

Curiosity Killed the M-Cat: an Examination of Illicit Drugs and Media

Kari Lancaster, Caitlin Hughes, Bridget Spicer and Francis Matthew-Simmons¹, and Paul Dillon²

Abstract

Using mainstream media communication theories, this article outlines different mechanisms by which media can impact on public perceptions of drugs and crime. The media can set the agenda and define public interest; frame issues through selection and salience; indirectly shape individual and community attitudes towards risk and norms; and feed into political debate and decision making. We demonstrate how the media can fulfill each of these roles by examining the so-called Miaow Miaow (Mephedrone) legal high 'epidemic', as reported in the United Kingdom news media from 2009-2010. In doing so we illustrate that by contributing to hysteria, exerting pressure for policy change and increasing curiosity in drug use, the media can have a potentially powerful impact on demand for drugs and public perceptions of illicit drugs and drugs policy.

Introduction

On the eve of the 2010 UK general election, a purportedly innocuous drug called mephedrone captured the attention of politicians, the public and drug users alike as the UK news media feverishly demanded an immediate ban on the new 'legal high'. Due largely to the influence of the UK press, mephedrone was hastily classified as a Class B drug within just six months of hitting the public agenda. As reported in the aftermath by *The Guardian*, '[a] substance few had heard of six months ago is now known by the vast majority of the population. The best viral marketing campaigns could not have achieved this level of brand awareness' (Doward 2010).

This policy change was not without controversy, with several members of the Advisory Council on the Misuse of Drugs resigning within a short period, leaving the government's drug policy 'in tatters' (*The Independent* 2010). The role of the media was brought into question when the seventh member to resign, Eric Carlin, used his resignation letter to argue that the mephedrone decision had been 'unduly based on media and political pressure' (Carlin 2010; Doward 2010). Carlin (2010) claimed that the Home Secretary's press announcement that mephedrone would be banned was made when the Council's advisory report was still a draft, while *The Guardian* scathingly suggested that headlines were 'the only stimulus to action known to the Home Office' (Jenkins 2010). The problematic influence of the tabloid media was summarised by David Nutt (2010b), former Chairman of the UK's Advisory Council on the Misuse of Drugs, who stated that the knee-jerk policy change highlighted the ongoing tension between 'the cause of evidence based policymaking and the imperatives of headline driven politics'. The issue for those interested in evidence-informed policy is *how* the media were able to exert such influence.

¹ Drug Policy Modelling Program, National Drug and Alcohol Research Centre, University of New South Wales, Sydney, Australia. Correspondence: NDARC, University of NSW, Sydney NSW 2052; k.lancaster@unsw.edu.au.

² Drug and Alcohol Research and Training Australia, Sydney, New South Wales, Australia.

This work has arisen out of a project examining youth responses to illicit drugs in the media, funded by the Commonwealth Department of Health and Ageing, under the National Psychostimulant Initiative. The Drug Policy Modelling Program is funded by the Colonial Foundation Trust.

ANZCCC: The Australian and New Zealand Critical Criminology Conference 2010

(c) 2011 Institute of Criminology, Sydney Law School, The University of Sydney

<http://sydney.edu.au/law/criminology>

The Institute of Criminology would like to thank the University of Western Sydney as co-sponsors of the ANZCCC.

Drawing on mainstream media communication theories this article outlines different mechanisms by which media can impact on the public's perception of drugs and crime. Research regarding violence, sexual behaviour, body image and smoking has shown that the media can produce multifarious effects on audiences (e.g. Brown 1996; Huston et al 1998; Posavac et al 1998; Brown et al 2002; Mills et al 2002; Anderson et al 2003; Clegg Smith et al 2008; Davis et al 2008). There has been comparatively little attention paid to the impact of mainstream media on public perception of illicit drugs, despite being identified as 'a new battleground' (Proctor et al 2001) for the alcohol and other drug (AOD) field almost a decade ago (for further discussion see Lancaster et al 2010). The question remains: how can the media influence public perception and affect illicit drugs policy debate?

