Between facts and ambiguity: Discourses on medical cannabis in Swedish newspapers

Ernesto Abalo [ID]

Jönköping University, Sweden

Abstract

Aim: This study examines the discursive construction of medical cannabis in Swedish newspapers, with the aim of understanding how the news media recontextualise the medical potential of cannabis. **Design:** The study is centred on the concept of recontextualisation, which focuses on how discourses are reinterpreted and reshaped when moving from one context to another, with a special focus on recontextualisation in relation to the media. Methodologically, the study uses critical discourse analysis to qualitatively analyse 134 articles of different subgenres, published in four Swedish newspapers between 2015 and 2020. **Results:** The study shows that medical cannabis is constructed around myriad topics and contexts, ranging from news that focuses on the medical potential of cannabis to articles where medical cannabis is mentioned in passing and constructed in a more abstract form. The media have difficulties retaining a conceptual boundary between medical and recreational cannabis. Moreover, the study shows that the medical potential of cannabis is discursively constructed using three different discourses: patient discourse, strong science discourse, and weak science discourse. **Conclusions:** The study suggests that there is a widening of the debate on cannabis in the Swedish public sphere, giving more recognition to the potential medical use of cannabis. The media, however, show difficulties in refining discourses on medical cannabis, which results in an altering between constructions that are strongly connected to science, and those that are not.

Keywords

cannabis, discourse, drugs, marijuana, media studies, medical cannabis, Sweden

---

Corresponding author:
Ernesto Abalo, School of Education and Communication, Jönköping University, Box 1026, 51 111 Jönköping, Sweden.
Email: ernesto.abalo@ju.se

This study examines how medical cannabis is discursively constructed in Swedish newspapers; this is done with the aim of understanding how the news media recontextualise the medical potential of cannabis.

Although cannabis has been used for different purposes for centuries, the scientific interest in cannabis substances' medical potential is far more recent. In the 1960s, the active substance THC (tetrahydrocannabinol) was discovered, and about a quarter of a century later, endogenous cannabinoid ligands and receptors were discovered. These discoveries laid the foundation for connecting cannabis to the relief of certain pains (Ware, 2020; see also EMCDDA, 2018). In 2017, a major review of research was conducted by US scholars to clarify the harms and benefits of cannabis use. Among the results for the therapeutic use of cannabis, the report finds that there is "conclusive or substantial evidence" that "cannabis or cannabinoids are effective" for treating chronic pain in adults, as anti-emetics in treating nausea caused by chemotherapy, and for improving multiple sclerosis spasticity symptoms (National Academies of Science, Engineering, and Medicine, 2017, p. 13). For the treatment of other symptoms, the scientific uncertainty is greater, according to the report. This uncertainty has to do with "a number of challenges involved in interpreting the available evidence on the effectiveness of cannabis medications", such as limited medical interest in medical cannabis, a constantly changing knowledge base, the scarcity of large and thorough studies, and "the lack of a common or agreed conceptual framework for describing the medical use of cannabis and cannabinoids" (EMCDDA, 2018, p. 6). All of this is in addition to the challenges posed by regulatory frameworks on the national level (EMCDDA, 2018).

Medical cannabis is best understood as "the use of cannabis under ongoing medical supervision" (Ware, 2020, para. 5), and the term incorporates different substances and medicines. Medical cannabis could mean cannabis extracts in spray form (such as Sativex), pills containing synthetic THC (such as Marinol), oral solutions of cannabidiol (CBD, such as Epiodiolex), herbal cannabis produced under special conditions to fit medical requirements and specific THC–CBD ratios (such as Bediol), and raw herbal cannabis not necessarily distinguished from that used for recreational use (marijuana) (see EMCDDA, 2018, p. 8). In their review of the regulation of medical cannabis in Europe and North America, Abusahira et al. (2018) show that while cannabinoid-based medicines are allowed in most European countries, Canada, and the US, raw herbal cannabis (marijuana) is allowed as medicine only in Canada, Germany, Israel, and the Netherlands, and about half of the US states. If one looks at the Scandinavian context, one can also note differences in regulation. For example, Denmark initiated a medical cannabis pilot programme in 2018, allowing doctors to prescribe herbal cannabis. In Sweden, specific medicines containing cannabis substances, such as Sativex and Marinol, can be prescribed, while herbal cannabis preparations, such as Bediol, require a case-by-case approval by the Swedish Medical Products Agency, the first licence for which was approved in 2017 (Olsson, 2017).

