REVIEW

Content Analysis of Newspaper Reports on Alcohol-Related Deaths

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Abstract — Aim: International research indicates that the role which alcohol plays in accidents tends to be understated in media reports. Evidence suggests that public support for alcohol harm reduction policies would increase if people were better informed about the role of alcohol in serious injuries. We hypothesized that the role of alcohol in Irish accidental deaths is under-reported in the Irish print media. **Method:** We identified all traumatic and poisoning deaths (excluding suicides) in Ireland during the years 2008 and 2009 where alcohol was mentioned on the death certificate. We conducted an Internet-based search for newspaper reports of these deaths. The content of each report was examined and rated for mention of alcohol's possible role in the individual death. **Results:** This study demonstrates the under-reporting in Irish newspapers of the role of alcohol in traumatic and poisoning deaths. Where deaths were reported, the role played by alcohol was generally ignored. **Conclusion:** This represents a missed opportunity to inform the public about the role of alcohol in these deaths. More accurate information would permit the public to make more informed decisions regarding their own behaviour and regarding their support for alcohol harm-reducing strategies.

BACKGROUND AND AIMS

The World Health Organization (WHO) estimates that every year at least 2.5 million people die prematurely as a result of the consumption of alcohol. Worldwide and in Europe, this makes alcohol the third leading cause of premature death and disability (Global Health Risks WHO, 2009). At least 25% of these early deaths involving alcohol are accidental in nature. Irish research indicates that alcohol is involved in 35–60% of unintended deaths caused by drowning, fire, falls and road traffic collisions (RTCs) (Bedford *et al.*, 2006; Bellis *et al.*, 2009).

Since the 1970s, the WHO has adapted a public heath approach, based on a total alcohol consumption model, to reduce the harm caused to both the individual drinker and the wider society (Anderson and Baumberg, 2006). In Ireland, following legislation that liberalized the sale and use of alcohol (Intoxicating Liquor Act 2000), the 'National Strategic Task Force on Alcohol' was set up in 2002 'to bring forward recommendations on specific, evidence-based measures to prevent and reduce alcohol-related harm' (Department of Health and Children, 2004). This committee endorsed the WHO public health approach and made recommendations with the aim of reducing the per capita consumption of alcohol to the EU average (STFA, 2004).

However, in order to achieve these aims, legislators have to gain public acceptance and permission to curtail the use of alcohol so that the rights of all society members can be balanced with those of the individual drinker. Whilst the most effective approach to change alcohol-use behaviour at the individual and societal levels is the enactment and enforcement of alcohol-control policies (Toomey and Wagenaar, 1999), alcohol controls which impact on the availability of alcohol across the population have been shown to be unpopular (Tobin *et al.*, 2011). Influencing media coverage by public health advocates has been proposed as a way of achieving changes in public health policy (Wallack and Dorfman, 2001) and more importantly, public support for the need for legislative change pertaining to the availability and use of alcohol.

Broadly speaking, the style of media reporting about alcohol falls into two categories, 'thematic' and 'episodic'. Thematic media coverage of alcohol policy issues provides the broad statistical facts pertaining to alcohol and focuses on the societal aspects of alcohol use as well as how alcohol affects the individual. In contrast, episodic reporting focuses on the person(s) reported in the news story and perhaps also on the circumstances of the individual involved in the news story (Iyengar and Simon, 1993). In reality, media coverage of alcohol-related risk is largely episodic, consisting of actual case reports of alcohol-related incidents—these exemplars are typically more influential on a variety of risk judgements than the kind of statistical information typically reported in thematic coverage (Zillman and Brosius, 2000).

North American research indicates that episodic media reports of cases of accidental injury and death tend not to address the role of alcohol in these tragedies. For example, most news stories about injuries due to violent crime, road traffic collisions and other unintended incidents under-report the role of alcohol in these incidents (Slater *et al.*, 2006, 2012) compared with the actual proportion of injuries where alcohol was shown to be involved (Smith *et al.*, 1999; National Centre for Statistics and Analysis 2003).

