting, updating and

educating the public on a range of health issues.⁸⁻¹¹ Of particular interest, news media (or news stories) have been posited as the most influential element of mass media¹² and in Australia, a key source of health information.¹³ News media coverage can increase the perceived importance of issues as well as shape the public's perception, attitude and behaviour toward a health issue and help set the collective agenda.^{11, 14-17} Recent research has found that when the public see or read news reports they assume it is a fair representation of reality.¹² For example, the frequent coverage of motor-vehicle crashes influences the public's perception of the risk and prevalence of traffic injury; as a consequence they may assume that a higher number of news items indicates these incidents occur more often than is the reality.¹⁴

The news media will often sensationalise stories and are more likely to report stories that are unusual or extraordinary.^{12, 14, 18} Media articles are often written in a way to capture and retain attention, to maintain readership and increase circulation.¹⁴ The term 'newsworthiness' describes an editorial decision based on the novelty and dramatic impact of a story which may determine the amount and type of coverage a news story may receive.^{12, 14, 19} Hence, fatal drowning events that involve toddlers, young males, dramatic circumstances and powerful imagery will often be featured.^{18, 20} Consequently, the opportunity to inform readers using drowning prevention expert commentary, and influence people's behaviours to prevent drowning may be overlooked for the attention-grabbing headlines, images and accompanying narrative.^{21, 22} This is a critical and neglected opportunity to influence public perception on the importance of drowning prevention.

Accordingly, analyses of the quantity and nature of media coverage of drowning is important. This study aimed to examine coverage of fatal drowning events in WA newspapers over two summer periods (2014-2016). We analysed newspaper articles (print and/or online) for content associated with the drowning event, page placement, news angle, attribution of responsibility for the drowning event, attribution of responsibility for the delivery of drowning prevention strategies, experts cited and drowning prevention strategies to gauge current media reporting of fatal drowning events.

Methods

WA coronial data were provided to the research team by the jurisdiction's peak drowning prevention organisation. Data were extracted by date, age, gender, location and description of fatal drowning events in WA for two time periods: 1 December 2014 to 31 March 2015 (referred to as Time 1) (T1) and 1 December 2015 to 31 March 2016 (referred to as Time 2) (T2). Dates were chosen to correspond with the southern hemisphere summer as drowning deaths peak during these periods in Australia.⁶ To capture print and online news articles corresponding to the collated coronial data, we searched:

(1) Media Alert (a media monitoring analysis service provided through ISENTIA Digital which delivers emails daily) monitoring WA print and online media; (2) Google News (<http://news.google.com>) for the corresponding period and 21 days post the event utilising Google Tools and a key word search (see Table 1); and (3) Factiva (www.factiva.com) (an international news database produced by Dow Jones). All media articles were considered for inclusion and analysis if they matched any of the search terms referred to in Table 1. The Factiva search was limited to print and online newspapers. The Google News search looked for online news stories and did not include blogs.

Table 1. Media Alert, Google News and other Factiva key word combinations

Search term		Combinations
Western Australia	AND	(drowning* OR near drowning OR drowning death OR drowning fatality) AND (backyard swimming pool OR pool OR beach OR dam OR waterway OR fishing and/or boating fatality)

News articles were then screened for final inclusion by one researcher (CH) and then reviewed by two researchers (JL & LN) for suitability. Media articles that met the following criteria were included: matched a WA coronial drowning death record and/or within 21 days post-event; reported in print or online format in WA media; and included demographic information. The WA coronial drowning data and matched news articles were then summarised into the following categories: date of drowning, age, gender, location of fatal drowning event, description of incident, data source (print/online), media timing (day, date & time), section, page, and/or web-link, headline and summary of the article (water source/location, activity, demographics). Headlines of all news articles were scanned and only those articles that related to the coronial recorded drowning event were included in the final analysis. Where there were duplicates, both articles were retained due to the different nature of print and online news. Eligible news articles were downloaded.