The complexity and uncertainty surrounding medical cannabis bring us to the role of the news media, which are central information channels for citizens' understanding of science-related topics (Olausson, 2011; Schäfer, 2017) and play an important role in shaping drug policies (Acevedo, 2007; Tieberghien, 2014). The power of the media in shaping attitudes towards the medical potentials of cannabis should not be underestimated in a context such as that of Sweden, characterised by comparatively low cannabis use (EMCDDA, 2019) and strict prohibitionist drug policies (Goldberg, 2004; Lenke & Olsson, 2002; Tham, 1992). Amid this prohibitionist context, the prescription of the legal medication Sativex has, however, increased from 168 to 395 cases between 2016 and 2018, and licenses for herbal cannabis increased from 8 to 63 during the same period (Hedlund, 2019). This shows a

somewhat increased recognition of the medical potentials of cannabis. The media can provide a locus for discussion on medical cannabis at the same time as they inevitably also are co-producers of specific discourses on the matter, which in turn could shape the attitudes of audiences and policymakers (Lewis & Sznitman, 2019). In this light, it is important to understand how the news media construct medical cannabis and how they deal with the potentials and uncertainties surrounding it.

There is a growing body of literature on the media representation of cannabis (Acevedo, 2007; Abalo, 2019a, 2019b; Haines-Saah et al., 2014; Kępski, 2020; Kim & Kim, 2018; Lewis et al., 2015; Månsson, 2016; Sznitman & Lewis, 2015; Tieberghien, 2014; Vickovic & Fradella, 2011). Considering the topic and scope of the current study, two categories of media studies are treated in more detail: studies on the representation of cannabis more generally in a Nordic context, and studies focusing on the representation of medical cannabis.

In a study of Swedish press, examining discourses on cannabis in 2002 and 2012, Månsson (2016) finds that cannabis is constructed around crime, health, and social problems, although the later materials also carry discourses that link cannabis to recreation and the economy. Abalo (2019a) analyses discourses on cannabis in the Swedish press in relation to legalisation and finds that a debate around the pros and cons of cannabis is established. This is linked to the international reporting on cannabis legalisation and provides certain legitimacy to pro-cannabis perspectives. Moreover, Abalo (2019b) shows that the Swedish press has difficulties in problematising the economic potentials that are linked to legal cannabis. Business arguments thus become a way to highlight the benefits of cannabis, which provides certain discursive power to business actors. Taken together, these studies show that the Swedish news media have, to a certain extent, adapted to international trends concerning cannabis, which has opened a space for a richer debate around cannabis.

A few studies have analysed the representation of medical cannabis in the media. In a quantitative content analysis, Sznitman and Lewis (2015) examine whether cannabis is mainly considered an illicit drug or a medicine in the media in Israel, a country where cannabis is allowed for therapeutic purposes. The authors find that cannabis is framed as a medicine in most news articles, while it is framed as an illicit drug in about one third of the articles. A content analysis of the framing of medical cannabis in Israeli media shows that medical cannabis is most often framed through a policy frame, which is characterised by having an elite perspective, referring to cannabis as a medicine, a neutral portrayal of both cannabis and patients, and a low salience of research cited in the texts (Lewis et al., 2015). The authors also identify a bottom-up frame, where patients are important sources and mainly constructed as in need of medical cannabis. Moreover, in a study of US media, Vickovic and Fradella (2011) find that a vast majority of the articles in their sample portrayed medical cannabis – as well as the enactment of medical marijuana laws – positively. This media portrayal thus follows the recent turn towards the acceptance of legalisation of cannabis for both recreational and medical use in the US. Moreover, an analysis of discourses on marijuana in Polish media finds that the meaning that is given to the substance by the media generally oscillates between criminal discourses and political-medical discourses (Kępski, 2020). Kępski also finds discourses on medical cannabis to be attached to political discourse, containing both positive accounts as well as constructions of uncertainty.