Research also suggests that coverage of crime and accidents that more consistently informs the public of alcohol involvement increases public concern about risks due to alcohol misuse and strengthens public support for alcohol-control policies (Slater *et al.*, 2009). The authors suggest that journalists should be encouraged to report news stories in a way that more accurately reflects the possible causal role of alcohol in the incident. These exemplars can provide individuals with objective examples of alcohol-related deaths, creating and strengthening in the public mind an association of alcohol use with unintended injury and death so that the judgement of risks related to the use of alcohol is improved.

We hypothesized that the role of alcohol in Irish accidental deaths is also under-reported in the Irish print media.

METHOD

Subjects

The National Drug-Related Deaths Index (NDRDI) is an epidemiological database that records death due to drugs and/or

alcohol poisoning, and deaths among drug users and those who are alcohol dependent in Ireland. The NDRDI is maintained by the Health Research Board (HRB) and is jointly funded by the Department of Health and the Department of Justice and Equality. In order to have the most complete and accurate data, the NDRDI team collects data from four sources: the Coroner Service, the acute hospital sector through the Hospital In-Patient Enquiry scheme, the Central Treatment List and the General Mortality Register via the Central Statistics Office (Lyons *et al.*, 2011).

The role of the Coroner Service in Ireland is to establish, following public investigation, the cause of death (including how the person died) in cases of sudden or unexpected death. The cause of death as determined by the coroner is recorded in the NDRDI.

A list of all alcohol-related deaths, as indicated by the death certificate, which occurred in 2008 and 2009, was extracted from the NDRDI. These were deaths due to alcohol poisoning but also included were deaths due to trauma (choking, drowning, fall, fire, RTC or other causes) where alcohol was also mentioned on the death certificate. We excluded deaths due to suicide and chronic alcohol-related medical conditions. The data were kept on a secure encrypted laptop and only two researchers had access to the named data.

Search method

An Internet search of the identified deaths was done, using Google as a search engine. The aim was to locate Irish local and national newspaper articles relating to these deaths that were published in the immediate period after the death. Newspaper articles reporting on the coroner's inquest into the cause of death were not included. The search method was to enter 'case-name' + 'died' + 'year', using each name on the NDRDI list. All newspaper articles identified by this method were obtained and included in the content analysis.

Coding of newspaper article content

A hierarchal coding system from 0 to 3 was used and for each article located, the role of alcohol was examined and rated. Where there was no direct or indirect reference to alcohol use by the decedent, the article received a code of '0'. Where articles indicated that the decedent had been attending a social occasion (such as a baptism or wedding) or stated simply that he/she had been on 'a night out with friends' or 'socializing', without locating the person specifically in a bar or nightclub, this was coded as '1'. Where the decedent was reported to have been drinking or was identified as having frequented a venue where alcohol was sold, e.g. a bar or nightclub, we considered this a stronger reference to alcohol use and such articles received a code of '2'. Finally, where the decedent was reported as intoxicated or to have frequented a number of bars/nightclubs and/or house-parties over a period of time, such articles were considered the strongest statement referencing alcohol use and the article was coded as a '3'.

In order to examine the willingness of journalists to speculate on factors contributing to deaths, we also coded this item. When no causal or potentially contributory factor was posited, the article was coded as '0'; Weather-related factors, such as rain causing a surface to be slippery, were coded as '1'. Non-weather environmental factors such as bald tires, poor road design or lack of a retaining wall around rivers received a

code of '2'. Personal factors such as tiredness or a medical condition were sometimes mentioned and such articles received a code of '3'.

Dichotomous variables were used to record whether or not the article provided information about (a) the decedents family, (b) their status/character in their community (e.g. 'was respected' or 'well liked'), (c) their role or participation in the community (e.g. member of the local football club), (d) the exact date of death and (e) a method of death was reported.

