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“Political Cannabis” or “Medicinal Cannabis?”: An Australian News Framing Analysis

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This study investigates the framing of medicinal cannabis (MC) in 300 Australian online news stories published on *ABC Online News* and *News.com.au* from 2014–2021. Using the theoretical frameworks of countervailing powers and biocommunicability, we find that Australian online news reports about MC have privileged the voices of patients, familial caregivers, and politicians, over those from medicine or science. Cannabis is most frequently framed as a legitimate therapeutic option, with positive anecdotal evidence to support its use, while carrying strong support from political elites. MC is positioned as an issue that is not just health specific, but also cultural, economic, and, largely, political, promulgating cannabis as an issue of public importance. Overall, it was found that in these news stories, patients and caregivers were given power and influence to heroize and legitimize MC, with support from political elites to frame the viability of cannabis as a medicine.

Keywords: medicinal cannabis, countervailing powers, biocommunicability, news reporting, health communication

Background

Cannabis as a Medicine

For thousands of years, cannabis has been ingested, inhaled, and topically applied as a medicine across many different cultural contexts, with a diverse history of use, including as an analgesic, antispasmodic, and topical anesthetic (Kalant, 2001). However, its recreational and narcotic history drew particular attention to the plant during the early 20th century in the United States, where it was stigmatized and embedded in racism through its portrayal as a drug for abuse in the famous anticannabis (“Reefer Madness”) campaign (Bridgeman & Abazia, 2017). This campaign, coupled with the rise of opiates that were considered a more reliable synthetic drug, resulted in the plant being removed from British and American pharmacopoeias (Bonini et al., 2018; Kalant, 2001), along with its legitimacy as a socially and culturally accepted plant medicine (Lewis & Flood, 2021; Newhart & Dolphin, 2019).

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The mid- to late-20th century, however, saw a renewed interest in the scientific research of medicinal cannabis (MC), and the discovery of the endocannabinoid system—a system that explains how cannabis reacts with human and animal physiology—was a turning point in understanding the plant's therapeutic value (Ebbert, Scharf, & Hurt, 2018). Phytocannabinoids also gained popularity in research, with the two most significant being tetrahydrocannabinol (THC), the psychoactive constituent of cannabis while carrying analgesic and anti-inflammatory properties, and cannabidiol (CBD), which has anticonvulsant, anxiolytic, anti-inflammatory, and neuroprotective properties (Ebbert et al., 2018).

As knowledge of the therapeutic benefits of cannabis increased, following an amendment to Australia's Narcotic Drugs Act 1967 earlier that year, on November 1, 2016, the Therapeutic Goods Administration (TGA) rescheduled some cannabis products from a Schedule 9 (S9) Prohibited Substance to a Schedule 8 (S8) Controlled Drug (Bawa, McCartney, Manocha, & McGregor, 2022). This means some MC products became available in Australia via two pathways, the Authorized Prescriber Scheme (APS) or the Special Access Scheme (SAS). Despite these prescribing pathways, in the years following this legislation change, MC was described as extremely difficult to access in Australia, because of a complex regulatory system and the treatment of the plant as an unapproved therapeutic good (O'Brien, 2019). However, in recent years, MC prescribing has increased in Australia, as has the number of Authorized Prescribers (Bawa et al., 2022). Yet, access barriers such as affordability and roadside testing laws about cannabis detection mean that more Australians are using illicit cannabis for medicinal purposes than those accessing a legal prescription (Lintzeris et al., 2022), and many GPs still note having inadequate knowledge of MC (Bawa et al., 2022).

Health News

The powerful influence of health news on our acceptance and assimilation of biomedical information, knowledge, and directives has been well documented (Clarke, Arnold, Everest, & Whitfield, 2007; Seale, 2003). Health news offers an array of narratives, framings, and key messages that may influence our choices about using certain products and therapies, as well as garnering support from communities, organizations, professions, and policymakers (Lewis, 2020). Health news, like other news genres, is also a complex space where information and knowledge are coproduced, for example, by journalists (including those with or without scientific understanding) and other newsmakers, along with strategic communicators and sources. Sources are integral to health news, with the journalist-source relationship being symbiotic in nature (O'Neill & O'Connor, 2008). Although traditionally, expert sources have been privileged in the media ecology, as they are viewed as more accessible, credible, and trustworthy (Wallington, Blake, Taylor-Clark, & Viswanath, 2010), lay sources are increasingly engaging with the news agenda (Briggs & Hallin, 2016). As Lewis (2020) points out, the interdependence and interrelationships at play here within health news coverage offer a rich picture of how healthcare—and indeed health products like MC—are “constructed, accepted, legitimized, contested, and even de-legitimized” (p. 209). Therefore, by paying particular attention to news framing and sources, this research investigates how MC has been framed in Australian online news media to further understand how these stories legitimize or delegitimize cannabis as a medicine.

Research investigating media representations of cannabis continues to emerge, with a strong background that has focused on the Israeli context (Lewis, Broitman, & Sznitman, 2015; Lewis & Sznitman, 2017, 2019; Sznitman & Lewis, 2015). In this research, the authors identified the dominance of medical news frames about cannabis, at the same time highlighting the political nature of MC reporting. They also argue that it is a

complex issue where the public may rely more heavily on media coverage for information and interpretation. Abalo (2021) also found that in Swedish newspaper representations, MC is constructed as a multifaceted topic, attached to different perspectives, discourses, and actors. At times, these discourses were found to be strongly connected to science, and at other times constructed through a weak science discourse, as patient accounts discursively function to prove the medical effect of cannabis. Patient voices in news representations about MC have also been the focus of Morris (2023), who investigated the constructions of self-prescribing MC users in British newspapers during the 1990s. Morris (2023) found that, despite the people in these stories accessing cannabis illicitly, they were positioned as "genuinely ill social insiders," and, rather than highlighting their deviance, self-prescribing MC use was constructed as something "respectable" people could do (p. 136).

Other research has investigated cannabis representations more broadly (Kępski, 2021; Kim & Kim, 2018; Lynch, 2021; Mortensen, Wan, & Yang, 2018). Investigating American print news, Lynch (2021) highlights the prominence of political themes, as medical themes appeared less frequently. Similarly, Kim and Kim (2018) found that American newspapers frame cannabis legalization as an issue of law enforcement, and Kępski (2021), in analyzing Polish news, found that cannabis was largely constructed through dominant discourses around politics, medicine, and criminality, highlighting its very polysemic nature (Duff, 2016).

Although these studies have covered cannabis representations in an array of geographical contexts, Australian research on the topic is lacking, with the exception of Lewis and Flood (2021), who investigated the framing of MC in Australian professional medical publications, finding it was frequently framed as a legitimate therapeutic option that is complex to prescribe and access, does not have a strong evidence base, and one that is not free of safety concerns. The results of their study provide a springboard for further research into MC mainstreaming through communicative and sociological approaches, as there is little understanding into how MC is constructed and legitimized in Australian media.