In this article we suggest that the media can set the agenda and define public interest; frame issues through selection and salience; indirectly shape individual and community attitudes towards risk; and feed into political debate and decision making. To demonstrate how the media can fulfil each of these roles, we examine coverage of mephedrone in the UK print media from November 2009 to May 2010. In doing so we illustrate the potential implications for understanding the role of news media and how it can influence public opinion and contribute to law and order debates. This example also provides one of the clearest links between news media coverage and coinciding policy change regarding the drug's legal status.

What is Mephedrone?

Mephedrone (2-methylamino-1-p-tolylpropane-1-one), also known as 4-methylmethcathinone (4-MMC) or 4-methylephedrone, is a synthetic stimulant chemically similar to amphetamine and cathinone chemical classes (Scott et al 2010; *The Lancet* 2010). It is also known as 'miaow miaow', 'm-cat', 'drone', 'meph', 'plant food', 'bubbles' and, simply, 'legal high'. It was termed 'legal high' as until recently it was legal to buy and sell mephedrone in the UK, and in many other countries its status as an illicit drug was unclear.

There are four main reasons for the popularity of 'legal high' drugs such as mephedrone including: changes in the availability of other drugs; the relatively low price for more reliable purity (as compared to cocaine, ecstasy and amphetamine); ease of purchase as it can be bought on the internet with a credit card and delivered to the user's door (Power 2010); and the purported effects including a sense of euphoria and well-being, along with not being regarded as a dangerous drug to most users.

There is some evidence from the 2009 Ecstasy and related Drugs Reporting System (EDRS) that mephedrone is present in the Australian drug market. Disappointment with the quality of other drugs and the desire to experiment with something 'new' were reported as contributing factors (Scott et al 2010). More significantly, in the UK there has been a rapid rise in the use of mephedrone since the end of 2007. An online survey conducted by British clubbing magazine *MixMag* (published January 2010) found that mephedrone was the fourth-most popular drug amongst its survey participants with 41.7 per cent of participants reporting having tried mephedrone and 33.6 per cent having used it in the last month (Dick et al 2010). There is still, however, very little research about the harms associated with its use and much of the available information about the drug has been published online through user forums, through the media and via word of mouth.

Using the example of mephedrone in the UK print media, in the following sections we demonstrate a number of ways the media can have an effect upon public perceptions and policy. It must be noted that these mechanisms often work synergistically and may have multifarious effects but for the purposes of this analysis we shall examine each discretely.

Agenda Setting

The nature of media production means that a limited number of issues can remain newsworthy at a particular time, and the choice of what is included (or excluded) sets the agenda and defines public interest. The agenda setting process builds consensus about what issues are the most important within the community (McCombs et al 1972; McCombs 1997) by defining salient issues, capturing the attention of the public and shaping public opinion. For example, research in the United States has shown that, through agenda setting, the media can more greatly influence public concern about social control issues such as crime and drug use than changes in the actual statistical incidence or severity of the problem (Beckett 1994). This indicates that the agenda setting effect is proportional to the amount of emphasis placed on the issue and not the magnitude of the issue itself (Beckett 1994).

Mephedrone provides another such example. Mephedrone shot to the top of the UK public agenda on 26 November 2009 after tabloid newspaper *The Sun* published a sensationalist report under the incendiary headline 'Legal drug teen ripped his scrotum off' (Soodin 2009). The story was a fake. It had been published on an internet forum as a joke and had later been quoted in an internal police report with qualifiers that *The Sun* failed to include (Fleming 2010). This didn't stop the unfounded, fear-mongering and sensationalist story becoming worldwide news—even appearing in the Australian press (e.g. *The Courier Mail* 2009) sparking widespread fears about a dangerous new drug. Despite being revealed as a fake, the scrotum story has continued to be published in association with mephedrone and its related harms, including recently in the *Herald Sun* in Victoria (Salemme 2010).