Two authors rated each newspaper article and inter-rater coefficients were calculated between the 2 sets of ratings. Where there were differences, a consensus rating was arrived at for the final analysis.

In addition, articles were categorized as 'death notice' style or 'obituary' style. They were viewed as death notice style if they provided information about the fact of the death, but gave no information on the person's character or role in the community. Articles that gave information on the person's character or role in the community were viewed as obituary style reports, whether or not they also contained information on the circumstances of the death.

Statistical analysis

To assess the level of agreement between ratings on the alcohol coding, we conducted the kappa test. To explore relationship between categorical variables, we utilized the chi square test or Fishers Exact test, opting to use the latter where an expected cell count was <5. When comparing differences in mean age between categories of people, we utilized the Student's *t*-test. For all statistical tests, we set 0.05 as the level of statistical significance.

RESULTS

There were 388 deaths recorded in the NDRDI linked to alcohol use which met the inclusion criteria over the 2-year period. The characteristics of those who died are provided in Table 1. The mean age of the decedents was 46 years. Poisoning by alcohol (alone or with other drugs) was the most common cause of death.

We identified newspaper articles pertaining to 43 (11%) individuals recorded on the NDRDI. Of the 345 people on whom we could not locate articles in any newspaper reports, we did identify an online funeral notice in 153 (44%) cases.

There were 100 newspaper articles located in total reporting on these 43 deaths; fifty-one articles were in local newspapers and 49 were in national newspapers. There were 81 articles pertaining to 37 individual deaths, where the person died alone. There were a further 19 articles which related to the deaths of more than one person.

The deaths of people who died by poisoning were less likely to be reported than deaths from RTCs, fires or drownings (see Table 1). While choking was the second most common cause of alcohol-related deaths in the study, we did not locate newspaper reports about any of these 31 deaths. The deaths of those who were under the age of 30 years were more likely to be reported than those of people over the age of 40 years. We identified newspaper reports on a significantly greater proportion of deaths of persons from the more rural Southern, Western and Northern provinces of Ireland, relative

Table 1. Characteristics of 388 traumatic and poisoning deaths, and print media reports of same

	Total group		Death reported			
	n	%	n	%	Odds ratio (95% CI)	P-value
Total	388		43	11	NA	
Gender						
Male	279	72	35	13		
Female	109	28	8	7	0.6 (0.2–1.2)	0.14
Age						
Under 30 years	47	12	11	23	1.0	
30–39 years	82	21	11	13	0.5 (0.2–1.4)	0.15
40–49 years	99	26	6	6	0.2 (0.1–0.7)	0.002
50–59 years	101	26	10	10	0.4 (0.1–1.0)	0.03
60 years and over	59	15	5	8	0.3 (0.1–1.0)	0.03
Home address						
Dublin	116	30	5	4	1.0	
Rest of Leinster	86	22	7	8	2.0 (0.5–7.4)	0.25
Munster	115	30	14	12	3.1 (1.0–10.2)	0.03
Connaught	42	11	9	21	6.0 (1.7–22.6)	0.002
Ulster	23	6	7	30	9.7 (2.4–41)	<0.001
Other	6	2	1	17	NA	
Year of death						
2008	191	49	14	7	1.0	
2009	197	51	29	15	2.2 (1.1–4.3)	0.02
Method of death						
Poisoning	267	69	13	5	1.0	
Choke	31	8	0	0	NA	0.20
Fall	31	8	3	10	2.1 (0.4–8.5)	0.26
Drown	23	6	8	35	10 (3.3–32)	<0.001
Fire	13	3	8	62	31 (7.8–130)	<0.001
RTC	13	3	9	69	44 (10–200)	<0.001
Other*	10	3	2	20	4.9 (0.6–29)	0.09

*Miscellaneous group of difficult to classify deaths involving alcohol.

to those from Dublin. We identified a significantly greater proportion of the deaths which occurred in 2009.