Theoretical Frameworks

Multiple theoretical frameworks have been applied to this project because of the interdisciplinary nature of the research. First, we draw on Donald Light's theory of countervailing powers from the sociology of the medical profession, which we use to understand the different power dynamics and alliances observable in the news reports. Light (1995) developed the argument for countervailing powers as a theoretical lens in criticism of the other major theoretical approaches used to understand power in health sociology such as medical dominance and deprofessionalization. He argued that these theories were incomplete, as they do not incorporate the dynamics of and challenges to medical dominance, focusing singularly on doctors and neglecting other key actors in healthcare (Light, 1991). Instead, countervailing powers view healthcare as an arena where different actors vie for resources, territory, and control to carry out their goals and visions of how health care should be (Light, 1991, 1995). In this sense, the theory holds a pluralistic view of power (Adams & Curtin-Bowen, 2021). Patients and consumers can hold countervailing power, as can other professions and adjacent occupations, as well as macrolevel forces such as government regulators, corporate interests, and public interest groups (Light, 1991, 2014).

The theory is also increasingly being used in studies concerned with forms of complementary and alternative medicine (CAM; Adams & Curtin-Bowen, 2021; Kelner, Wellman, Boon, & Welsh, 2004; Kelner, Wellman, Welsh, & Boon, 2006). Almeida and Gabe (2016) note that "countervailing powers as a theory

allows research to move away from professional dominance and corporatist approaches, where CAM is subjugated to the power of the medical profession and the state" (p. 2).

Hartley (2002) also extends this theory through the term "system of alignment," which occurs when different actors work together as a system, to challenge traditional forms of dominance, and through mutual interaction can evolve and shape policies. In direct relation to this research, Light (2014) notes how the media can act as an ally, and much like the state can promote or impede health policy, afford health news a level of countervailing power.

Mediatization has played an important role in the sociocultural and political vilification and stigmatization of cannabis (Newhart & Dolphin, 2019), as well as being a major influence in its gradual return to legitimacy. Investigating mediatization processes offers insight into how certain "realities" about a phenomenon like MC are constructed over time. While news-making activities, organizations, and professional cultures are of importance here, we are also interested in the influence of biomedicalization on the construction of cannabis news and subsequent "realities" that are articulated about it. Briggs and Hallin (2016) apply the neologism "biomediatization" to capture the mediatization-biomedicalization nexus, offering an additional layer to Deuze's (2011) concept of a "media life," which can also be understood as a "biomediatized" life.

Considerations of contemporary health care are inadequate without accounting for the highly mediatized landscape within which it functions (Lewis, 2020). We have a limited understanding of this mediatized landscape without also making space to acknowledge the profound influence of biomedicalization—that is, the "normalizing" of biomedical interventions and biomedicalized definitions that permeate our everyday social lives (Conrad, 2007), and that become mediatized phenomena. Within this biomedicalized, mediatized domain that plays out in the news ecology, we can apply Briggs and Hallin's (2007) concept of biocommunicability to better understand how knowledge about health issues ("bio") gets produced, circulated, and received ("communicability").

Briggs and Hallin (2007) offer three main models of biocommunicability to help us classify the positioning and normative assumptions of mediated information, which asks audiences to adopt certain roles (for example, as "passive" or "active" recipients of the information being communicated). First, the medical-authority model carries an assumption of biomedical authority to a passive audience of "patients." Second, the patient-consumer model imagines an audience as both patients and consumers; and third, the public sphere model assumes an audience of politically aware citizens (as opposed to merely being patients or consumers, though these three models can coexist within the one news story, for example), who carry interest in the broader political elements of the story. In this model, information is not linear from science to public sphere but rather evolves interested parties to promulgate an issue into the public domain (Briggs & Hallin, 2016). For our study, we bring the focus to news reports about MC.

Materials and Methods

Content analysis was chosen as the method for this project as a flexible approach to data gathering and analysis frequently used in mass media communications research allowing for data to be analyzed systematically and reliably (Prior, 2014). Although the content analysis for this project drew on a qualitative

approach through media framing analysis as well as thematic coding, quantitative elements such as frequency counts of the data were used to better understand and contextualize the prominence of the findings.

News framing is a particularly influential phenomenon in health reporting of MC, offering a valuable method of analysis. Understanding how cannabis is framed required identifying the problems and solutions articulated in the news report, as well as the ideas, arguments, and moral judgments offered (Entman, 1993). Framing scholar Robert Entman (1993) notes that, essentially, framing is about selecting and emphasizing certain perceived realities to promote a particular interpretation or worldview.

We were interested here to identify patterns in the construction of facts and salient issues about MC in Australian news reports, including indications of its therapeutic potentialities or, indeed, the very opposite. Such mapping of key themes and the news framing of MC allowed us to capture how cannabis as a health product and therapeutic tool has been presented to its assumed audiences.

Sample and Data Gathering

To account for both regional and national audiences, as well as different media ownership, digital news stories about MC from *News.com.au* and the *ABC Online News* were selected for our samples. These were chosen as they are two of the most popular online news websites in Australia, generating a large amount of online traffic through website visits and readership (*Mediaweek*, 2021). The *Australian Broadcasting Corporation (ABC)* is the country's national public broadcaster, whereas *News.com.au* is a news outlet owned by News Corporation, which publishes both its own news and compiles various publications to one website.

Articles published between January 2014 and December 2021 were selected for analysis to capture reporting two years before legalization to the time of data gathering and included the terms: medicinal cannabis, medical cannabis, medicinal marijuana, medical marijuana, CBD oil, and/or cannabinoid. A custom in-house web scraper was used to gather the articles from the news outlets, allowing for automated data collection, where the articles were then saved in an analyzable and structured data set. The web scraper, using the timeframe and search terms above, collected and stored the data for relevant articles (N = 901 for *ABC*, and N = 910 for *News.com.au*) in two CSV files, one for each news site. The inclusion and exclusion criteria were then applied, which resulted in a total data set of 816 articles (N = 336 from *ABC*, and N = 480 from *News.com.au*).

To create a manageable data set, a sample of that population was captured using systematic sampling, which involves selecting every n th unit from a sampling frame, with the n th unit determined by dividing the sampling frame by the sample size (Riffe, Lacy, Fico, & Watson, 2013). The sample size chosen for this study was 300 news reports (150 from each news outlet). Division of the sampling frame to size resulted in intervals with non integer values (n th unit for *ABC* = 2.24, and n th unit for *News.com.au* = 3.2). Therefore, to reflect the n th units above while ensuring consistency and accuracy, a rounding technique was enforced in Excel, drawing on the floor function to round to the lowest integer (to avoid overshooting the sample), creating a systematic list or sampling pattern of which articles should be selected to adhere to the sample frame to size ratio.

Data Analysis

To map the key themes and news frames in a story, a codebook was created that started deductively, using *a priori* coding influenced by Lewis and Flood's (2021) study. The inductive frames

emerged during the pilot and intercoder reliability (ICR) tests. For the pilot, three coders all coded five articles separately and then came together to compare the results and reach consensus. The same three coders then completed the ICR measures.

For ICR, we drew on a novel method put forward by Cofie, Braund, and Dalgarno (2022), guided by extant research and their own experiences, which suggests a robust measure of ICR that is compatible with interpretivist research, such as this project. Their approach aims to descriptively and qualitatively characterize the extent to which multiple coders agree or disagree on codes produced from textual data. It emphasizes the need to achieve consistency between coders, rather than quantification, instead encouraging reflexivity and authenticity. To achieve this, eight processes are suggested (Cofie et al., 2022) that were adapted by the research team across 30 articles (10% of the data set).

