

Australian news media reporting of methamphetamine: an analysis of print media 2014–2016

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Media organisations have a long-standing history of unbalanced and inaccurate reporting on illicit drug issues.^{1–4} In particular, the use of language such as 'epidemic' and 'crisis' when reporting drug issues has become commonplace and found to generate community perceptions of drugs as a threat to society, contributing to an inflated level of alarm that is not always commensurate with the scale of the problem.^{5,6} This type of language, when attached to particular groups, can also contribute to a public perception of a threatening 'other',⁷ increase stigma,^{8,9} impact access to treatment, and promote policy options that are reactive to public opinion and media coverage, such as 'war on drugs' interventions, rather than being informed by public health research, service provider experiences and those who use drugs.^{9–11}

Methamphetamine was first highlighted in the Australian media when routinely collected population surveys in the late 1990s and early 2000s revealed higher potency forms of the drug in use, mostly among people who injected drugs and gay men.^{12–14} While the predominant type of methamphetamine available and used in the 1990s had been amphetamine-based pills and amphetamine powder, from 2010 there was a shift towards greater use of a more potent and purer crystalline methamphetamine. This has since been associated with greater harms in Australia, as evidenced by increases in methamphetamine-related treatment, hospital admissions and arrests.¹⁵ Crystal

Abstract

Objectives: To examine the representation and framing in Australian print media of methamphetamine and methamphetamine users from 2014 to 2016 when media attention was heightened around the National Ice Taskforce, including the implications of the coverage and framing in limiting public health responses to the problem.

Methods: A quantitative media content analysis examined media portrayals of methamphetamine, including crystalline methamphetamine (also referred to by other names including 'crystal' or 'ice'), in 1,364 Australian print media articles published 2014–2016.

Results: The largest number of articles about methamphetamine were published in 2015 with a higher proportion of these articles framed as a crisis than in other years. A crisis framing predominated media reporting across all years, with crime and legal consequences a key focus. Users were positioned predominantly as criminals, deviants or addicts.

Conclusions: The coverage of methamphetamine in the Australian print media mostly serves to construct methamphetamine use as an urgent social problem, often framed from a legal perspective and associated with violent, dangerous, deviant and aggressive users.

Implications for public health: Such reporting and stigmatisation of methamphetamine use can undermine public health policy responses and strategies, including early intervention and treatment and focused efforts directed at those most at risk of harm.

Key words: methamphetamine, media reporting, drug policy, drug use framing, Australia

methamphetamine is commonly referred to as 'ice', 'crystal' or 'crystal meth', and these terms have been used interchangeably with methamphetamine in the media and the broader community. In this paper, we use the term methamphetamine to be inclusive of all types of powder and crystal forms of methamphetamine, while acknowledging that media and public attention appears to be focused mostly on crystal methamphetamine and its greater harms.

Media coverage in the early 2000s suggested Australia was facing a wide-reaching 'ice epidemic', despite data showing that only

some sub-groups of the population were using the drug.⁹ Analysis of media coverage on reported methamphetamine use at this time references the drug being referred to as Australia's 'greatest scourge'.⁹ Public concern about methamphetamine was also growing, as evidenced in the significantly increased proportion of respondents in the National Drug Strategy Household Survey who indicated methamphetamine was the drug they thought to be most associated with a drug 'problem', which rose from 5.5% in 2004 to 16.4% in 2007,¹⁶ and more recently has seen a further increase to 40% in the 2016 survey.²²

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The Australian Government responded to the apparent threat of an 'ice epidemic' by convening a National Leadership Forum on Ice in 2006 and releasing a National Amphetamine-Type Stimulant (ATS) Strategy in 2008.^{9,18} That strategy showed an absence of research evidence about the causal relationship between crystal methamphetamine and associated harms, as articulated by Fraser and Moore in 2011.¹⁹ Media interest in methamphetamine rose again in 2014, around the time the Australian Crime Commission stated that methamphetamine posed "the highest risk to the Australian community" of all illicit drugs.²⁰ Following this assessment, as well as media coverage of the issue and a peak in community concern, a National Ice Taskforce was established in April 2015 by the Office of Prime Minister and Cabinet to drive the development of a renewed National Ice Action Strategy.²¹

As occurred during the earlier peak in community, media and government interest in the early to mid-2000s, national statistics on drug use in Australia appeared at odds with media reporting.⁶ Although Australia has a high reported use of methamphetamine in comparison with other countries,²² population-level data published in 2016 showed 1.4% of the population aged 14 years or older indicated using methamphetamine in the previous year, which was a decline from 2.1% in 2013,²³ even though some groups may use at higher levels.²⁴ The proportion using crystal forms of the drug remained relatively stable at 1% and 0.8%, respectively.²³ Importantly, however, between 2010 and 2016 it was found that daily and weekly use of methamphetamine among people who used the drug more than doubled, increasing from 9.3% to 20%,²³ showing that harms were likely to be concentrated in existing user groups. There was also the possibility that methamphetamine use had been under-reported in nationwide surveys due to negative media attention creating stigma.⁶

Regardless of uncertainty about the actual prevalence of use, media focus on methamphetamine has contributed to public and political concern and debate.⁷ As such, systematically examining media coverage of methamphetamine use and better understanding how methamphetamine use is represented and framed is an important focus for research, because it allows for a clearer critique of the alignment between

available evidence and any media hype or alarm portrayed in media representations of drug use. Such critique also allows for better governance of methamphetamine use driven by policy that is informed more by evidence than by overstated problems.