In the context of this media generated panic, *The Sun* newspaper in London launched an open campaign to have the drug banned in the UK. On March 10, *The Sun* demanded action from the government, dismissing statements that the government was waiting on advice from the Advisory Council on the Misuse of Drugs, instigating weeks of media debate regarding mephedrone. In some cases, media agenda-setting is simply an unintentional by-product of the limitations of news production. Other times, the agenda setting process can be strategic— as was *The Sun's* campaign against mephedrone. In less than six months, mephedrone had shot to prominence in the UK through an active tabloid media campaign with disregard for the difference between fact and fiction.

Framing

Framing focuses on the way the media deal with issues in different ways meaning that issues are reported to the public from different perspectives (Kohring et al 2002). Entman's definition (1993:52) has remained central to subsequent research in the field:

To frame is to select some aspects of a perceived reality and make them more salient in a communicating text, in such a way as to promote a particular problem definition, causal interpretation, moral evaluation, and/or treatment recommendation for the item described.

In a policy context, framing affects what is said about issues, by whom and the definition of optimum solutions. Framing influences the *type* of public debate that can occur through the way a problem is defined. The use of a 'drug war' metaphor provides one such example. It suggests strong intervention of a military or law enforcement nature as the logical solution to a war-like problem, which stigmatises drug users as an 'enemy', narrows the frame of public debate and limits discussion of health or economic interventions as possible policy solutions (McLeod et al 1991; Australian Injecting and Illicit Drug User's League 2010).

The scope of possible public debate regarding policy options was significantly and irretrievably narrowed through the framing of tabloid media coverage of mephedrone in the UK. On March 17, just a week after *The Sun* had launched its campaign to have mephedrone banned, they reported that an 18-year-old and a 19-year-old had died after using mephedrone (Taylor 2010). The story was emotively framed in the context of a grieving father. At the time of reporting there was only speculation that the boys' deaths were linked to mephedrone and toxicology reports later found that

ANZCCC: The Australian and New Zealand Critical Criminology Conference 2010

(c) 2011 Institute of Criminology, Sydney Law School, The University of Sydney

<http://sydney.edu.au/law/criminology>

The Institute of Criminology would like to thank the University of Western Sydney as co-sponsors of the ANZCCC.

mephedrone was not at all present (Lewis 2010). The drug had already been framed by the media as dangerous and, in that context, the emotively reported deaths of these boys narrowed the possibility for open, honest and frank discussion about the actual harms of the drug and the best policy options. Indeed David Nutt (2010a) stated that when he was called and asked for comment on the deaths of the boys he realised that 'all sense had left the ongoing debate on the question of the harms and control of this drug'. This example demonstrates that it is the strategic ideological framing of not only the facts of the story but of the actors, leaders, affected communities, relevant arguments and proposed solutions (Pan et al 2001) that has an effect on public perception and policy debate.

Influencing Perception of Risk and Norms

Unlike experts, who have the skills to analyse the potentiality of a particular risk, the general public must build their understanding and perception of risk through cultural practices, and the media play a significant role in this process (Blood et al 2003). The media also impact on public behaviour more broadly as media messages enter community discourse and build support for policies (Gelders et al 2009). For example, those who have little contact with illicit drugs and illicit drug users tend to shape their perception of risk and their behaviour around prominent portrayals in the media (Gelders et al 2009).

With a lack of clinical and pharmacological research available about mephedrone, the public, drug users and authorities alike have been reliant on anecdotal reports from users (*The Lancet* 2010). It is perhaps unsurprising that if information is scarce then people will rely on the media as a source of information, and anecdotes are given credence. In this atmosphere, mephedrone received a large amount of media attention, being linked to 27 deaths in the UK in a 12-month period, all with similarly scant information about the proof of causality at the time of reporting on each of these deaths.