Besides focusing on a Nordic context, the current study contributes to this body of research by analysing how medical cannabis is constructed at the level of discourse. This is important because by analysing the discourse one can identify how medical cannabis is ascribed different meanings and how these meanings are connected to different social fields and discourses. Media discourse is powerful in the sense that it can serve to establish

notions of drugs in a broad sense. Therefore, understanding the media discourse on medical cannabis is a valuable contribution to the field.

The next section provides the theoretical framework of the study, which is followed by a presentation of the study's methods and materials. After that, the main results of the study are presented. The last section presents a concluding discussion.

Theoretical framework

The news media's discursive construction of medical cannabis is here perceived from a discourse analytical perspective (Fairclough, 1995, 2009), where the concepts of discourse and recontextualisation play a central role. Discourses are here understood as "semiotic ways of construing aspects of the world (physical, social or mental) which can generally be identified with different positions or perspectives of different groups of social actors" (Fairclough, 2009, p. 164). Discourses are perceived as social practices that take place in specific social fields, or discursive contexts, with specific rules and conventions that in different ways condition how discourses are produced and interpreted. Discourses are not static, but they shape and are shaped by surrounding social structures. This, in turn, is the outcome of the dialectic relation between discourses and their contexts, which means that different elements in social relations internalise aspects of each other (Fairclough, 2009).

Recontextualisation, in turn, is "the process of transferring given elements to new contexts", which means that the transferred element is given a new framing and can acquire a new meaning (Reisigl & Wodak, 2009, p. 90). In the case of this study, recontextualisation means how medical cannabis is interpreted and reconstituted to the forms of media communication. Fairclough (1995, p. 41) stresses that "communicative events and social practices are recontextualized differently depending upon the goals, values and priorities of the communication in which they are recontextualized".

The factors that shape recontextualisation would, in the case of the media, be intertwined with journalistic professional ideals, format, and genre conventions, but also with dominant worldviews (see Hall et al., 2013; Hallin, 1989; Tuchman, 1978).

In order to understand the news media's recontextualisation of medical cannabis, we need to identify central discursive contexts in which medical cannabis is situated. As *medical* cannabis, it is part of practices regarding health, medicine, and science, where its benefits for treating patients are at the core, and scientific evidence of its therapeutic effects plays an important role in shaping discourses about it. On the other hand, as medical *cannabis*, it can form part of conversations about illicit drugs, where practices concerned with law/crime, and risks could be central, apart from those on health and science (here focusing on the harm the substance causes). Yet another context could be business, given the economic potentials of the cannabis industry and of medical cannabis as a commodity. When recontextualised into media discourse, aspects that are central in these different contexts, such as discourses, actors, and positions, are translated into the media form and the conventions of the news media and its subgenres. For example, scientific discourse on medical cannabis could be relevant for the media if new medications are launched or if patients demand cannabis, and the media need to provide expertise on the matter. This is related to the importance of the topics of the stories that medical cannabis forms part of, which would serve to determine what actors and perspectives are relevant to include and not to include, which in turn would shape the meanings given to medical cannabis.

However, this recontextualisation task is not unproblematic. The media's ambition of being neutral and pluralistic, and at times also rewarding conflict and personification, can on the one hand lead to the voicing of different perspectives on medical cannabis, which in the best of cases would lead to a nuanced and pluralistic account on the matter. On the other hand, these

same ambitions can lead to misinformation, for example if pseudoscientific discourses are treated like science or if these voices are given equal weight as scientific voices. This problem transcends medical cannabis and is tied to the media's difficulties in communicating science and risk (Allan, 2002; Boykoff & Boykoff, 2004; Schäfer, 2017) as well as medicine (Prosser, 2010), and it is also shaped by the resources available in the newsrooms (Schäfer, 2017). In a time of declining revenues and an established ambition to make newsrooms more economic and effective, there is a risk that fact-checking and the provision of in-depth accounts are neglected for content that is fast and cheap to produce and that can generate sales, as well as clicks and traffic to the news outlet's own website (Davis, 2010; Schäfer, 2017).