Previous analysis of print media coverage of illicit drugs in Australia from 2003 to 2008 found dominant media portrayals were primarily law-enforcement and criminal-justice focused and that 'ice' use was increasingly portrayed as unacceptable compared with other drugs.^{6,18} However, there has been no detailed and systematic analysis of methamphetamine coverage specifically, or analysis of how users of the drug are positioned. User positioning is particularly important as stigmatisation in the media can impact access to treatment and health services; users opt to avoid situations where they perceive or have experienced negative judgements from health care workers based on their drug use.^{6,25}

The current study examines the representation and framing in Australian print media of methamphetamine and methamphetamine users from 2014 to 2016 when media attention was heightened around the National Ice Taskforce, including the implications of the coverage and framing for public health responses to the problem.

Methods

This study was a quantitative media content analysis of methamphetamine-related print media articles published 2014–2016 to assess the nature of the print media's portrayal of methamphetamine use and those who use methamphetamine in Australia. We adapted the methods of Hughes et al.¹⁸ who identified an exhaustive list of text elements, or what we refer to as dimensions, and used the five most relevant to their analysis of print media reporting of illicit drugs (*crisis; topic; consequences of drugs/use; overall tone; moral evaluation of drugs*).

To address the study aims in the current paper, we adopted four of the five coding elements from Hughes et al.¹⁸ omitting 'overall tone', because it focused on whether an article appeared to be a good news or bad news story, which was not relevant to our research aim and analyses. We instead developed a new dimension with eight categories focused on the '*positioning of people who use methamphetamine*'. This new dimension was included to assess how

media framing may demonise or pathologise methamphetamine users or portray them as having deliberate intent or a lack of agency.

Each dimension contained several coding categories except for the *framed as a crisis or epidemic* dimension, which was a dichotomous 'no/yes' (see Supplementary File). In the current study, within each dimension for each media article, there were three coders who were permitted to choose only the one most prominent coding category within each of the five dimensions, based on a detailed set of descriptors accompanying the coding schedule. For example, in the dimension developed in our study, *positioning of people who use methamphetamine*, coders could choose only one of the eight coding categories in each paper (addict; having agency; criminal/deviant; disadvantaged; traumatised; dangerous or out of control; victim; not positioned). Analyses in the current paper were consistent with Hughes et al.¹⁸ by reporting frequencies (percentages) of the coding categories across the sample of print media articles.

Since most newspapers in Australia are owned by either News Limited or Nine Entertainment Co. (formerly Fairfax Media), it was considered important to choose newspapers from both media organisations, which is what occurred in the study. To ensure a broad cross-section of newspapers and readership in the study, the media sampling frame comprised 16 newspapers including one national newspaper, several major metropolitan newspapers and two regional newspapers in the most populous state, New South Wales (Table 1). The sample included at least one high circulation publication in each state and territory, according to market research company Roy Morgan.²⁶ Two weekly newspaper publications with a weekend sister publication, including *The Sydney Morning Herald* and the *Sun Herald*, as well as *The Age* and the *Sunday Age*, were not considered to be the same newspaper publication couched under a different name. According to Roy Morgan,²⁶ the weekly publication in both cases included different content areas and a different readership than the weekend sister publication.

Media articles were obtained using a Factiva online database search, with all articles that contained at least one mention of the drug methamphetamine or its derivatives (ice, meth, crystal) being identified with keywords: methamphetamine* or amphetamine* or

meth or methamphetamine* or drug* and ice and use. In total, 3,124 articles were identified over the three-year period. The project team consisted of academic research staff and three postgraduate public health students (coders). Articles were initially screened independently by two members of the team and only included in further analysis if methamphetamine or its derivatives was the focus of the article. Following the method adopted by Hughes et al.,¹⁸ articles were excluded if the focus was something other than drug use/supply or where the focus was another illicit drug. Articles were also excluded if methamphetamine or its use was mentioned only incidentally to the main story, which was about something other than methamphetamine use. Also excluded were articles about prescription amphetamines used in Attention Deficit Hyperactivity Disorder treatment, articles with a focus outside of Australia, and historical pieces or articles that were not news stories.

On completion of screening, 1,364 articles met the inclusion criteria. Initially, the three coders began by coding a sample of 45 articles to test understanding and application of the coding categories and then met to discuss any differences with the broader research team. Following this process, the coders again coded the sample of 45 articles to enable inter-rater reliability Kappa coefficients to be calculated with scores for each dimension between each coder (i.e. coder A vs B; A vs C; B vs C); Kappa coefficients of 0.6 and above indicating substantial agreement between the coders for all categories. Calculation of intra-rater reliability Kappa coefficients was based on each coder blindly re-coding five articles on each dimension one month after their original coding. Coefficients ranged from 0.55 through to 1 with most being 1. The average Kappa coefficient was 0.92, indicating a high level of intra-rater reliability. Coders then commenced application of the coding framework with each working with an allocated sample from the 1,364 articles.

Data analysis plan

Articles were sorted by year (2014, 2015, 2016) and analysed using chi-square tests to examine whether the characterisation of methamphetamine as a crisis or epidemic was greater in 2015 when the Ice Taskforce was active. Descriptive analyses were used to report on topic focus, positioning of people who use methamphetamine, consequences

Table 1: Newspapers in sample (N=16).