Development of the coding framework

Using previously described methods^{13, 21, 23, 24} a content and frame analysis protocol was designed. This was pilot tested, and following revisions, was used to code each news article. The final revised protocol captured the following content: date of article published, newspaper name, medium (print/online), page placement, newspaper section, article length, focus (drowning found in the headline and/or first three paragraphs), images and photos, news angle (found in the headline and/or first few sentences), aspect of body content (details of the drowning reported in paragraphs 1-3), population group (by age and country of birth), responsibility for the drowning event (who and

what), responsibility for drowning prevention, event outcome, prevention strategy mentioned. The full data coding protocol can be found in the supplementary file.

Application of the coding framework

Coding was conducted by three researchers (JL, LN and JJ). All articles were read and coded by one researcher (JL) and inter-rater coding comparisons were made on a random sample of approximately 25% of the articles (n=12) (LN, JJ). Agreement was 100% for 21 of the 23 coding categories, with 66% agreement for the remaining two categories (*who is being identified as responsible for the drowning event* and *what is being identified as responsible for the drowning event*). Disagreement or uncertainty was resolved through discussion between researchers.

Data analysis

Statistical analysis was undertaken using SPSS Version 23 (IBM Statistics) to determine frequencies for: medium (print/online); page placement; focus; images/photos/videos; and population group. A sub-group analysis was undertaken for articles where the main focus of the news article was drowning. Analysis of responsibility for the drowning event (*who* and *what*), responsibility for drowning prevention (*who* and *the source*) and prevention strategy were generated for the sub-group. Multiple response frequencies were undertaken for these variables. A qualitative approach was taken to analyse the news angle. Within the first one to three paragraphs^{13, 25} of each article the news angle was categorised thematically. An inductive approach was used to identify the news angle allowing themes to emerge from the raw data.²⁶ The general inductive approach is a straightforward, easily used, systematic set of procedures for analysing qualitative data and provides trustworthy findings.²⁷ One researcher (JL) performed the analyses independently, and then met with the research group to discuss and confirm the news angle and the supporting headline.

This study did not involve human participants and thus was not required to seek ethical approval, however permission was granted from the custodians of the WA coronial drowning data by the jurisdictional drowning prevention organisation.

Results

The final sample of 50 news articles comprised 60.0% (n=30) print news articles and the remaining were online news articles (n=20). The articles were matched to 17 individual drowning events, in T1 (n=9) and T2 (n=8). Of the 50 articles, almost half (n=23) related to one drowning event which was a male toddler, in close proximity to the national summer-holiday season, whilst the least reported was one print news item for an older male adult (65 plus years), late in the summer season (Table 2). Of the 50 articles, the focus was the drowning event in 58.0% (n=29). Of the remaining articles the

main focus in 71.4% (n=15) were the search efforts undertaken to locate the missing person, prior to the recovery of the body.

Table 2: Quantity, date, profile, and location of drowning event reported in news media (n=50)

Quantity of coverage n (%)	Date	Profile	Location
23 (46)	09/12/2014	Toddler, male	Lake
7 (14)	26/12/2015 National holiday	Adult, female, CaLD	Beach
7 (14)	25/01/2016 National holiday	Adult, female	River
5 (10)	06/02/2015	Adult, male	Beach
5 (10)	17/01/2016	Adult, male x 2	Ocean
2 (4)	24/01/2016 National holiday eve	Adult, male	Beach
1 (2)	02/02/2015	Older adult, male	Beach

CaLD: Culturally and Linguistically Diverse

Page placement

Stories about drowning rarely appeared on page one in the print media (n=2), but were often located in the first 2-10 pages (n=20) (66.6%). The two stories that did appear on page one were: 1) in a newspaper that was distributed across the state (*The West Australian*, p1 December 11, 2014: 'Flynn Paterson pays tribute to another toddler [name] whose body was found in a lake yesterday — 24 hours after he disappeared from his Landsdale home'); and 2) a local community newspaper (*The Joondalup Times*, p1 December 11, 2014: 'Hearts broke for little [name] and his family when divers discovered the two-and-a-half year old's body in Warradale Parks Snake Swamp in Landsdale yesterday before 10am'). Both related to the drowning death of the same toddler aged 2 years. Sixteen of the news articles featured an image, of which 50% were a photograph of the deceased.