We suggest there are two significant effects when risks associated with drugs are reported incorrectly—elevated perception of harms, and increased curiosity in the drug (i.e. perception of acceptability). Of the 27 deaths reportedly linked to mephedrone in the UK, the drug was only found to be present in the toxicology of three of those people, and only contributory in one death (Fleming 2010; Lewis 2010). As reported by *The Independent* in a highly critical opinion piece after the ban, this makes mephedrone 'somewhat less dangerous than peanuts, which kill 10 people a year by causing an allergic reaction' (Hari 2010). It was argued that disproportionate reporting exaggerating the risk and harms of mephedrone, both to users and broader society, caused knee-jerk political responses and fear in the community (Greenslade 2010).

Media portrayals denoting the risks associated with 'new drugs' may have the opposite effect on some audiences, however. For example, an experimental study in the US using the model of product curiosity found that news media coverage of a new illicit drug heightened interest and curiosity about the drug among those already predisposed to try drugs, demonstrating that news media messages may have an effect on actual drug use (Lancaster 2004). Another American study indicated that 28 per cent of college students who said they had tried ecstasy and 31 per cent who said they had tried GHB indicated that they did so because the media had increased their curiosity about the drug (Gotthoffer 1998). The same has been said of mephedrone in the UK. As reported in *The Lancet* (2010), the UK's Advisory Council on the Misuse of Drugs suggested 'that media coverage has increased the use of the drug' indicating that the media not only affected perceptions of risk regarding mephedrone, but may indeed have had a normative effect.

Influencing Political Debate and Policy

The integral role of the media in shaping policy making is assumed, although it rarely works in an orderly or linear way (Shaw et al 1989). It is nonetheless considered significant and influences 'not only the public profile of problems but also the political response to them' (McArthur 1999). It is suggested

that the more strongly the media push an issue the more likely it is that politicians and policy makers will take notice and that media coverage will influence policy decisions (Christie 1998).

The change in legal status of mephedrone in the UK provides one of the few clear examples in illicit drug policy where the media played a key role in precipitating policy change. It has been said that 'rarely can there have been a more dramatic example of the media portraying a complex health issue in black-and-white terms and demanding action accordingly' (Dixon 2010). On April 16, *The Sun* claimed a major victory, triumphantly claiming to have successfully spearheaded the campaign to have the 'killer' and 'deadly powder' known as mephedrone banned (Wilson 2010). That mephedrone went from being a relatively unknown 'legal high' in the UK to being banned by legislation as a Class B drug within less than six months highlights the power of the media's effect in this particular policy debate.

So, Given the Damage Drugs Do, What's the Harm in a Little Media Hysteria?

It is widely assumed that the media play a role in shaping public perceptions about drugs and crime. The question above is not new, it was asked in the 1980s in relation to the role of the media in the construction of the so-called 'crack epidemic' (Reinarman et al 1989:567; Brownstein 1991). At that time, and now, the answers remain the same. The harm is considered two-fold. Media hysteria firstly diverts attention and resources from larger problems surrounding drug use in society, and secondly, such media coverage often doesn't serve to reduce drug problems but may promote rather than prevent the behaviour (Reinarman et al 1989). As demonstrated using these models of media effects, the same can be said for the case of media coverage of mephedrone in the UK. Policy decisions ignoring broader implications were made hastily based on media generated panic, and curiosity in and use of mephedrone was increased through what was essentially a very successful viral marketing campaign. It has been further suggested that the speedy change in the legal status of mephedrone left licit and illicit drug dealers as the 'early winners' (Townsend 2010). This was on account of two factors. First, the removal of legal supplies of mephedrone encouraged interest in other new, untested substances that took mephedrone's place in the 'legal high' market. Second, and more problematically, the banning of mephedrone has been argued to have drawn people into the illicit drug market and encouraged substitution of other illicit stimulants such as cocaine and ecstasy (both Class A drugs) (Townsend 2010).

This example demonstrates the broad implications of media effects for complex policy problems such as drugs and crime. Research already tells us that the media can increase curiosity in a new drug (Gotthoffer 1998; Lancaster 2004) and can stigmatise drug users (Australian Injecting and Illicit Drug User's League 2010). The media can increase perceptions of risk and generate fear in the general public (Fan 1996; Blood et al 2003). It can also influence policy makers, which can lead to resources being put in the wrong places and limit the possibility for evidence-informed policy solutions to be explored (Reinarman et al 1989; Brownstein 1991).