Level (number)	Name of newspaper (location, if applicable)
National (n=1)	The Australian
Metropolitan (n=13) (alphabetically by state/territory)	Canberra Times (Canberra, ACT)
	The Sydney Morning Herald (Sydney, NSW)
	Sun Herald (Sydney, NSW)
	Daily Telegraph (Sydney, NSW)
	Northern Territorian/Northern Territory News (NT)
	Sunday Territorian (NT)
	Courier Mail (Brisbane, QLD)
	The Advertiser (Adelaide, SA)
	Hobart Mercury/The Mercury (Hobart, TAS)
	The Age (Melbourne, VIC)
Sunday Age (Melbourne, VIC)	
The West Australian (Perth, WA)	
The Sunday Times (Perth, WA)	
Regional (n=2)	The Newcastle Herald (Newcastle, NSW, Australia)
	Illawarra Mercury (Wollongong, NSW, Australia)

of methamphetamine use, and moral evaluations; there were no differences by year and data were therefore aggregated for the three years. In addition to quantitative analysis, article headlines were reviewed by the team with illustrative examples of article headlines included for the positioning, consequence and moral evaluation in the results section alongside the quantitative data.²⁷

Results

Of the 1,364 articles that met the inclusion criteria, nearly half (n=635; 46.6%) were published in 2015, followed by 31.5% (n=430) in 2016 and 21.9% in 2014 (n=299), see Figure 1A. There was a strong statistically significant difference in the proportion of articles across the three-year period, $\chi^2(2)=126.16, p<0.0001$.

Type of framing

Figure 1B displays the proportion of articles within each year that portrayed methamphetamine use as a crisis (or epidemic) issue, where there was a sense of urgency due to severity of consequences that required immediate government attention – refer to Supplementary File for coding categories. Examples of crisis-related headlines included: “Killer ice now at ‘pandemic’ level in Australia”²⁸ and “The ice explosion gripping our streets”²⁹ In 2014, 37.8% of the articles were framed as a crisis, 55.4% in 2015, and 33% in 2016. These proportions were significantly different, with 2015 showing a higher proportion of articles being framed as a

crisis than expected, $\chi^2(2)=57.99, p<0.0001$. Of the total 1,364 articles, 44.5% framed current methamphetamine use as a crisis or epidemic.

Topic type

The topic of focus was established for each article by considering the primary reason for the question: ‘What makes this news today?’ Only one topic of focus was coded for each article – refer to Supplementary File for coding categories. The category ‘criminal justice’ accounted for the largest proportion of media articles (24%), followed by ‘policy commentary’ (20.7%) and ‘trends and research’, which accounted for 19.4% (see Figure 2). Several other categories, including ‘drug-related crime’ (14.1%) and ‘harms’ (8.1%), accounted for the remaining 36%.

Articles covering ‘drug-related crime’ were mainly about law enforcement, while articles about criminal justice focused on proceedings against a person using or dealing methamphetamine, methamphetamine-related violence, trafficking or organised crime. These articles included headlines such as: “Drug ice blamed for country crime crisis”³⁰ and “Half of Sydney crims on meth”³¹

Positioning of those who used methamphetamine

Articles were assessed on how methamphetamine users were positioned, with only one code chosen per article – refer to Supplementary File for coding categories. While 19.4% of the articles did not position the person/s using methamphetamine in any specific way, most articles (80.6%) did

Figure 1: Number and percentage of methamphetamine-related news articles in 2014–2016 (A) and percentage of these articles in each year framing the issue as a crisis (B) (N=1,364).

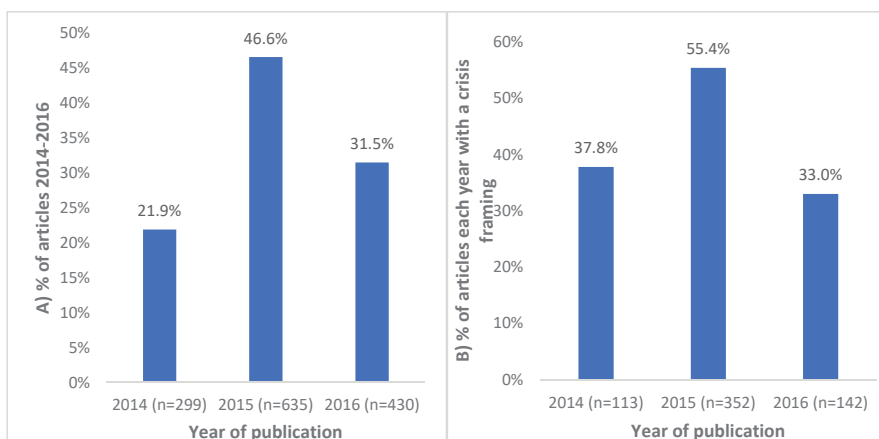


Figure 2: Topic types in methamphetamine-related news articles, 2014–2016 (N=1,364).