After this, the codebook was refined and a primary coder coded the rest of the data set, entering the data on NVivo. In NVivo, all articles were closely scanned and coded in accordance with the codebook to understand the main frames across the news stories analyzed. Two more emerging frames were discovered inductively after the ICR study was completed, and these were discussed with the complete coding team to reach a consensus. Units of analysis that were coded for across the 300 articles include number of stories per year, news publication, sources in stories and journalist roles, images, and frames.

Results

Stories Per Year and News Publication

Figure 1 presents the findings of stories published per year for both the systematic sample of 300 articles and the original raw data set, demonstrating how representative the systematic sample is against the raw data. The subsequent data in our discussion are based on our systematic sample.

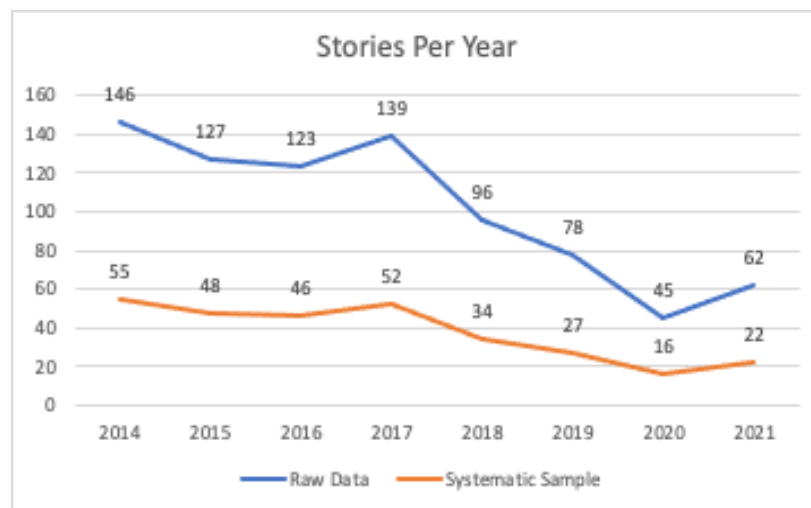


Figure 1. Stories per year.

It may be that 2020–2021 saw less reporting on MC because of the COVID-19 pandemic, which dominated the news cycle. With this, it has also been found that the passage of cannabis laws increases news coverage (Kim & Kim, 2018), which is represented in these findings, as reporting was at its peak during 2014–2017, consistent with the timeline of Australian MC legal reform (Gleeson, 2020).

Of the ABC articles, 141 were sourced from *ABC Online News*, and nine from *ABC Rural* (Figure 2). Within the *News.com.au* data set, national news was represented in 150 stories, as well as every state and territory through a local publication.

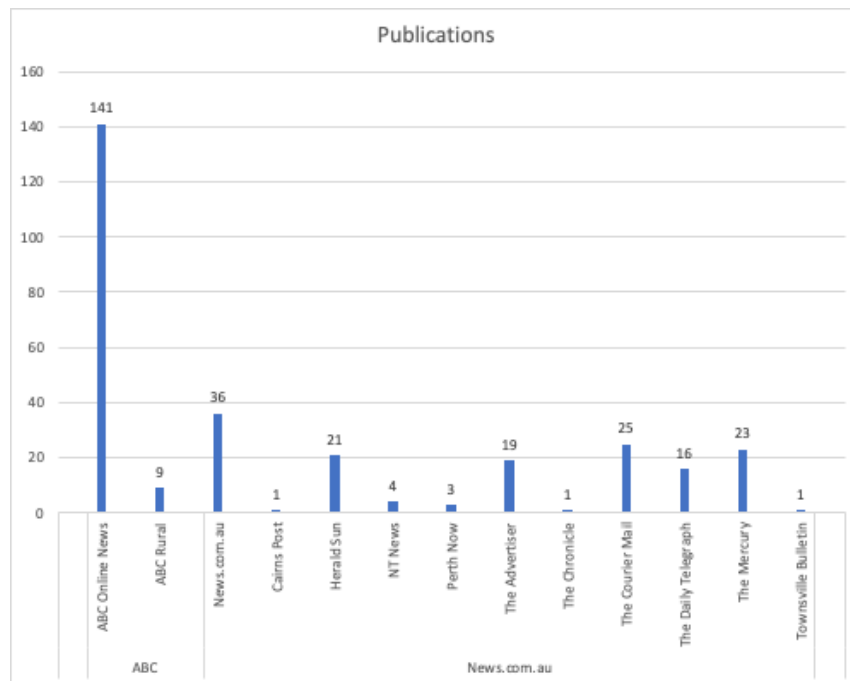


Figure 2. Publications.

Sources and Journalists

Politicians and government representatives ($n = 184$) dominated as the main source drawn upon in MC news reports, appearing in 61% of all articles. These included spokespeople at a local, state, or federal level, as well as health ministers or representatives from a health department. TGA spokespeople were only cited in three reports across the data set. Information from a previously published news article or program ($n = 107$) was another frequent source in news reports.

Private industry professionals, including people who do not work within government or governing body associations and who were largely from cannabis and agricultural sectors, were used as a source in 73 articles, followed by familial caregivers ($n = 72$). Sixteen articles (5.3%) also cited a caregiver turned long-term activist, 23 articles cited an illicit user of MC, and 12 cited a prescribed or legal user. In 71 articles, a biomedical source

or spokesperson was cited. This group was dominated by medical association members ($n = 54$), with fewer articles quoting general practitioners ($n = 10$) or medical specialists ($n = 7$).

Most reporters credited in the article bylines did not have a specified role; rather, their names were listed without any context ($n = 104$), or their roles were described as general or daily news journalists ($n = 64$), or the stories did not have any names accredited ($n = 45$). Eleven news reports were written by a health or science journalist but only three were by a medical reporter. In contrast, 26 journalists were listed as political reporters. Various isolated specializations (e.g., sport, lifestyle) were scattered across the data set.

Images

Although a visual analysis is beyond the scope of this project, the types of images used in the news reports were quantified. Only 28 stories (9%) did not include visuals. Images of cannabis plants and crops featured predominantly in the news reports, such as cannabis crops ($n = 65$), a scientist cutting raw material ($n = 17$), and an image of a fresh cannabis flower ($n = 13$), or leaf ($n = 13$). Fewer images with illicit connotations were used, including four images of illegal cannabis crops, and three of a cannabis "joint."

MC products were the next most frequently visual offered ($n = 64$), followed by pictures of caregivers ($n = 57$), government representatives ($n = 45$), and cannabis users ($n = 44$). Photographs of industry representatives appeared in 34 reports. Images of medical professionals and illicit suppliers shared frequency, each of which were included in just under 5% ($n = 14$) of all news reports. Visuals of university researchers and celebrities appeared in just nine articles (3%) each.

Frames

Across the data set were five main themes that included 35 abductive frames (Table 1), and a news article often evoked more than one frame. The two most common frames occurred in the medical usage theme. From this theme, the framing of cannabis as a legitimate therapeutic option ($n = 176$) was found in just under 60% of the 300 articles. In contrast, framings that drew on cannabis as an illegitimate option were rare ($n = 4$). The second most common framing across the whole data set was the positive anecdotal evidence frame, which occurred in over one-third of all articles ($n = 109$), whereas no articles drew on negative anecdotal evidence.

Table 1. Prevalence of Frames.