Six articles (12%) had one image, and similarly six articles (12%) had three images, one article had five images. Three videos were embedded in the online articles however at the time that the research was undertaken they had all expired and were no longer available to view. The articles ranged in length from 41 words to 1669 words.

News angle

One fifth (22%) of the articles employed a news angle relating to *community spirit* including the contribution of water police, police divers and volunteers (e.g. State Emergency Service (SES)), together with community members who supported search efforts prior to the deceased being found. *Celebration of life* was the news angle used in just over one-fifth (22%) of the articles consisting of testimonials of the personal qualities of the deceased. Drowning-related news angles such as the cause of drowning (14%), the location (16%) and the tragedy of the actual discovery of the dead body (14%) were of almost equal proportions. The full breakdown is shown in Table 3.

Table 3: News angle: What makes drowning newsworthy?

News angle	Example headline (n=50)	n (%)
Celebration of life	<i>Drowned woman hailed as 'angel'</i> <i>Dead friends loved the water</i>	11 (22)
Community spirit	<i>[Name] search: 100 SES volunteers to join hunt for missing Perth toddler</i> <i>Sleep put aside for [name]</i>	10 (20)
Known location	<i>Surfer dies at Smiths Beach</i> <i>Mandurah Drowning</i>	8 (16)
Tragedy of the event	<i>Tragic end: Police divers find missing toddler [name] body</i> <i>Search ends in tragedy</i>	7 (14)
Cause of drowning	<i>Two dead in Dampier boating tragedy</i> <i>Man dies after being pulled unconscious from Mandurah beach</i>	7 (14)
Missing person	<i>Missing toddler gone in seconds out open door</i> <i>Woman missing after kayak capsizes</i>	5 (10)
Call to action	<i>Plea for surfers to watch out for each other</i> <i>Family wants surfer son's death to prompt change</i>	2 (4)

Sub-analysis: Responsibility for the drowning event - Who and what?

There were 30 mentions of 'who was responsible for the drowning event' in those news articles focusing on drowning (n=29). The proportion of responsibility attributed to the 'Individual(s)/Deceased' (43.3%) and 'No-one' (40.0%) were similar. 'Other' (13.3%) included "tradesmen working at the house" while the 'Parent/Significant other' (3.3%) were rarely identified as responsible for the drowning event (not shown).

Table 4 presents *what* was identified as being responsible for the drowning event in the news articles focussing on drowning (n=29). The most cited factors were ‘Environmental’ (20.4%) such as a large swell or swollen river. ‘Other’ factors included a collision caused by a speeding boat (13.6%), and an unlocked door (10.3%). Of interest ‘Nothing or no responsibility’ (14.3%) was the second most cited factor. Alcohol was not mentioned in any of the articles.

Table 4: In the article (n=29) ‘what’ was identified as responsible for the drowning event

Factor ¹	n (%)
Environmental (e.g. waves, swell, rainfall)	10 (20.4)
Nothing – no responsibility identified in the article	7 (14.3)
Collision	7 (13.6)
Non patrolled beach/swimming between the flags	6 (12.2)
Unlocked door	5 (10.3)
Adverse event (e.g. medical event)	5 (10.2)
Swimming ability	4 (8.2)
Inappropriate clothing	3 (3.4)
Supervision	2 (2.0)
Lack of fencing	1 (2.0)

¹Multiple response category

Sub-analysis: Responsibility for drowning prevention - Who is identified and who said it?

There were 32 mentions of *who* was responsible for delivering drowning prevention in the 29 articles focussing on drowning. The category ‘No-one’ (59.4%) was identified most frequently, followed by the ‘Individual’ identified by one-quarter (25.0%) of articles. ‘Parents’ (3.1%), ‘Community’ (6.3%) and ‘Other’ (6.3%) which included ‘surfing buddies’ were infrequently mentioned as responsible. The sources *who said it* included: peak drowning prevention agency spokesperson (66.7%); family (11.1%); people involved in the incident (11.1%); police (2%) and health professionals (2%) (not shown).