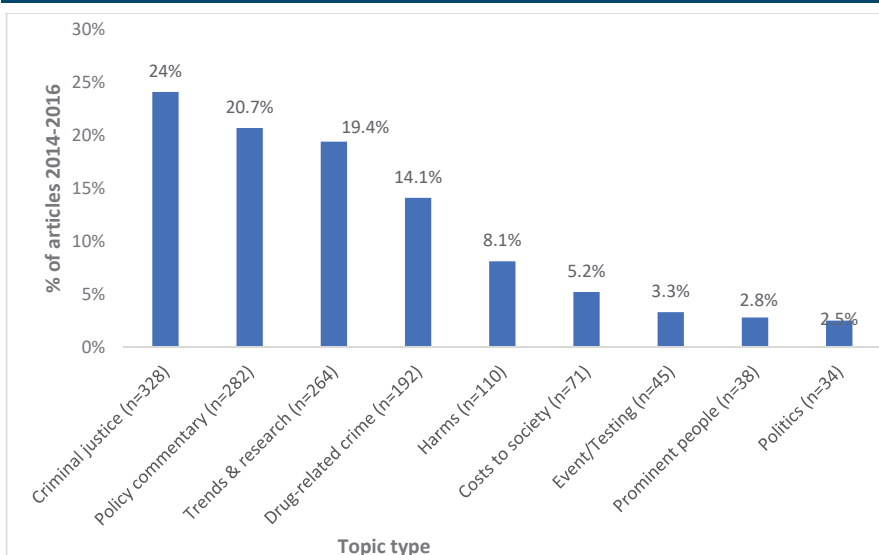
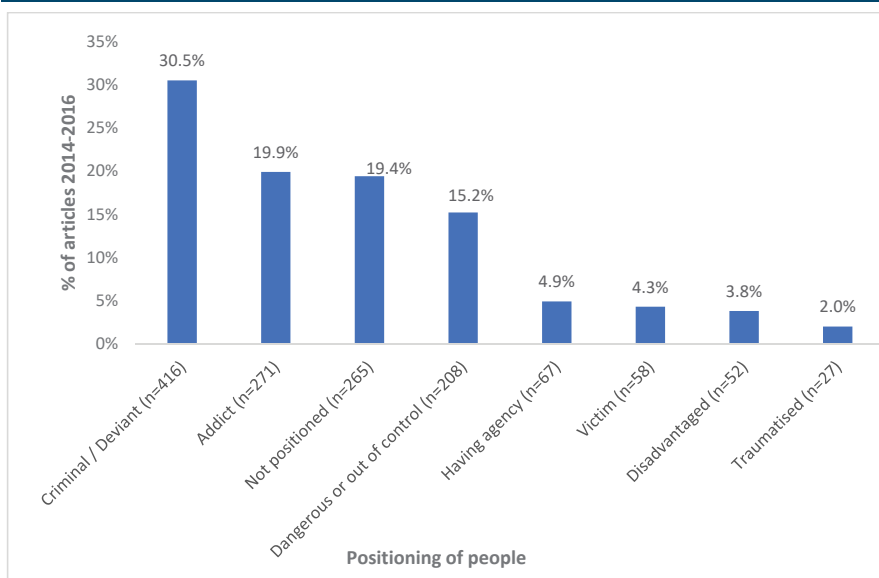


Figure 3: Positioning of people in methamphetamine-related news articles, 2014–2016 (N=1,364).



(Figure 3). Across all of the articles, individuals who used methamphetamine were most frequently (30.5%) positioned as engaging in criminal or deviant behaviour, for example, “Tide of ice evil linked to killings”³² In 19.9% of articles, users were positioned as addicts, with ice use portrayed as interfering with everyday activities, health and relationships. In 15.2% of the articles, methamphetamine users were positioned as being ‘dangerous or out of control’. This code was used when the individual was depicted as being aggressive or violent and potentially posed a threat to other individuals. Such headlines included: “Doctors want protection from ice rage”³³ and “Erratic, brutal and cruel: Ice blamed for home attacks on the elderly”³⁴

Consequences of use

Each article was assessed for the main implied consequence of methamphetamine use – refer to Supplementary File for coding categories. The most frequently denoted consequence of use was ‘cost to society’ (28.2%), followed by ‘legal problems’ (26.7%) and ‘health problems’ (20.4%). Collectively, these three consequences accounted for about three-quarters of the articles (Figure 4). ‘Loss of control’ and ‘social problems’ were the main consequences of use implied in 9.3% and 7.4% of articles, respectively. Individual ‘loss of control’ as a consequence of methamphetamine use included articles with headlines such as, “Crazy ice addicts: more force to subdue”³⁵ ‘Social problems’ included consequences such as damage to reputation and tragedy and/or family breakdown, marginalisation and reduced employment or education prospects. In 7.2% of the articles, no consequence of methamphetamine use was implied; these were assessed as ‘neutral’.

Moral evaluation

Coders considered the specific attitudes and moral tone depicted in each article – refer to Supplementary File for coding categories. More than half (58.5%) the articles expressed a type of explicit moral evaluation, with 41.5% coded as ‘neutral’. As seen in Figure 5, almost half (45.3%) of the articles framed methamphetamine use as ‘bad’ and deemed its use unacceptable in all circumstances. For example, one article ran with the headline “Time for action on ice menace”³⁶ Another 10.8% of articles depicted methamphetamine use as risky behaviour and argued that individuals should be informed of the risks. Other articles coded as ‘risky behaviour’

demonstrated a harm reduction philosophy: not demonising drug use but focusing on limiting harm. A small proportion of articles (2.1%) were coded as giving a 'mixed' evaluation. Only 0.1% (n=1) of articles gave a moral evaluation of the user as 'good', that is, drug use (and involvement in the drugs market) was considered good and/or beneficial for certain people, or that drug use is fun and pleasant.