Theme	Frame within Theme	Number of Articles Containing the Frame	Percentage of Total Sample (%)
Scientific Research Theme	Negative research findings	1	0.33
	Positive research findings	10	3.33
	Need for more scientific research	32	10.66
	Emerging research	55	18.33
	Lack of scientific research	17	5.66
	Research hurdles or complexities	27	9

Medical Usage Theme	Cannabis is a legitimate therapeutic option	176	58.66
	Cannabis is an illegitimate therapeutic option	4	1.33
Policy and Regulation Theme	MC is hard to access as a medicine	48	16
	Doctor wariness, caution, or hesitancy toward MC	20	6.66
	Positive anecdotal evidence	109	36.33
	Negative anecdotal evidence	0	0
	Need for doctor education on MC	10	3.33
	Need for patient education on MC	1	0.33
	MC is expensive	16	5.33
	Current legislation is adequate	8	2.66
	Current legislation is not adequate/barriers to access	71	23.66
	MC should not be legalized	1	0.33
Law Enforcement Theme	MC should be legalized	57	19
	Safety or quality is a concern or risk for MC	28	9.33
	Lobbying or advocacy for legislation or research	99	33
	Community support	33	11
	Government endorsement or support for MC	102	34
	Government does not endorse or is hesitant toward MC	19	6.33
	Legislative hurdles or complexities	43	14.33
	MC associated with criminal activity	10	3.33
	Good citizen, illegal access	60	20
	Driving as a barrier to access	7	2.33
Economic and Industry Theme	Medical community, illegal access	7	2.33
	Industry flouting legislation, law, or processes	3	1
	Economic or industry development, opportunity, or progress	63	21
	Economic risk	3	1
	Agricultural opportunity	36	12
	Industry hurdles	31	10.33
Agricultural risk or hurdles	7	2.33	

The third most common frame across all reports came from the policy and regulation theme. These reports framed political actor endorsement or support for MC ($n = 102$), closely followed by the frame of lobbying or advocacy for legislation or research ($n = 99$). In contrast, only 19 articles drew on the frame of political actors not endorsing or expressing hesitancy toward MC. Another common frame within this theme was current legislation is not adequate/barriers to access ($n = 71$).

Both themes of economic and industry and scientific research were comprised of six frames each. Within the economic and industry theme, the most common frame was economic or industry development, opportunity, or process ($n = 63$), followed by framings of agricultural opportunities presented by MC ($n =$

36). Within the scientific research theme, the most common frame was emerging research into cannabis ($n = 55$), followed by need for more scientific research ($n = 32$).

Although overall, the theme of law enforcement was less common, the framing of good citizens who illegally access MC, which sits within this theme, was found in 20% of all articles ($n = 60$). This frame draws on language that positions illegal usage, growing, or supplying of MC (typically for ill patients) as compassionate activities undertaken by "good citizens," minimizing the criminality of the individual's actions.

Discussion

Legitimacy and Personal Anecdotes

The framing of cannabis as a legitimate therapeutic option was by far the most frequent in the study, appearing in almost 60% of all reports. This finding is consistent with other studies on MC framings in Australia and internationally (Lewis & Flood, 2021; Lewis et al., 2015; Sznitman & Lewis, 2015), as discussed earlier. In the Australian context, we find that as with professional medical publications (Lewis & Flood, 2021), news reports from *ABC Online* and *News.com.au* are also portraying the legitimacy and possibilities of cannabis as a medicine. In contrast, framings of MC as a nonviable, illegitimate therapeutic option were rare, occurring in just over 1% of all news reports.

Instead of its illegitimate portrayal, news reports offered criticism about limited evidence for efficacy and safety, and the need for more scientific research into cannabis. Doctors articulating their wariness, caution, or hesitancy was another infrequent framing that appeared in these reports that were more circumspect toward cannabis. Reports on potential risks, harms, and adverse events related to MC were rare, indicative of cannabis being largely framed in mainstream news discourse as a relatively risk-free plant medicine. Although serious adverse events are uncommon in CBD medicines, for example, the lack of information on possible side effects in news reports could foster the incorrect assumption that all cannabis medicines are free of any potential health risks (Dos Santos et al., 2020).

Cannabis was legitimized in many ways across the news stories. Key spokespeople in these stories were nonbiomedical, nonexpert sources, notably patients, and politicians. Rarer expert voices arose from medical practitioners and researchers who, at times, contributed to legitimizing MC through expert discourse and commentary.

Reports often featured positive personal anecdotes that reinforced the legitimacy of cannabis. Although positive anecdotal evidence is a distinct frame to legitimacy, a crosstabulation of results found that 81.6% of articles that framed cannabis through positive anecdotal evidence also included a framing of legitimacy. These results reinforce Gleeson's (2020) commentary, that positive anecdotes of ill patients and their families played an important function in leading to MC reform.

Familial carers were frequently cited as sources in these stories, and they were an important vehicle for mediating concerns about vulnerable patients who were in their care. Stories about children with illnesses

such as severe forms of epilepsy that were difficult to treat, featured in legitimacy reports along with adults with conditions such as pain, cancer, and degenerative nerve conditions:

"At 25 weeks of age Alice was having up to 30 seizures a day and I was told that she was going blind and dying, that she could never survive," she said. "I started treating her with medicinal cannabis four years ago; from the moment Alice started on the medicinal cannabis her health increased. She now has long periods without seizures, [but] it's not just the reduction in seizures, it's the improved quality of life overall." (Ogilvie, 2017, paras. 12–14)

Heroization stories rely on a compelling narrative, and it is these narratives that persuade audiences on health topics (Davis & Lohm, 2020). In these cannabis stories, the clear hero was not the doctor or patient but rather the plant medicine itself that helped those patients (or "victims," in the narrative) who were represented as "genuinely ill" and suffering (Morris, 2023, para. 136). These compelling narratives operated to emphasize MC as heroic, with terms such as "miracle" and "life changing" being used frequently by patients or caregivers. One heroizing article referred to CBD as "liquid gold" (Morgan, 2020, para. 9), and another was titled "How Backyard Medicinal Cannabis Soothes Desperate South Aussies When Doctors Can't or Won't Prescribe It" (DiGirolamo, 2019). Such narratives also constructed MC as heroic actant, legitimizing its use as a better alternative to orthodox medicine. MC was compared favorably to opiates, enabling previously "bedridden" patients to be able to enjoy daily life and which "kills crippling pain" (Duffy, 2015, paras. 1–9). One story also reported on a mother whose daughter's "quality of life improved dramatically" switching from benzodiazepine to cannabis (Shorthouse, 2017, paras. 29–30). Such orthodox medicines like opioids were rendered inferior to MC in these anecdotes, a discourse that contributes to its legitimization.

Much like the state, the media can act as an ally in promoting policy (Light, 2014) and it has been noted that periods of heightened media attention are a key element in attracting policy attention, as news reporting can feed into political debate and decision making, influencing voter opinions (Yanovitzky, 2002). These narratives placed the issue of MC legalization and access on the public agenda, positioning the audience as citizen-spectators tasked with making decisions on the social value of cannabis as a medicine (Briggs & Hallin, 2016).

What we see within the frames of positive anecdotal evidence and legitimacy is how Australian online news media has functioned as an ally for MC, aligning and supporting with certain patients and caregivers in the coconstruction of cannabis as a valid medicine. This, in turn, afforded patients and caregivers a level of countervailing power in the news sphere.