Drowning prevention strategies

Drowning prevention strategies were mentioned in nine of the 50 articles. Six of the nine articles mentioned multiple strategies whilst the remaining three mentioned just one strategy. Swimming between the flags was the most commonly mentioned strategy (n=4) and was cited by a representative of a peak drowning prevention organisation in two of the four articles. Pool fencing, locking doors and barriers were mentioned twice, whilst a buddy system for recreational surfers and paddlers was mentioned three times. Of interest, life-jackets were mentioned as either worn or unsure if they were worn (n=2) rather than being explicitly mentioned as a prevention strategy (not

shown). There was one mention of a specific program (BeachSAFE) by a Surf Life Saving Society spokesperson who encouraged CaLD people to learn about coastal conditions through this program.

Discussion

This study examined the quantity and content of print and online news media coverage for fatal drowning events over two summer periods in WA (2014-2016). We found drowning events were generally considered newsworthy by WA print and online news outlets, however most focussed on the rescue and tragedy of the drowning event or were a tribute to the person(s) drowned. Reporting infrequently used the opportunity to discuss drowning prevention strategies or prioritise drowning prevention. The scarcity of page one stories suggests that despite being summer, seasonally the most likely time for the public to be involved in aquatic activities, drowning and drowning prevention is not a news priority. Furthermore, whilst drowning prevention experts or spokesperson were consulted or quoted as part of reporting, the brevity of the commentary represented a missed opportunity to promote messages to a large public audience regarding safety in and around the aquatic environment.

The leading news angles were the search efforts undertaken by the community, celebration of the life lost, and the tragedy of the event, exhibiting common news values such as impact of the risks, prominence, unusualness and timeliness.^{18, 21} There were more reports if the drowning coincided with a national holiday which in the literature has been suggested to be a 'silly season effect'¹² whereby there may be low-activity news day which could lead to more reports on drowning.^{12, 28} Of interest, similar fluctuations in terms of the time of the year and the month have been observed in news reporting of traffic crashes.¹²

The news media have the power to choose and frame the events that reach the public, which in turn may increase the perceived importance of certain issues^{29, 30} as well as shape public opinion by framing an event, that is, presenting it in a particular way.²⁴ For example, to attract maximum readership and circulation editors frame issues by highlighting certain aspects that exaggerate the tragic or emotional "*Heartfelt tributes after body of kayaker found*" or human element "*Love, support, key to coping with loss*" and they may sideline or omit responsibility or prevention strategies.^{12, 18, 21, 31} The human interest frame is one of the most common frames in news media which implies that the message is emotionalised or personalised.^{12, 24} Of interest events reported in the news media that result in a fatal outcome often use language that position the death as *an accident* and being unfortunate and unpreventable.¹⁹ To some extent this was replicated in the drowning articles for example "*Women missing in Bridgetown floodwaters*" and "*Two men dead after boat capsizes in WA*". News stories of death often rely on describing the person involved in the

event using familiar archetypes and characters e.g. 'victim', 'hero' or 'good mother'^{32,33} which may limit the opportunity to make the news meaningful from a public health perspective. Accordingly, those working in drowning prevention should continue to cultivate trusting, reciprocal relationships with news outlets to increase the narrative relating to drowning prevention and to better understand what is considered to be newsworthy.