Table 2 provides an overview of the content of the 100 newspaper reports. The median word count of the articles was 218 words (IQR 91–348). A majority of articles reported the date of death, a method of death and some information regarding the family of the deceased. In terms of article style, we categorized 57 (57%) as death notice style reports and 43 (43%) as obituary style reports.

On the initial coding of reporting on alcohol by raters, the initial rating by the two raters was highly correlated ($\kappa = 0.86$). Consensus was then reached on all discrepant ratings. No article reported that a person was intoxicated or drunk. Only two articles, which were about the same individual, stated clearly that the decedent had been drinking for a prolonged period of time. Sixty-seven per cent of articles failed to provide any information to indicate the possibility of alcohol consumption prior to death. Where alcohol consumption was hinted at, it was simply to indicate that the person had been out socializing in 70% of cases, with no mention of alcohol, intoxication or a licensed venue in these instances. There was no difference between local newspaper reports and national newspaper reports regarding provision of information on alcohol consumption.

Sixteen (16%) reports indicated some other, non-alcohol related, factors believed to have contributed to the fatality, such as environmental or structural issues (problems with roads for example).

In Table 3, we have collated the information provided in all the identified articles for each of the 43 decedents. The median number of reports per person was two (inter-quartile

Table 2. Content of 100 print media reports relating to traumatic and poisoning deaths

	n	%
Date of death given	83	83
A method of death reported	67	67
Information given about family	70	70
Comment on person's character	36	36
Information given relating to role in the community	23	23
Style of newspaper report[a]		
Death notice	57	57
Obituary	43	43
Information given on possible alcohol use		
None	67	67
Social event/occasion mentioned	23	23
Identified as having been in a venue where alcohol is typically sold, or having been drinking	8	8
Identified as having been drinking over a prolonged period	2	2
Speculation regarding non-alcohol factors contributing to death		
No speculation	84	84
Weather related	1	1
Other environmental, non-weather-related factors	12	12
Personal non-alcohol factors	4	4

[a]Viewed as death notice style if report provided information about the facts of the death, but gave no information on the person's character or role in the community.

range 1–4). In 28 (65%) of deaths there was at least one report which provided information regarding the decedent's positive personality characteristics. In 29 cases there was at least one

Table 3. Content of collective print media reports relating to 43 individual traumatic and poisoning deaths

	n	%
Number of reports per individual death		
1 report	19	44
2–3 reports	10	23
4 or more reports	14	33
Source of print media reports		
Local newspaper only	19	44
National newspaper only	7	16
Death reported in both local and national newspapers	17	40
Date of death given[a]	36	84
A method of death reported[a]	27	63
Information given about family[a]	36	84
Comment on person's character[a]	28	65
Information given relating to role in the community[a]	15	35
Style of newspaper report[b]		
Death notice	14	33
Obituary	29	67
Information given on possible alcohol use[a]		
None	27	63
Social event/occasion mentioned	8	19
Identified as having been in a venue where alcohol is typically sold, or having been drinking	7	16
Identified as having been drinking over a prolonged period	1	2
Speculation regarding non-alcohol factors contributing to death[a]		
No Speculation	31	72
Weather related	2	5
Other environmental, non-weather-related factors	8	19
Personal non-alcohol factors	3	7

[a]Where more than one newspaper report was obtained, we indicate whether any reported the content items of interest.
[b]Viewed as death notice style if report provided information about the facts of the death, but gave no information on the person's character or role in the community.

report which was categorized as an obituary style report. In eight cases, there was at least one report indicating that the decedent had been drinking or had been in a licensed premise prior to their death. There was some speculation regarding non-alcohol-related factors which may have contributed to the death in 13 (28% of cases).