Political Support and Lobbying

Correlating with the prevalence of political sources across the data set, the frequent framing of political actor endorsement or support for MC ($n = 102$), occurred consistently. The prominence of this frame and the use of political sources echoes existing media research that notes the highly political nature of health news (Briggs & Hallin, 2010) and highlights how MC often exists as both an issue of policy and health within media frames (Kim & Kim, 2018; Lewis et al., 2015). As was also found in Australian medical

publications (Lewis & Flood, 2021) reports quoting political sources correlated with positive framings of MC. This may be because of the finding that the highest proportion of framings in Australian online news media during the legislative period were about legitimacy and positive anecdotal evidence, with (largely supportive) political actors tasked with responding in these reports.

Another common frame with similar political significance is related to lobbying or advocacy for legislation or research ($n = 99$). As noted by Lewis and Flood (2021), MC legislation has evolved through “an unusually bottom-up trend of patients and advocates seeking legitimization of access to therapeutic use as opposed to a top-down trend where medical experts legitimize the practice” (p. 10). In extending this knowledge, we find that framings of political support and lobbying, while distinct, often coalesced to showcase Hartley’s (2002) idea of a system of alignment—when interrelation among stakeholders shapes policies through mutual interaction.

What was observed in these frames is how certain politicians and activists formed relationships and worked together to successfully lobby for MC without the ethos of an expert medical presence. For instance, the former premier of New South Wales Mike Baird, collaborated with Lucy Haslam—a well-known caregiver turned MC advocate. This system of alignment was manifested in the reports, and stories featuring Baird often included references to Haslam, or her late son, Dan. For instance, it was said that Dan and Lucy’s story “convinced Premier Mike Baird to act” (Maiden, 2015, p. 8) and that Baird supported legal access to MC after he “spent an hour with cancer patient Daniel Haslam,” with Lucy stating, “the Premier related to our story” (Godfrey, 2014, paras. 3–6). In an article reporting on the passing of Dan after his battle with cancer, Baird said, “every step we take on medical cannabis will be built on the footsteps he left behind,” and Lucy noted that she will continue to “strive” for access (ABC, 2015, paras. 12–22).

What is distinct about Lucy Haslam is the extent to which she stepped outside of her role as caregiver to become a citizen activist and a producer and shaper of health information, which exemplifies the public sphere model of biocommunicability (Briggs & Hallin, 2016). Her experience as activist and caregiver was used as evidence by political forces when exercising support for MC, which, in turn, increased her own credibility. As Ihlen (2020) contends, this is a key indicator for establishing audience confidence in the message. The news reports indicate how Haslam was able to use both her own personal and emotional stake to incorporate herself into state routines of knowledge production, to gain expert standing.

Other citizen activists were also prominent in the reports, including other caregivers and illicit suppliers. Seventeen of the articles across the data set mentioned “Jennifer Hallam,” an illicit producer of MC oil for patients, and nine included a framing of advocacy. Although it is known that illicit users are more common than those receiving legal prescriptions in Australia (Lintzeris et al., 2022), this study is the first to explore how illicit suppliers have been constructed in Australian news. Hallam was framed as an activist, rather than drug dealer, and as Klein and Potter (2018) contend, her activism was constructed as genuine evangelism. At times, political sources in reports reinforced this, and a Greens politician at the time said, “I think it’s outrageous that someone who clearly isn’t a drug trafficker, who is trying to help sick people, is being treated this way” (Henson, 2017, para. 21). Another form of activism found in the study was that of celebrity activism although these reports were few, and largely focused on Olivia Newton-John ($n = 4$).

These findings, which largely reinforce the power and importance of patients, caregivers, activists, and politicians in the reporting of MC in Australia, indicate that it is these groups that offer the main narrative for legitimization, both working separately, as well as together, through a system of alignment. This also leads the audience to understanding cannabis as a highly politicized object, as political voices and frames are salient in the reports.

Legislation and Barriers to Access

The framing of MC legislation as inadequate ($n = 71$) was another prominent frame. This framing occurred once in both 2014 and 2015 and then increased substantially in 2016 synchronously with the legalization of some MC products. Although we noted above that barriers to access for MC have been discussed in other research, this study is the first to map how these legislative issues are being frequently represented and framed in mainstream online news, with the assumed audience being citizens who are politically interested in the debate.

Largely, legal MC usage was framed as facing many obstacles within the reports, including product cost, and the complexity of navigating the prescribing process as a doctor. Inadequate legislation also manifested in headlines, such as "Medical Cannabis in Australia 'Pretty Much Inaccessible,' Leaving Patients Looking to U.S." (Vincent, 2018). Crosstabulation found that 37 articles with inadequate legislation framing also included a frame of access difficulties. Although access to MC has increased in Australia, nine articles in 2021 still carried framings about barriers to access, indicating it has been an ongoing issue of concern.

What was largely observed in this frame was the usage of the term "red tape." This term was used by various news sources in 33 reports to highlight vexation toward the current legislation and other issues surrounding MC. For instance, politicians were seen using the term to create a buffer between themselves and "inadequate legislation." In an article focusing on the Northern Territory, independent state politician (at the time) Jeff Collins said, "red tape and high prices were stopping people from getting the drug" (Roberts, 2019, para. 4). This was also seen in the headline of an article focusing on Tasmanian Independent Senator, Jacqui Lambie: "State Election 2018: Jacqui Lambie Vows to Cut Red Tape Around Medicinal Cannabis" (Kempton, 2018).

Patients and caregivers were also found to be drawing on the "red tape" narrative, as one caregiver said that "red tape" was leaving her daughter's doctors "unable to fast track her lifesaving access to medicinal cannabis" (Smith, 2017, para. 17). Interestingly, biomedical actors drew on this same narrative, as was seen in the opinions of the Royal Australian College of General Practitioners (RACGP), in an article titled, "Medical Cannabis Red Tape Forces Thousands to Turn to Black Market for Pain Relief" (Daly, 2018). In the same article, the former president of the RACGP commented:

"Currently it's a basket case here in Australia," said Bastian Seidel, President of the Royal Australian College of General Practitioners and a practicing GP. "It's almost impossible [to get a prescription] and it's impossible because of political reasons—that's why I've called it political cannabis rather than medicinal cannabis." (Daly, 2018, paras. 15–16)

Of note here is the boundary work from the medical profession in distancing prescribing patterns from the medical authority. Although doctors have been referred to as “gatekeepers” in cannabis access for patients (Karanges, Suraev, Elias, Manocha, & McGregor, 2018), the above quote shifted the gatekeeping position from the doctor to policymakers. The metaphor of red tape, used by various sources, further promulgates MC as a political issue rather than one solely of health. It is also an invitation to audiences to give attention to this bureaucratic (rather than medical) problem affecting both doctors and patients, indicating a public sphere model of biocommunicability in these stories.

Cannabis as Economic Opportunity

The framing of economic opportunities presented by MC in the reports worked to convey the benefits for government, citizens, and industry stakeholders. References to job creation, financial benefits, the evolution of a newly emerging industry, and improving supply formed part of this framing, with the main voices coming from industry and government. Notably absent, however, were news reports that conveyed concerns or reservations about cannabis commercialization about vested interests or unethical, profit-driven practices. The absence of this frame was also noted by Lewis and Flood (2021) in their analysis of medical publications, who pointed out that the narrative of cannabis as a legitimate medicine is laden with commercial possibilities, that have evaded such scrutiny and critique. Only 1% of reports carried a framing of industry flouting legislation or processes, all of which focused on concerns about CBD being sold illegally. Overwhelmingly, these reports (largely uncritically) embraced the economic potentialities of cannabis, reinforcing its legitimacy as not just a medicine, but a product to generate income for the state and the cannabis industry, including agriculture, manufacturers, and retailers.