News stories which attribute blame to an individual have been suggested to move the focus away from prevention;³¹ an undesirable outcome. Interestingly, in the sample of news stories which focussed on drowning, almost sixty per-cent of the articles assigned 'no-one' responsible for the drowning event. This suggests the WA news media avoid the consequences (intended and unintended) of stating '*who*' is responsible for a fatal drowning outcome. This may be due to the emotional impact of finger-pointing or blame on the family of the deceased.^{12,32} Explicitly stating the parent is responsible for a child's death in a national newspaper may impact on both the family, and any inquiry that follows the death. However, in this analysis there was one instance where an external party (tradesperson) was implicated in '*leaving a front door unlatched*' and deemed responsible for the drowning event to have occurred. Framing in this study mostly centred on the human-interest frame, for example, focusing on the deceased's personality or the family's grief,³⁴ rather than the responsibility frame (whereby the responsibility is most commonly explicitly attributed to an individual),³⁴ which is often seen in the news reporting of fatal traffic crashes. Similarly, other health issues such as obesity tend to be framed around responsibility where blame tends to be placed on the individual.^{21,31} In contrast, in this study, environmental and structural factors or the *what* such as extreme weather, heavy rainfall and swell, patrolled beaches and signage were stated explicitly in the articles where a drowning had occurred. Of interest, alcohol was not highlighted in the news coverage, despite being identified as a significant risk factor for drowning.³⁵ Death is never an easy story to report in any situation.³² The difference between *who* and *what* may arise from the ethical dilemma a journalist may face when reporting on a drowning. To avoid exacerbating family grief by victim-blaming, environmental factors such as bad weather may be highlighted as they may be much less likely to cause distress. However a failure to highlight the role of alcohol for example in news coverage may be considered a lost opportunity for prevention.

Newspapers have the power to inform and educate the public.³⁰ They provide an inexpensive means to provide health information capable of influencing the public and professionals to respond to injury prevention.³⁶ By providing information about injury risk and the benefit of taking preventative measures, newspapers could be pivotal in bringing about a shift in community attitudes towards

drowning and ultimately social change.³⁰ The lack of expert injury prevention commentary is a missed opportunity to capture a potentially large audience at a low cost. This content analysis highlighted the dearth of drowning prevention commentary in the news by those working in, and researching injury prevention. Encouragingly, we found that drowning prevention experts were cited in just over two thirds of the drowning articles which was more than non-experts. However, there was a lack of detail, and description of specific prevention strategies provided by the expert sources. This is consistent with findings which suggest that newspaper articles reporting drowning of children and adults often focus on demographics and location³⁶ and, that whilst newspapers provide a timely and graphic description of drowning events, prevention messages are limited or missing entirely.²⁸ This may in part be due to lay-out, editorial decisions and word count restrictions (articles in this study were on average only 355 words). It appears tension exists between presenting expertise, competence and objectivity with the inherent sensationalism often present in a highly tragic story, particularly where those details are more likely to sell newspapers than evidence informed water safety messages.^{18, 19, 30} For that reason, finding ways to encourage new outlets to consider the addition of a prevention message in stories that is endorsed and supported by expert commentary may support recall of the drowning prevention message in the future.^{16, 18, 19}

Seeking opportunities to work closely with journalists and editors responsible for news content including dedicated sections that feature stories on health, safety and well-being is an important strategy going forward. Working with universities who offer degrees in journalism and multi-media communication to highlight the role of the media in the development of injury prevention messages is vital.³⁰ Finally, media-based advocacy plays a significant role in public health and is recognised as fundamental to the success of public health efforts.³⁷ In this context, advocacy may be required to ensure that where practicable, an expert source is routinely included in the narrative of all news articles featuring a non-fatal and or fatal drowning outcome to increase reader recall of prevention messages.^{16, 18}

Strengths and limitations

The study was limited by the restricted timeframe of newspaper coverage over two summers. In addition it was limited to print and digital news media only. It is possible that news coverage of fatal drowning events on television, radio and social media (e.g. Facebook, Twitter and blogs) may be presented differently due to the diversity of the audience and the reach.³⁸ Notwithstanding this, research developed a coding framework specific to drowning that provided new insights into how news media in WA portrays drowning events and what is considered newsworthy.

Conclusion

The nature of the news cycle and the pervasive influence of news media suggest that it is still an important mass reach tool for the dissemination of drowning prevention messages to the public and priority populations, specifically during times of heightened risk, such as summer. The findings of this research will add to an under researched area in drowning prevention and recommends working more closely with news media outlets to increase the dissemination of drowning prevention messages and/or strategies embedded in news article that features drowning.

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