It is important to note that the media won't always have such an obvious and powerful effect, especially on policy making. Despite the fact that they stick in our minds, sensationalised framing of drug scares such as this are the exception and not the norm. Although this is an atypical case, there have been cases like it in the Australian print media, for example *The Courier Mail's* 'Drug Scourge' campaign, the *Herald Sun's* 'Heroin Toll' or *The Daily Telegraph's* coverage of the proposed Australian Capital Territory heroin trial (see for examples Lawrence et al 2000; Hughes 2010; Lancaster et al 2010). Moreover, given the multiple factors that affect policy, drug use and community perceptions, the effect of media is not always so obvious.

While the effects of everyday, normative media coverage are likely to differ somewhat, this article contends that it is equally important to understand the subtle effects of how the media shape views of problems and solutions, and risks and norms: the way media influence our views of what

types of policy responses are desirable for drug use; our views on who drug offenders are; and how deserving they are of our assistance.

The media is only one influence among many in our society. But in a world with a 24-hour news cycle it is essential for researchers and those with an interest in evidence informed policy effectively to engage with the media with a view to producing more informed media debate, and possibly play an advocacy role in reframing the debate. The mephedrone example has demonstrated why it is important to understand the media's role in setting the agenda, framing the issues, affecting perceptions of risk and norms and influencing policy. Even though media effects often work synergistically, by showing each approach discretely and using the issue of media coverage of mephedrone in the UK, we can see how by contributing to hysteria, exerting pressure for policy change and increasing curiosity in drug use, the media can have a potentially powerful impact on demand for drugs and public perception of illicit drugs and drugs policy.

References

- Anderson C, Berkowitz L, Donnerstein E, Rowell Huesmann L, Johnson J, Linz D, Malamuth N and Wartella E (2003) 'The Influence of Media Violence on Youth', *Psychological Science in the Public Interest*, vol 4 no 3, 81-110
- Australian Injecting and Illicit Drug User's League (2010) *Summary Report, Findings and Future Actions from AIVL's Anti-discrimination Market Research*, Australian Injecting and Illicit Drug User's League, Canberra
- Beckett K (1994) 'Setting the Public Agenda: "Street Crime" and Drug use in American Politics', *Social Problems*, vol 41 no 3, 425-47
- Blood R W, Williams J and McCallum K (2003) 'Representations of Public Risk: Illegal Drugs in the Australian Press', *Media International Australia Incorporating Culture and Policy*, vol 108, 82-100
- Brown J and Witherspoon E (2002) 'The Mass Media and American Adolescents' Health', *Journal of Adolescent Health*, vol 31 no 6, 153-70
- Brown M (1996) *The Portrayal of Violence in the Media: Impacts and Implications for Policy*, Australian Institute of Criminology, Canberra
- Brownstein H (1991) 'The Media and the Construction of Random Drug Violence', *Social Justice*, vol 18 no 4, 85-103
- Carlin E (2010) 'My ACMD Resignation Letter to the Home Secretary', *Eric Carlin's blog*, 1 April, accessed online at <<http://ericcarlin.wordpress.com/2010/04/02/my-acmd-resignation-letter-to-the-home-secretary/>>
- Christie S (1998) 'Trial by Media: Politics, Policy and Public Opinion', *Current Issues in Criminal Justice*, vol 10 no 1, 37-51
- Clegg Smith K, Wakefield M, Terry-McElrath Y, Chaloupka F J, Flay B, Johnston L, Saba A and Siebel C (2008) 'Relation between Newspaper Coverage of Tobacco Issues and Smoking Attitudes and Behaviour among American Teens', *Tobacco Control*, vol 17 no 1, 17-24
- Davis R, Gilpin E, Loken B, Viswanath K and Wakefield M (eds) (2008) *Tobacco Control Monograph No. 19: The Role of the Media in Promoting and Controlling Tobacco use*, US Department of Health and Human Services, National Institutes of Health, National Cancer Institute, Bethesda, Maryland
- Dick D and Torrance C (2010) 'MixMag Drugs Survey' *MixMag*, vol 225, Development Hell Ltd, London
- Dixon B (2010) 'Worries over Legal Drugs', *Current Biology*, vol 20 no 7, 298-9
- Doward J (2010) 'Mephedrone Row Grows as Seventh Member of Drugs Panel Quits', *The Guardian*, 4 April