Scientific Research

Almost half of all reports featured framing that related to scientific research, dominated by voices from government as well as researchers. Few articles referred to positive research findings into MC ($n = 10$), and notably only one report contained a framing of negative findings. More common were reports that focused on emerging research into MC that had commenced or was in the pipeline. This included articles about evolving developments in cannabis research, such as upcoming trials or emerging findings, and new research grants: “The multi-million dollar research grant will be used to look at how cannabis can help treat cancer pain and other side effects. [The Health Minister] says the government is committed to building on the evidence supporting medicinal cannabis” (Australian Associated Press, 2019, paras. 3–4).

The prominence of government voices further positions this group as a source of countervailing power for MC, as they dominate the discourse across multiple frames. Interestingly, half of the reports framing emerging research also framed political support. Reports featuring calls for action for more scientific research to be undertaken, along with framings about hurdles and complexities posing a challenge for MC research, also highlighted their political nature. This echoes Briggs and Hallins’ (2016) findings that demonstrate the dominance of the public sphere model of biocommunicability in health news, along with the diminishing of medical-authoritative voices that present expert information to passive “patient” audiences.

Reports referring to cannabis using scientific language, albeit less frequent, imbued the plant medicine with pharmaceutical "power" as part of the legitimizing discourse. Language occasionally referred to "cannabinoid" ($n = 24$), "THC" ($n = 53$), "tetrahydrocannabinol" ($n = 21$), and "cannabidiol" ($n = 32$). In these cases, we see cannabis being constructed as a molecularized (Rose, 2007), pharmaceuticalized product, legitimized through the scientific understanding and naming of the plant's active constituents, an observation also made by Lewis and Flood (2021). Notably, a greater proportion of images used in stories were of plants or plant materials, rather than bottled therapeutic product or lab image. A closer analysis of the images used in these stories is beyond the scope of this study, and for a future study.

Conclusion

This analysis of news representations of MC from 2014 to 2021 shows how cannabis has been constructed as a legitimate medicine in Australia. Positive anecdotes often narrativize MC as a hero for those who are portrayed as authentically sick. Cannabis as a medicinal product is also frequently framed politically, through stories about political support, lobbying, inadequate legislation, and access barriers. We have found an overwhelming political presence in MC news in Australia, and politicians and government (at times, separate from the state) are a main manifestation of countervailing power in news media. Surprisingly, government and political sources were found more often than not to be exercising this countervailing power to support MC, at times through a system of alignment with patients, caregivers, and activists. However, these less powerful groups were still found to be subject to the state as a form of countervailing power, as demonstrated in the framing of inadequate legislation. Within this context, it is notable that MC advocates were often not protesting the authority of doctors or their practice, but against bureaucracy and "red tape."

The prominence and nature of the political frames and narratives found within the news reports are evidence of Briggs and Hallin's (2010) public sphere of biocommunicability, which imagines audiences as politically involved citizens, and implies that health issues should be open to debate, allowing space for conflicting voices to emerge. These articles portrayed MC as a politicized issue, positioning its legalization and access as an issue of public importance. Notably, despite the politicized nature of the news discourse, the therapeutic legitimacy of cannabis was rarely under contention. The sources in these legitimizing stories did not speak in a linear transmission of information from science to public sphere, but rather between interested parties, mainly politicians and patient caregivers. In this sense, the news stories positioned MC as an issue with stakes that are not just health specific but also cultural, economic, and largely political (Briggs & Hallin, 2016, p. 33).

This study found that cannabis is distinct from the usual routine of power whereby authoritative biomedical voices convince governments about the efficacy and safety of nonorthodox medicines. (Kelner et al., 2006). In the coproduction of news stories, patients and caregivers were given power and influence to construct the benefits and potentialities of MC with support from political elites. As with medical professional publications (Lewis & Flood, 2021), mainstream Australian online news characterizes MC as a legitimate therapeutic option, offering strong evidence that regulation is being driven by the community.

In rendering MC as a hero through patient voices, and advocacy framings more generally, important nuances in the complexity of cannabis as a medicine (and assumptions of its efficacy, safety, and quality)

may be lost in the news-making process. This requires further investigation into mediated representations of MC from the perspectives of both newsmakers and claims makers, along with the impact this has on audiences who consume these messages.

References

- Abalo, E. (2021). Between facts and ambiguity: Discourses on medical cannabis in Swedish newspapers. *Nordic Studies on Alcohol and Drugs*, 38(4), 345–360. doi:10.1177/1455072521996997
- Adams, C., & Curtin-Bowen, M. (2021). Countervailing powers in the labor room: The doula–doctor relationship in the United States. *Social Science & Medicine*, 285, 1–8. doi:10.1016/j.socscimed.2021.114296
- Almeida, J., & Gabe, J. (2016). CAM within a field force of countervailing powers: The case of Portugal. *Social Science & Medicine*, 155, 73–81. doi:10.1016/j.socscimed.2016.02.044
- Australian Associated Press. (2019, October 6). Morrison Government invests \$3m in medicinal cannabis research for cancer treatment. *News.com.au*. Retrieved from <https://www.news.com.au/national/politics/morrison-government-invests-3m-in-medicinal-cannabis-research-for-cancer-treatment/news-story/e99a8e2c0574d02e2345c8239bd94a4d>
- Australian Broadcasting Corporation. (2015, February 25). *Medicinal cannabis campaigner Dan Haslam dies after battle with cancer*. Retrieved from <https://www.abc.net.au/news/2015-02-25/medicinal-cannabis-campaigner-dan-haslam-dies/6260522>
- Bawa, Z., McCartney, D., Manocha, R., & McGregor, I. S. (2022). Knowledge, experiences, and attitudes of Australian general practitioners towards medicinal cannabis: A 2021–2022 survey. *BMC Primary Care*, 23(330), 1–11. doi:10.1186/s12875-022-01946-x
- Bonini, S. A., Premoli, M., Tambaro, S., Kumar, A., Maccarinelli, G., Memo, M., & Mastinu, A. (2018). Cannabis sativa: A comprehensive ethnopharmacological review of a medicinal plant with a long history. *Journal of Ethnopharmacology*, 227, 300–315. doi:10.1016/j.jep.2018.09.004
- Bridgeman, M. B., & Abazia, D. T. (2017). Medicinal cannabis: History, pharmacology, and implications for the acute care setting. *P & T: A Peer-Reviewed Journal for Formulary Management*, 42(3), 180–188.
- Briggs, C. L., & Hallin, D. C. (2007). Biocommunicability: The neoliberal subject and its contradictions in news coverage of health issues. *Social Text*, 25(4), 43–66. doi:10.1215/01642472-2007-011
- Briggs, C. L., & Hallin, D. C. (2010). Health reporting as political reporting: Biocommunicability and the public sphere. *Journalism*, 11(2), 149–165. doi:10.1177/1464884909355732