Discussion and implications for public health

This study examined Australian print media reporting of methamphetamine from 2014 to 2016, specifically in relation to how methamphetamine use was framed, the ways that people who use methamphetamine were positioned, purported consequences of methamphetamine use, as well as types of moral evaluation made about the use of the drug. Identifying the ways methamphetamine was framed in the media was considered important as media reporting has been demonstrated to affect community attitudes^{5,37} and political decisions³⁸ and to potentially stigmatise people who use drugs.^{6,8}

Our analysis showed that 44.5% of media articles over the three-year period framed methamphetamine use as a crisis or emergency in the Australian community. Similarly, a previous content analysis by Hughes et al. found that media framing differed depending on the type of illicit drug, with amphetamine-related articles more than twice as likely to depict the issue as a crisis compared with articles about other drugs.¹⁸

In the current study, we were also interested in whether media framing of methamphetamine as a crisis fluctuated, and whether such fluctuation aligned with political actions taking place in Australia. Our results showed that a higher number and proportion of articles framed methamphetamine as a crisis in 2015 compared with 2014 and 2016. During 2015, when the Ice Taskforce was established and reported its findings,²¹ 56.2% of the news articles portrayed the issue as a crisis – the highest percentage in any year. While it may be expected that government activities will contribute to increased media interest, are there reasons to assume that such interest would frame methamphetamine as a crisis issue?

In addition to crisis framing, the use of language such as 'epidemic' can generate

Figure 4: Portrayed consequences of use in methamphetamine-related news articles, 2014–2016 (N=1,364).

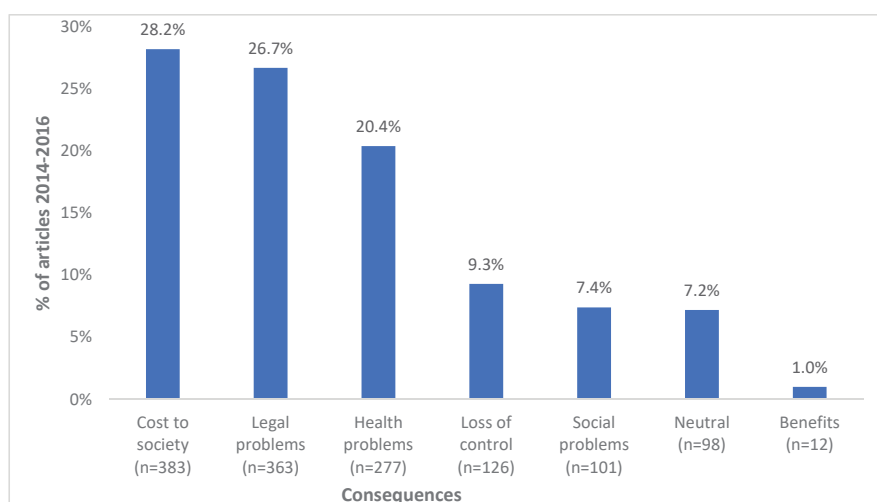
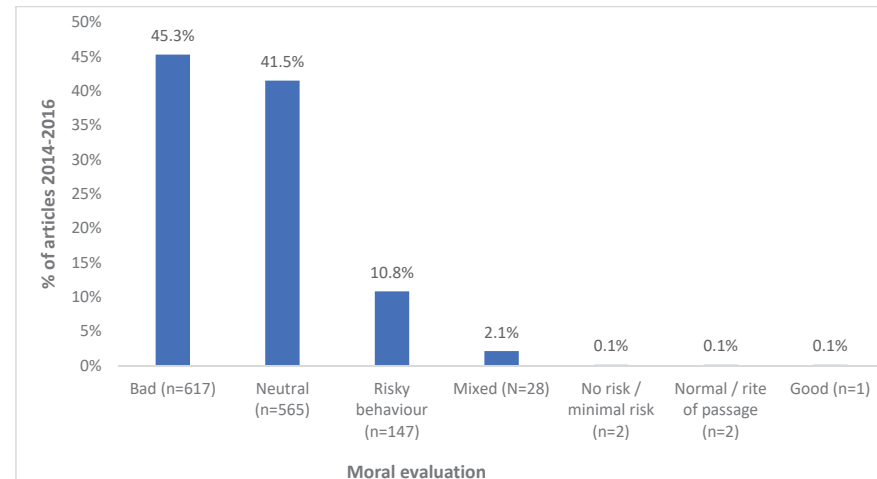


Figure 5: Moral evaluation in methamphetamine-related news articles, 2014–2016 (N=1,364).



fear and panic and may construct certain drugs and the people who use them as threats to the community.⁸ This construction may bolster government action to address the issue as a matter of priority. However, the focus of government action may be poorly directed if it is reactive to biased media reporting and public reaction.¹⁷ While the causal direction of influence between the media and political responses cannot be determined in a cross-sectional analysis, it is likely the influence is in part bidirectional, with both media and political responses being partly shaped, informed, and influenced by each other. A concurrent analysis of political discussion over the same time period of the current study would further inform the likely direction and levels of influence.

While evidence of the direction, strength and nature of the relationship between

media reporting and political responses is still accumulating,³⁹ the relationship between media reporting and community perceptions of illicit drug use is reasonably well established.⁴⁰ An example of the likely influence of media reporting on public perceptions can be inferred from concerns by the Australian community about methamphetamine. Following increased media attention about methamphetamine in 2014 and 2015,^{15,17} the 2016 National Drug Strategy Household Survey⁴¹ showed the drug reported to be of most concern' to the Australian community was methamphetamine, with respondents selecting that drug increasing from 16% in 2013 to 40% in 2016.²³ Additionally, for the first time in 2016, methamphetamine became the drug most likely to be nominated as a 'drug problem' with respondents indicating it was of greater concern than

alcohol.²³ Public concern about the harms of methamphetamine use also increased during this period, with the proportion nominating it as the illicit drug they thought to cause the most deaths doubling from 2013 (8.7%) to 2016 (19.2%).²³ Across all drugs (illicit and non-illicit), methamphetamine ranked second behind alcohol as the drug that the public perceived to be the cause of most deaths. Factors that led to the dramatic increase in the reported public concern about methamphetamine cannot be definitively answered in the current study. However, it is likely that by framing methamphetamine use as a crisis, media coverage during that period was contributing to changing public sentiment as noted generally by Ayres and Jewkes,⁴¹ Hughes et al.¹⁸ and Chalmers et al.,⁶ who concluded that stigmatising media attention on methamphetamine use contributes to rising public concern.