ANZCCC: The Australian and New Zealand Critical Criminology Conference 2010

(c) 2011 Institute of Criminology, Sydney Law School, The University of Sydney

<http://sydney.edu.au/law/criminology>

The Institute of Criminology would like to thank the University of Western Sydney as co-sponsors of the ANZCCC.

- Entman, R 1993 'Framing: Toward Clarification of a Fractured Paradigm', *Journal of Communication*, vol 43 no 4, 51-8
- Fan D (1996) 'News Media Framing Sets Public Opinion that Drugs is the Country's Most Important Problem', *Substance Use and Misuse*, vol 31 no 10, 1413-21
- Fleming N (2010) 'The Truth about Mephedrone', *New Scientist* vol 2757, Reed Business Information, London
- Gelders D, Patesson R, Vandoninck S, Steinberg P, Van Malderen S, Nicaise P, De Ruyver B, Pelc I, Dutta M, Roe K and Vander Laenen F (2009) 'The Influence of Warning Messages on the Public's Perception of Substance Use: A Theoretical Framework', *Government Information Quarterly*, no 26, 349-57
- Gotthoffer A (1998) 'Do Social Norms and Media Coverage Influence Illicit Drug Trial among College Students?', *Association for Education in Journalism and Mass Communication*, Baltimore, Maryland
- Greenslade R (2010), 'Ban Mephedrone? Better to Ban Newspaper Coverage—and Politicians', *Greenslade blog*, 6 April, accessed online at <<http://www.guardian.co.uk/media/greenslade/2010/apr/06/mephedrone-drugspolicy>>
- Hari J (2010) 'Drugs, Royals, and the Lousy Laws being Rushed Through', *The Independent*, 2 April
- Hughes C (2010) 'The Australian (Illicit) Drug Policy Timeline: 1985-2010, Drug Policy Modelling Program', 22 July, accessed online at <<http://www.dpmp.unsw.edu.au/dpmpweb.nsf/page/Drug+Policy+Timeline>>
- Huston A C, Wartella E and Donnerstein E (1998) *Measuring the Effects of Sexual Content in the Media: A Report to the Kaiser Family Foundation*, The Henry J Kaiser Family Foundation, Menlo Park, California
- Jenkins S (2010) 'Only Drug Dealers will Benefit from this Absurd ban on Mephedrone', *The Guardian* 1 April
- Kohring M and Matthes J (2002) 'The Face(t)s of Biotech in the Nineties: How the German Press Framed Modern Biotechnology', *Public Understanding of Science*, vol 11, 143-54
- Lancaster A (2004) 'What Does Curiosity Really do to the Cat? A Look At How Message Exposure can Lead to Illicit Drug Trial Among College Students', *Mass Communication and Society*, vol 7 no 1, 77-95
- Lancaster K, Hughes C, Spicer B, Matthew-Simmons F and Dillon P (2010) 'Illicit Drugs and the Media: Models of Media Effects for use in Drug Policy Research', *Drug and Alcohol Review*, Doi: 10.1111/j.1465-3362.2010.00239.x
- Lawrence G, Bammer, G and Chapman S (2000) "Sending the Wrong Signal": Analysis of Print Media Reportage of the ACT Heroin Prescription Proposal, August 1997', *Australian and New Zealand Journal of Public Health*, vol 24, 254-64
- Lewis P (2010) 'Banned Mephedrone Cleared of Blame for Two Deaths', *The Guardian*, 28 May
- McArthur M (1999) 'Pushing the Drug Debate: The Media's Role in Policy Reform', *Australian Journal of Social Issues* vol 34 no 2, 49-65
- McCombs M (1997) 'Building Consensus: The News Media's Agenda-Setting Roles', *Political Communication*, vol 14, 433-43
- McCombs M and Shaw D (1972) 'The Agenda-Setting Function of Mass Media', *Public Opinion Quarterly*, vol 36, 176-87
- McLeod J, Kosicki G and Pan Z (1991) 'On Understanding and Misunderstanding Media Effects' in Curran J and Gurevitch M (eds) *Mass Media and Society*, Edward Arnold, New York, 235-66
- Mills J S, Polivy J, Herman C P and Tiggemann M (2002) 'Effects of Exposure to Thin Media Images: Evidence of Self-Enhancement among Restrained Eaters', *Personality and Social Psychology Bulletin*, vol 28 no 12, 1687-99