- Briggs, C. L., & Hallin, D. C. (2016). *Making health public: How news coverage is remaking media, medicine, and contemporary life*. New York, NY: Taylor & Francis Group.
- Clarke, J. N., Arnold, S., Everest, M., & Whitfield, K. (2007). The paradoxical reliance on allopathic medicine and positivist science among skeptical audiences. *Social Science & Medicine*, 64(1), 164–173. doi:10.1016/j.socscimed.2006.08.038
- Cofie, N., Braund, H., & Dalgarno, N. (2022). Eight ways to get a grip on intercoder reliability using qualitative-based measures. *Canadian Medical Education Journal*, 13(2), 73–76. doi:10.36834/cmej.72504
- Conrad, P. (2007). *The medicalization of society: On the transformation of human conditions into treatable disorders*. Baltimore, MD: Johns Hopkins University Press.
- Daly, N. (2018, February 10). *Medical cannabis red tape forces thousands to turn to black market for pain relief*. ABC. Retrieved from <https://www.abc.net.au/news/2018-02-10/medicinal-cannabis-red-tape-forces-thousands-to-black-market/9416330>
- Davis, M., & Lohm, D. (2020). *Pandemics, publics, and narrative, explorations in narrative psychology*. New York, NY: Oxford University Press.
- Deuze, M. (2011). Media life. *Media, Culture & Society*, 33(1), 137–148. doi:10.1177/0163443710386518
- DiGirolamo, R. (2019, October 19). How backyard medicinal cannabis soothes desperate South Aussies when doctors can't or won't prescribe it. *The Advertiser*. Retrieved from https://www.adelaidenow.com.au/subscribe/news/1/?sourceCode=AAWEB_WRE170_a_GGL&dest=https%3A%2F%2Fwww.adelaidenow.com.au%2Fnews%2Fsouth-australia%2Fhow-backyard-medicinal-cannabis-soothes-desperate-south-aussies-when-gps-wont%2Fnews-story%2F18aa56374fca2dec512be37ba028bc73&memtype=anonymous&mode=premium&v21=dynamic-high-test-score&V21spcbehaviour=append
- Dos Santos, R. G., Guimarães F. S., Crippa, J. A. S., Hallak, J. E. C., Rossi, G. N., Rocha, J. M., & Zuardi, A. W. (2020). Serious adverse effects of cannabidiol (CBD): A review of randomized controlled trials. *Expert Opinion on Drug Metabolism & Toxicology*, 16(6), 517–526. doi:10.1080/17425255.2020.1754793
- Duff, C. (2016). Natures, cultures and bodies of cannabis. In K. Wolff, J. White, & S. Karch (Eds.), *The Sage handbook of drug and alcohol studies* (pp. 677–691). London, UK: SAGE Publications.
- Duffy, C. (2015, May 22). *Pot kills crippling pain, cancer-suffering medical marijuana user Paul Lawrence says*. ABC. Retrieved from <https://www.abc.net.au/news/2015-05-22/pot-stops-pain-says-cancer-suffering-medical-marijuana-user/6491292>

- Ebbert, J. O., Scharf, E. L., & Hurt, R. T. (2018). Medical cannabis. *Mayo Clinic Proceedings*, 93(12), 1842–1847. doi:10.1016/j.mayocp.2018.09.005
- Entman, R. M. (1993). Framing: Toward clarification of a fractured paradigm. *Journal of Communication*, 43(4), 51–58. doi:10.1111/j.1460-2466.1993.tb01304.x
- Gleeson, P. (2020). The challenge of medicinal cannabis to the political legitimacy of therapeutic goods regulation in Australia. *Melbourne University Law Review*, 43(2), 558–604. doi:10.3316/ielapa.268892426853536
- Godfrey, M. (2014, July 23). Premier Mike Baird rolls up on legal medicinal cannabis: He would support his family using it if they were terminally ill. *The Daily Telegraph*. Retrieved from https://www.dailytelegraph.com.au/subscribe/news/1/?sourceCode=DTWEB_WRE170_a&dest=https%3A%2F%2Fwww.dailytelegraph.com.au%2Fnews%2Fns%2Fpremier-mike-baird-rolls-up-on-legal-medicinal-cannabis-he-would-support-his-family-using-it-if-they-were-terminally-ill%2Fnews-story%2F3dd27ba46a736edabb27dcc88814942a&memtype=anonymous&mode=premium&v21=dynamic-hot-control-score&V21spcbehaviour=append
- Hartley, H. (2002). The system of alignments challenging physician professional dominance: An elaborated theory of countervailing powers. *Sociology of Health & Illness*, 24(2), 178–207. doi:10.1111/1467-9566.00290
- Henson, E. (2017, January 5). Outcry over police raid on medicinal cannabis producer Jenny Hallam's home at Hillier. *The Advertiser*. Retrieved from <https://www.adelaidenow.com.au/news/south-australia/police-raid-medicinal-cannabis-producer-jenny-hallams-home-at-hillier/news-story/a409f577e091e04c2061c94ac0c38355>
- Ihlen, Ø. (2020). Science communication, strategic communication and rhetoric: the case of health authorities, vaccine hesitancy, trust and credibility. *Journal of Communication Management*, 24(3), 163–167. doi:10.1108/JCOM-03-2020-0017
- Kalant, H. (2001). Medicinal use of cannabis: History and current status. *Pain Research & Management*, 6(2), 80–91. doi:10.1155/2001/469629
- Karanges, E. A., Suraev, A., Elias, N., Manocha, R., & McGregor, I. S. (2018). Knowledge and attitudes of Australian general practitioners towards medicinal cannabis: A cross-sectional survey. *BMJ Open*, 8(7), e022101. doi:10.1136/bmjopen-2018-022101
- Kelner, M., Wellman, B., Boon, H., & Welsh, S. (2004). Responses of established healthcare to the professionalization of complementary and alternative medicine in Ontario. *Social Science & Medicine*, 59(5), 915–930. doi:10.1016/j.socscimed.2003.12.017

- Kelner, M., Wellman, B., Welsh, S., & Boon, H. (2006). How far can complementary and alternative medicine go? The case of chiropractic and homeopathy. *Social Science & Medicine*, 63(10), 2617–2627. doi:10.1016/j.socscimed.2006.07.005
- Kempton, H. (2018, January 29). State Election 2018: Jacqui Lambie vows to cut red tape around medicinal cannabis. *The Mercury*. Retrieved from <https://www.themercury.com.au/news/politics/state-election-2018-jacqui-lambie-vows-to-cut-red-tape-around-medicinal-cannabis/news-story/a0ac6634ab0339e89f955f8883b418ea>
- Kępski, P. (2021). Defining "the marijuana problem": An analysis of the Polish daily press, 2015–2016. *Nordic Studies on Alcohol and Drugs*, 38(4), 361–376. doi:10.1177/1455072520936807
- Kim, H., & Kim, S. H. (2018). Framing marijuana: How US newspapers frame marijuana legalization stories (1995–2014). *Preventive Medicine Reports*, 11, 196–201. doi:10.1016/j.pmedr.2018.07.003
- Klein, A., & Potter, G. R. (2018). The three betrayals of the medical cannabis growing activist: From multiple victimhood to reconstruction, redemption and activism. *International Journal of Drug Policy*, 53, 65–72. doi:10.1016/j.drugpo.2017.12.004
- Lewis, M. (2020). Political citizens, consumers, or passive patients? Imagined audiences in the complementary medicine debate. *Communication Research and Practice*, 6(3), 209–228. doi:10.1080/22041451.2020.1785192
- Lewis, M., & Flood, J. (2021). The transition of cannabis into the mainstream of Australian healthcare: Framings in professional medical publications. *Journal of Cannabis Research*, 3(1), 1–48. doi:10.1186/s42238-021-00105-w
- Lewis, N., Broitman, D., & Sznitman, S. R. (2015). Medical cannabis: A framing analysis of Israeli newspaper coverage. *Science Communication*, 37(6), 675–702. doi:10.1177/1075547015608507
- Lewis, N., & Sznitman, S. R. (2017). You brought it on yourself: The joint effects of message type, stigma, and responsibility attribution on attitudes toward medical cannabis. *Journal of Communication*, 67(2), 181–202. doi:10.1111/jcom.12287
- Lewis, N., & Sznitman, S. R. (2019). Engagement with medical cannabis information from online and mass media sources: Is it related to medical cannabis attitudes and support for legalization? *International Journal of Drug Policy*, 73, 219–227. doi:10.1016/j.drugpo.2019.01.005
- Light, D. W. (1991). Professionalism as a countervailing power. *Journal of Health Politics, Policy and Law*, 16(3), 499–506. doi:10.1215/03616878-16-3-499a
- Light, D. W. (1995). Countervailing powers: A framework for professions in transition. In T. Johnson, G. Larkin, & M. Saks (Eds.), *Health professions and the state in Europe* (pp. 25–41). London, UK: Routledge.