In a *post hoc* analysis, we looked specifically at media reports of poisoning deaths. While none of the newspaper reported a method of death for poisoning deaths, a method was reported in 27 (96%) of the 28 deaths linked to falls, fires, RTCs and drownings (Fisher's exact test, $P < 0.001$). Reports were less likely to include any suggestion of alcohol use in the deaths linked to alcohol poisoning compared with the deaths linked to falls, fires, RTCs and drownings (15 vs. 50%, $P = 0.03$). There was no significant difference in mean age of those who died by poisonings compared with those who died in falls, fires, RTCs and drownings.

DISCUSSION

In keeping with international research and as hypothesized, the role played by alcohol in these confirmed alcohol-related deaths was under-reported in the Irish media between 2008 and 2009. The main evidence-based measures to address alcohol-related harm include increased alcohol taxation and reduced availability of alcohol (Anderson and Baumberg, 2006). Such measures inconvenience all drinkers. The absence of information on the role of alcohol in deaths in the Irish print media is likely to contribute to lower levels of public support for these strategies (Slater *et al.*, 2009).

The reporting of deaths due to alcohol poisoning, the largest category of deaths, was particularly scant. These deaths were much less likely to be reported upon than deaths due to trauma. Where such deaths were reported, the method of death was never stated. This may be explained by the need for a post mortem in such cases. The quantity of alcohol consumed in alcohol-related poisonings is substantial. In a recent Irish study, the mean blood alcohol concentration in cases of fatal alcohol poisoning was 400 mg% (Bellis *et al.*, 2009). In light of this, it is particularly surprising to find that media reports on deaths due to alcohol poisoning in this study were less likely to make any, even tangential, reference to alcohol consumption prior to death compared with deaths due to falls, fires, RTCs and drownings.

Where newspaper reports on these deaths did occur, we found that they were often quite lengthy, with 25% being over 350 words in length. In general, the report content focused on the facts of the death and typically provided information about the decedent's family and good character. While being unwilling to speculate on any possible role played by alcohol in these deaths, we did find that journalists did demonstrate a willingness to speculate on other factors, which were perhaps considered less controversial, which may have contributed to the death in a significant minority of reports.

Possible reasons to explain this reluctance by newspapers to consider alcohol as a possible contributory factor could include the newspaper's editorial policy, and/or the ethos of an individual journalist, to protect the reputation of the decedent and their family. While it may be the case that the dead cannot be libelled, culturally in Ireland there is probably a reluctance to speak ill of the dead, or to suggest that they may have in any way contributed to their own death. The role of the Gardai (the Irish police force) in underreporting the role of alcohol in these deaths may also be an issue. In the first instance it is the Gardai who investigate deaths, especially deaths linked to trauma. If the Gardai omit to report that the person who died was drinking, journalists may understandably be unable to report these facts.

The study has some limitations. It was an Internet-based retrospective search and no paper copies of the newspapers were searched for those articles which may not have been put up on line. Therefore it is likely that newspaper articles were missed in an unknown number of cases. The search method identified a significantly larger proportion of reports on deaths in 2009 compared with 2008. This raises the possibility that there was a change in the way newspaper articles were published on the Internet between these years. Therefore, our findings cannot be considered a reliable estimate of the proportion of deaths reported. However, the main aim of this study was to describe the content of reports of alcohol-related deaths and the large number of located reports permitted the completion of this task.

This study demonstrates the under-reporting in Irish newspapers of the role of alcohol in traumatic, and especially in alcohol-related poisoning deaths. Where these deaths were reported, readers of these newspaper articles usually had

absolutely no indication that alcohol could have played any role in the death.

This represents a missed opportunity to inform the public about the role of alcohol in deaths in Ireland. Consequently, it probably contributes to the limited support among the general public for the evidence-based population health approaches which have been recommended to address alcohol-related harm in Ireland. We suggest that journalists should seek and report information on alcohol consumption by people prior to deaths which are known to be frequently alcohol-related, such as deaths in RTCs, drownings and falls. This would permit the public to make more informed decisions regarding their own drinking behaviour and regarding their support for alcohol harm-reducing strategies.

Conflict of interest statement.   None declared.

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