ANZCCC: The Australian and New Zealand Critical Criminology Conference 2010

(c) 2011 Institute of Criminology, Sydney Law School, The University of Sydney

<http://sydney.edu.au/law/criminology>

The Institute of Criminology would like to thank the University of Western Sydney as co-sponsors of the ANZCCC.

- Nutt D (2010a) 'Lessons from the Mephedrone Ban', *The Guardian*, 28 May
- Nutt D (2010b) 'Trashing Evidence-based Drugs Policy', *The Guardian*, 1 April
- Pan Z and Kosicki G (2001) 'Framing as a Strategic Action in Public Deliberation', in Reese S, Gandy O and Grant A (eds) *Framing Public Life: Perspectives on Media and Our Understanding of the World*, Lawrence Erlbaum Associates, New Jersey, 35-66
- Posavac H D, Posavac S S and Posavac E J (1998) 'Exposure to Media Images of Female Attractiveness and Concern with Body Weight among Young Women', *Sex Roles*, vol 38, 187-201
- Power M (2010) 'World Wired Web', *Druglink* 25(1), DrugScope, London
- Proctor D and Babor T (2001) 'Drug Wars in the Post-Gutenberg Galaxy: Mass Media as the Next Battleground', *Addiction*, vol 96 no 3, 377-81
- Reinarman C and Levine H (1989) 'Crack in Context: Politics and Media in the Making of a Drug Scare', *Contemporary Drug Problems*, vol 16, 535-77
- Salemme N (2010) 'Meow Drug Triggers Psychosis in Melbourne Man "Conrad" as Experts Issue Warnings', *Herald Sun*, 11 March
- Scott L and Burns L (2010) *New South Wales Trends in Ecstasy and Related Drug Markets 2009: Findings from the Ecstasy and Related Drugs Reporting System (EDRS)*, Australian Drug Trends Series, National Drug and Alcohol Research Centre, Sydney
- Shaw D and McCombs M (1989) 'Dealing with Illicit Drugs: The Power-and Limits-of Mass Media Agenda Setting', in Shoemaker P (ed) *Communication Campaigns About Drugs: Government, Media and the Public*, Lawrence Erlbaum Associates, Hillsdale, NJ, 113-20
- Soodin V (2009) 'Legal Drug Teen Ripped his Scrotum Off', *The Sun*, 26 November
- Taylor A (2010) 'Grieving Dad's Drug Warning', *The Sun*, 17 March
- The Courier Mail* (2009) 'Drug user Rips off his Scrotum', 27 November
- The Independent* (2010) 'Mephedrone Madness', 3 April
- Editorial (2010) 'A Collapse in Integrity of Scientific Advice in the UK', *The Lancet*, vol 375 no 9723, 1319
- Townsend M (2010) 'Meow Meow was Innocent, but the Damage has been done', *The Guardian*, 6 June
- Wilson G (2010) 'Meow is Banned from Midnight', *The Sun*, 16 April