Another aim of the current study was to examine the most common topics discussed in the studied articles to assess the level of balance in reporting of methamphetamine. Methamphetamine-related crime featured prominently as a focus in the articles. In almost 40% of the articles, the topic of focus was criminal justice or drug-related crime, followed by policy commentary (20.7%) and trends and research (19.4%). Even among the policy commentary articles, almost three-quarters focused on law enforcement and treatment, compared with less than one-quarter that focused on harm reduction and prevention. This focus on crime also featured commensurately in the consequences of methamphetamine use depicted in the articles.

Our results have shown that significant media attention was given to the legal consequences of methamphetamine use and the cost to society of methamphetamine-related crime. Drug issues presented in the media in relation to crime, deviance and retribution is not a new phenomenon. Hughes et al.¹⁸ confirmed the dominance of criminal justice topics in media reporting of drug issues in Australia. Other studies about media framings have shown that illicit drug use is typically framed as a problem of 'crime and deviance', with the person using the drugs being portrayed as rebellious and deserving punishment, as opposed to deserving help.^{42,43} The common framings of methamphetamine in the current study can influence community perceptions of the problem and the political and policy

response, and our analysis adds further support to this claim.

Another important aim was to examine the way the media portrays people who use methamphetamine – a novel code introduced into the current study. In the vast majority of articles, people were positioned as criminals, deviants, addicts, or as being dangerous and out of control. How accurate is this positioning? People who use methamphetamine are not a homogenous group and the research literature affirms that some people manage their use in different (and even functional) ways.^{44,45} However, these other kinds of methamphetamine use and experiences were largely ignored in media coverage. Additionally, in 15.2% of articles, people using methamphetamine were positioned as being dangerous or out of control and potentially posing a threat to others, such as health professionals. This negative framing can play a role in stoking fears and amplifying dangers in the community, which can result in stigma and discrimination and can impact access to health services.⁶ In the UK, Ayres and Jewkes investigated how the media specifically represented crystal methamphetamine use and similarly found that media portrayals of people using crystal methamphetamine contributed to distorted and stereotypical preconceptions by presenting the most extreme cases.⁴⁰

Media positioning of people who use drugs plays a crucial role in shaping policy decisions in Australia.^{19,46} Ayres and Jewkes (2012) suggested that the media constructs people who use crystal methamphetamine "as the enemy within, a parasite who threatens to infect the masses."^{40(p327)} This type of media portrayal can contribute to restricting alternative dialogue and narrative, impeding evidence-based policymaking while legitimising authoritarian and disciplinary intervention.⁴⁰ To this end, the National Ice Taskforce Final Report encompassed many recommendations towards strengthening law enforcement strategies, such as disrupting ice supply through seizures and arresting prominent players involved in trafficking networks.⁴⁷ However, other strategies were also recommended by the National Ice Taskforce, including: support for families, frontline health workers and communities to respond to people affected by methamphetamine; efforts to reduce demand; tailoring health services, treatment and support centres to the needs of people;

and targeting prevention and funding research to provide better evidence in this field.⁴⁷ An analysis of the recommendations from the National Taskforce Final Report that have been taken up – and how they have been implemented – will be important in future research.

In our study, there was a paucity of articles that explicitly positioned people using methamphetamine as having agency or that took into consideration any background circumstances that may have helped explain their methamphetamine use. Recent Australian research suggests trauma is strongly associated with methamphetamine use among adolescent females presenting for treatment,⁴⁸ yet these types of positionings were mostly absent in media portrayals of people who use methamphetamine. In many of the analysed articles, there was inferred agency on the methamphetamine user, as media coverage depicted individuals as being primarily responsible for their methamphetamine use and any harms consequent to such use. There is an interesting and arguably illogical juxtaposition apparent in positioning methamphetamine users with strong agency, while also inferring power to the drug in the way it was framed as damaging people's lives and diminishing their rational judgement.

Consistent with the results discussed above, the print media generally presented a negative moral evaluation of methamphetamine use, with almost half the articles portraying methamphetamine use as 'bad'. While we did not compare media portrayals of other drugs with those of methamphetamine in the current study, our findings are consistent with those of Hughes et al., which found that print media articles related to methamphetamine, when compared with other illicit drugs, had the most "explicit and pejorative value dimensions."¹⁸ The current study shows that media portrayals of methamphetamine contain strong moral judgements that are likely to contribute to the construction of methamphetamine use as a priority community issue involving random violence, danger and irrational behaviour.⁶ Resulting stigmatisation has been shown to be a barrier to participation in prevention and treatment options and can have lasting psychological and physiological health impacts.²⁵

One of the limitations of the current study occurred in restricting coders to choosing only one coding category within each

dimension for each article. An example of how this restriction at times limited the analysis can be shown in the dimension based on the positioning of people who used methamphetamine. If coders believed that the most prominent positioning of people in a given article was as criminals or deviants, then this ruled out any other categories when the people may have been positioned in multiple ways, for example as having agency or even as victims themselves. While the current study highlighted the most prominent features of the analysed articles, some richness of information was lost by focusing on prominence. To overcome this limitation, which would entail a different set of research questions, further analyses could explore the range of richness in media articles by not restricting coding in each dimension to one category only. Another limitation of the current study, which is common to this field of research, was the cross-sectional design that did not allow for causal influences to be anything other than inferred.