- Light, D. W. (2014). Countervailing powers. In W. Cockerham, R. Dingwall, & S. Quah (Eds.), *The Wiley Blackwell encyclopedia of health, illness, behavior, and society* (pp. 325–332). Chichester, UK: Wiley Blackwell. doi:10.1002/9781118410868.wbehibs161
- Lintzeris, N., Mills, L., Abelev, S. V., Suraev, A., Arnold, J. C., & McGregor, I. S. (2022). Medical cannabis use in Australia: consumer experiences from the online cannabis as medicine survey 2020 (CAMS-20). *Harm Reduction Journal*, 19(88). doi:10.1186/s12954-022-00666-w
- Lynch, M. (2021). Themes and tones of cannabis news reports and legalization outcomes. *Media, Culture & Society*, 43(3), 570–581. doi:10.1177/0163443720960905
- Maiden, S. (2015, October 18). Cannabis farms set for NSW as Baird government looks for sites. *The Daily Telegraph*. Retrieved from <https://www.dailytelegraph.com.au/news/nsw/cannabis-farms-set-for-nsw-as-baird-government-looks-for-sites/news-story/b364d7865ce5a3f1fd467e3916c1a996>
- Mediaweek*. (2021, August 19). *Top news sites July 2021: ABC and news.com.au lead market*. Retrieved from <https://www.mediaweek.com.au/top-news-sites-july-2021-abc-and-news-com-au-lead-market/>
- Morgan, S. (2020, April 30). *Inside Paige Spiranac's modern golf den where she runs through diet and reveals CBD changed her life*. News.com.au. Retrieved from <https://www.news.com.au/sport/sports-life/inside-paige-spiranacs-modern-golf-den-where-she-runs-through-diet-and-reveals-cbd-changed-her-life/news-story/3495c39afa096e47d5e3e2763fabf74a>
- Morris, C. (2023). Negotiating ambiguous substance use: UK newspaper representations of self-prescribing medicinal cannabis use in the 1990s. *Journal of Drug Issues*, 53(1), 129–144. doi:10.1177/00220426221090177
- Mortensen, T. M., Wan, A., & Yang, A. (2018). Hashing it out: An examination of the interaction of image and headline frames of marijuana in a time of flux. *Visual Studies*, 33(2), 186–201. doi:10.1080/1472586X.2018.1490156
- Newhart, M., & Dolphin, W. (2019). *The medicalization of marijuana: legitimacy, stigma, and the patient experience* (1st ed.). New York, NY: Routledge.
- O'Brien, K. (2019). Medicinal cannabis: Issues of evidence. *European Journal of Integrative Medicine*, 28, 114–120. doi:10.1016/j.eujim.2019.05.009
- Ogilvie, F. (2017, May 23). *Tasmanian medicinal cannabis scheme too expensive, patients say*. ABC. Retrieved from <https://www.abc.net.au/news/2017-05-23/medicinal-cannabis-cost-fears-tasmanian-scheme/8552108>
- O'Neill, D., & O'Connor, C. (2008). The passive journalist: How sources dominate local news. *Journalism Practice*, 2(3), 487–500. doi:10.1080/17512780802281248

- Prior, L. (2014). Content analysis. In P. Leavy (Ed.), *The Oxford handbook of qualitative research* (pp. 359–379). New York, NY: Oxford University Press.
- Riffe, D., Lacy, S., & Fico, F., & Watson, B. (2013). *Analyzing media messages: Using quantitative content analysis in research*. New York, NY: Routledge. doi:10.4324/9780429464287
- Roberts, L. (2019, August 12). 'Doctors don't want to prescribe it' claims Territory MLA. *NT News*. Retrieved from https://www.ntnews.com.au/subscribe/news/1/?sourceCode=NTWEB_WRE170_a&dest=https%3A%2F%2Fwww.ntnews.com.au%2Fnews%2Fdoctors-dont-want-to-prescribe-it-claims-territory-mla%2Fnews-story%2F588b1972c1550ec87008fb17d46a96b2&mementype=anonymous&mode=premium
- Rose, N. (2007). *The politics of life itself: Biomedicine, power, and subjectivity in the twenty-first century*. Princeton, NJ: Princeton University Press.
- Seale, C. (2003). *Media and health*. London, UK: SAGE Publications.
- Shorthouse, J. (2017, April 13). *Medicinal cannabis demand driving unwarranted black market, supplier says*. ABC. Retrieved from <https://www.abc.net.au/news/2017-04-13/medicinal-cannabis-demand-driving-unwarranted-black-market/8443274>
- Smith, L. (2017, April 5). *This eight-year-old girl suffers from a rare condition where she has multiple seizures every day*. News.com.au. Retrieved from <https://www.news.com.au/lifestyle/parenting/kids/this-eightyearold-girl-suffers-from-a-rare-condition-where-she-has-multiple-seizures-everyday/news-story/11da4e37a4b0f28afe921e4ae88eebe5>
- Sznitman, S. R., & Lewis, N. (2015). Is cannabis an illicit drug or a medicine? A quantitative framing analysis of Israeli newspaper coverage. *International Journal of Drug Policy*, 26(5), 446–452. doi:10.1016/j.drugpo.2015.01.010
- Vincent, M. (2018, July 23). *Medical cannabis in Australia 'pretty much inaccessible,' leaving patients looking to US*. ABC. Retrieved from <https://www.abc.net.au/news/2018-07-23/medical-cannabis-patients-in-australia-look-to-united-states/10026308>
- Wallington, S. F., Blake, K., Taylor-Clark, K., & Viswanath, K. (2010). Antecedents to agenda setting and framing in health news: An examination of priority, angle, source, and resource usage from a national survey of U.S. health reporters and editors. *Journal of Health Communication*, 15(1), 76–94. doi:10.1080/10810730903460559

Yanovitzky, I. (2002). Effects of news coverage on policy attention and actions: A closer look into the media-policy connection. *Communication Research*, 29(4), 422–451.
doi:10.1177/0093650202029004003