Conclusion

This analysis has illustrated how reporting on methamphetamine use in Australian print media between 2014 and 2016 commonly depicted methamphetamine use at 'crisis' or 'epidemic' levels, which has the potential to undermine accurate reporting of use from population and related studies and supports more reactive government policy⁵⁶ to address inflated community concern and media hysteria.⁵⁷ While previous studies have noted levels of bias in media reporting about illicit drugs and drug use, the unique contributions of this paper included providing an updated account of media reporting in the context of methamphetamine in Australia, as well as linking fluctuations in the quantity and type of media framings with the establishment of the National Ice Taskforce in early 2015. Analysing media framings through an additional dimension developed in this study to assess how people who used methamphetamine were positioned by the media was a novel approach that provided important data about how the media positions people who use methamphetamine. These positionings could be taken up in the broader community and by policymakers. The impact of such positioning by the media on how those who use the drug are positioned in broader society requires further investigation.

Our analyses also showed that media reporting largely focused on drug-related crime and the legal consequences for people who use methamphetamine, who were positioned predominantly as criminals, deviants or addicts. Narrow framings of methamphetamine use, which exclude disadvantage and trauma^{24,48} and ignore harm reduction and prevention approaches, represent missed opportunities to provide the public with a more detailed and nuanced understanding of the issues and circumstances of people who use methamphetamine. The omission of possible contextual and social factors may limit the possible approaches considered for intervention and may contribute to governments adopting more punitive measures than harm minimisation approaches. Interventions to address methamphetamine use should ideally be guided by the epidemiological and socially contextualised data on use and harms among different groups in society.

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References

- Denham BE. Folk Devils, News icons, and the construction of moral panics. *Journal Stud.* 2008;9(6):945-61.
- McGinty EE, Kennedy-Hendricks A, Baller J, Niederdeppe J, Gollust S, Barry CL. Criminal activity or treatable health condition? News media framing of opioid analgesic abuse in the United States, 1998-2012. *Psychiatr Serv.* 2016;67(4):405-11.
- Törrönen J. Finnish newspapers' positions on drug policy between 1993 and 2000. *Contemp Drug Probl.* 2004;31:59-88.
- Weidner RR. Methamphetamine in three small midwestern cities: Evidence of a moral panic. *J Psychedelic Drugs.* 2009;41(3):227-39.
- Blood RW, Williams J, McCallum K. Representations of public risk: Illegal drugs in the Australian press. *Media Int Aust.* 2003;108(1):82-100.
- Chalmers J, Lancaster K, Hughes C. The stigmatisation of 'ice' and under-reporting of meth/amphetamine use in general population surveys: A case study from Australia. *Int J Drug Policy.* 2016;36(1):15-24.
- Fredrickson A, Gibson AF, Lancaster K, Nathan S. "Devil's lure took all I had": Moral panic and the discursive construction of crystal methamphetamine in Australian news media. *Contemp Drug Probl.* 2019;46(1):105-21.
- Lloyd C. The stigmatization of problem drug users: A narrative literature review. *Drugs (Abingdon Engl).* 2013;20(2):85-95.

- Lancaster K, Ritter A, Colebatch H. Problems, policy and politics: Making sense of Australia's 'ice epidemic'. *Policy Stud.* 2014;35(2):147-71.
- Hill M, Hupe P. *Implementing Public Policy: Governance in Theory and in Practice.* London (UK): SAGE Publications; 2002.
- Bright SJ, Bishop B, Kane R, Marsh A, Barratt MJ. Kronic hysteria: Exploring the intersection between Australian synthetic cannabis legislation, the media, and drug-related harm. *Int J Drug Policy.* 2013;24(3):231.
- McKetin R, McLaren J. *The Methamphetamine Situation in Australia: A Review of Routine Data Sources* [Internet]. Sydney (AUST): National Drug and Alcohol Research Centre; 2004 [cited 2018 Nov 23]. Available from: <https://ndarc.med.unsw.edu.au/sites/default/files/ndarc/resources/TR.172.pdf>
- Topp L, Degenhardt L, Kaye S, Darke S. The emergence of potent forms of methamphetamine in Sydney, Australia: A case study of the IDRS as a strategic early warning system. *Drug Alcohol Rev.* 2002;21(4):341-8.
- Worth H, Rawstone P. Crystallizing the HIV epidemic: Methamphetamine, unsafe sex, and gay diseases of the will. *Arch Sex Behav.* 2005;34(5):483.
- Degenhardt L, Sara G, McKetin R, Roxburgh A, Dobbins T, Farrell M, et al. Crystalline methamphetamine use and methamphetamine-related harms in Australia. *Drug Alcohol Rev.* 2017;36(2):160-70.
- Australian Institute of Health and Welfare. *2007 National Drug Strategy Household Survey: Detailed Findings* [Internet]. Canberra (AUST): AIHW; 2008 [cited 2018 Nov 23]. Available from: <http://www.aihw.gov.au/WorkArea/DownloadAsset.aspx?id=6442459906>
- Lancaster K, Ritter A, Colebatch H. Problems, policy and politics: Making sense of Australia's 'ice epidemic'. *Policy Stud.* 2014;35(2):147-71.
- Hughes C, Lancaster K, Spicer B. How do Australian news media depict illicit drug issues? An analysis of print media reporting across and between illicit drugs, 2003-2008. *Int J Drug Policy.* 2011(22):285-91.
- Fraser S, Moore D. Governing through problems: The formulation of policy on amphetamine-type stimulants (ATS) in Australia. *Int J Drug Policy.* 2011;22(6):498-506.
- Australian Crime Commission. *The Australian Methylamphetamine Market: The National Picture* [Internet]. Canberra (AUST): Government of Australia; 2015 [cited 2018 Nov 23]. Available from: https://www.acic.gov.au/sites/g/files/net1491/f/2016/06/the_austrian_methylamphetamine_market_-_the_national_picture.pdf?v=1467242675
- Department of the Prime Minister and Cabinet. *The National Ice Taskforce* [Internet]. Canberra (AUST): Government of Australia; 2015 [cited 2018 Nov 23]. Available from: <https://www.pmc.gov.au/domestic-policy/taskforces-past-domestic-policy-initiatives/national-ice-taskforce>
- United Nations Office on Drugs and Crime. *Recent Statistics and Trend Analysis of Illicit Drug Markets.* Chapter 1. In: *World Drug Report* [Internet]. Vienna (AUT): UNODC; 2012 [cited 2018 Nov 23]. Available from: https://www.unodc.org/documents/data-and-analysis/WDR2012/WDR_2012_Chapter1.pdf
- Australian Institute of Health and Welfare. *2016 National Drug Strategy Household Survey Key Findings: Illicit Use of Drugs.* Canberra (AUST): AIHW; 2017.
- Nathan S, Bethmont A, Rawstone P, Ferry M, Hayen A. Trends in drug use among adolescents admitted to residential treatment in Australia. *Med J Aust.* 2016;204(4):149-50.
- Pascoe EA, Richman LS. Perceived discrimination and health: A meta-analytic review. *Psychol Bull.* 2009;135(4):531-54.
- Roy Morgan. *Australian Newspaper Readership Australia.* Melbourne (AUST): Roy Morgan; 2018.
- Bazeley P, Kemp L. Mosaics, triangles, and DNA: metaphors for integrated analysis in mixed methods research. *J Mix Methods Res.* 2012;6(1):55-72.
- White N. Killer ice now at 'pandemic' level in Australia. *The Daily Telegraph.* 2014;August 15:4:33pm.
- Nottle B. The ice explosion gripping our streets. *Herald Sun.* 2016;February 2.
- Kaila J. Drug ice blamed for country crime crisis. *Herald Sun.* 2014;August 21.

31. Maiden S. Half of Sydney crims on methamphetamine. *The Daily Telegraph*. 2015;August 23.
32. Buttler M. Tide of ice evil linked to killings. *Herald Sun*. 2014;March 28.
33. Belot H. Doctors want protection from ice rage. *Canberra Times*. 2015;September 4.
34. Duff E. Erratic, brutal and cruel: Ice blamed for home attacks on the elderly. *Sun Herald*. 2015;November 1.
35. Knowles G, Wynne G. Crazy ice addicts: More force to subdue. *The West Australian*. 2016;November 14.
36. Rapanaro M. Time for action on ice menace. *The Sunday Times*. 2016;January 3.
37. Gelders D, Patesson R, Vandoninck S, Steinberg P, Van Malderen S, Nicaise P, et al. The influence of warning messages on the public's perception of substance use: A theoretical framework. *Gov Inf Q*. 2009;26(2):349-57.
38. Beckett K. Setting the public agenda: 'Street crime' and drug use in American politics. *Soc Probl*. 1994;41(3):425-47.
39. Cohn A, O'Connor R, Lancaster K, Rawstorne P, Nathan S. Media and political framing of crystal methamphetamine use in Australia. *Drugs (Abingdon Engl)*. 2020;27(4):261-70
40. Ayres TC, Jewkes Y. The haunting spectacle of crystal meth: A media-created mythology? *Crime Media Cult*. 2012;8(3):315-32.
41. Australian Department of Health and Ageing. *National Amphetamine-Type Stimulant Strategy 2008-2011*. Canberra (AUST): Government of Australia; 2008.
42. Bell P. Drugs and the media. *Aust Alcohol Drug Rev*. 1985;4(2):235-42.
43. Blood RW, McCallum K. *Key Principles for the Reporting of Drug Issues*. Canberra (AUST): Australian National Council on Drugs; 2005.
44. Dwyer R, Moore D. Enacting multiple methamphetamines: The ontological politics of public discourse and consumer accounts of a drug and its effects. *Int J Drug Policy*. 2013;24(3):203-11.
45. Lende DH, Leonard T, Sterk CE, Elifson K. Functional methamphetamine use: The insider's perspective. *Addict Res Theory*. 2007;15(5):465-77.
46. Elliott A, Chapman S. 'Heroin hell their own making': Construction of heroin users in the Australian press 1992-97. *Drug Alcohol Rev*. 2000;19(2):191.
47. Department of the Prime Minister and Cabinet. *Final Report of the National Ice Taskforce*. Canberra (AUST): Government of Australia; 2015.
48. Dixon G, Woolfenden S, Jayasinha R, Rawstorne P, Palmer K, Nathan S. Characteristics of Australian adolescent females in residential treatment who report using methamphetamines. *Drug Alcohol Rev*. 2018;37(5):384-93.

Supporting Information

Additional supporting information may be found in the online version of this article:

Supplementary File 1: Abridged coding schedule.