Methods and materials

This study uses discourse analytical tools deriving from the tradition of critical discourse analysis (Carvalho, 2008; Fairclough, 2009; van Dijk, 2009). Although the study, in line with this tradition, seeks to understand the relation between media discourse and broader norms and attitudes, the critical impetus is here limited to understanding the power of the media in shaping discourses on medical cannabis.

Sample construction

The study uses a strategic approach to construct a sample for qualitative discourse analysis. The print editions of four Swedish newspapers were selected: *Aftonbladet* (*AB*), *Dagens Nyheter* (*DN*), *Expressen* (*Exp*), and *Svenska Dagbladet* (*SvD*). These newspapers were selected because they are the top four newspapers in terms of circulation and because, although based in Stockholm, they have a national reach. With these newspapers, the sample also covers two traditionally different newspaper genres: morning (or quality) newspapers (*DN*, *SvD*) and evening (or tabloid) newspapers (*AB*, *Exp*). This selection also allows the inclusion of diverse

editorial positions: independently liberal (*DN*, *Exp*), unbound conservative (*SvD*), and independently social democratic (*AB*), which potentially could bring about different editorial positions on medical cannabis.

The materials were collected from the database Retriever Mediearkivet, after searches were conducted using the following keywords: "cannabis*", "*läkemedel*" [*pharmaceuticals*], "*medicin*" [*medicine*], and "marijuana*". The searches were limited to articles published between 1 January 2015 and 13 May 2020. Within this time frame it is possible to cover the recent discussions in Scandinavia about medical cannabis as well as, potentially, discourses on medical cannabis deriving from discussions on cannabis legalisation in different countries.

All articles fulfilling both of the following criteria were included in the sample: (1) they centre on cannabis or (illicit) drugs in the title or the lead paragraph, and (2) somewhere in the article (including in information boxes), they link cannabis to medicine or therapeutic use, or refer to medical cannabis. Survey articles (where random people are asked a question about cannabis) were excluded (four items).

In total, 134 articles were included in the sample (*AB*: 24, *DN*: 36, *Exp*: 21, *SvD*: 53). The sample includes a broad set of subgenres and discourse types, such as news articles (national, international, economy, and sports), news columns, feature articles, entertainment articles, health/lifestyle articles, editorials, debate articles, cultural columns, letters to the editor, and front-page blurbs. The length of the articles varies from blurbs, briefs, and regular news articles to feature articles of several pages.

Data analysis

The general goal with the discourse analysis was to identify how medical cannabis is recontextualised in the media and what discourses, topics, and perspectives are salient. This objective was fulfilled by manually analysing the following categories:

- *Article type and author/source.* Registration of the surface elements (Carvalho, 2008): subgenre and type of article (for example, news article in the national section) as well as the author or source (in-house journalist or external source).

- *Topics.* Identification of the topics – the "most important information of a discourse" (van Dijk, 2009, p. 68). Topics commonly appear in headlines and lead paragraphs, and the task here was to identify how medical cannabis is linked to a specific topic and what contexts the topics draw from. Here, I differentiated between macro-topics (e.g., business, medicine) and specific topics related to the reported event.

- *The characteristics of medical cannabis.* What are the characteristics attributed to medical cannabis, how are the medical potentials of medical cannabis warranted, and which problems are attributed to medical cannabis? Central here was linking the different characterisations with specific actors, voices, and discourses, and the different degrees of "framing power" (Carvalho, 2008, p. 168) given to different actors.

- *Lexical choices.* In relation to the analysis of topics and characteristics, the analysis has highlighted the use of specific concepts, terms, and loaded words to identify how medical cannabis is linked to specific contexts, values, and positions (Carvalho, 2008).

- *Visuals.* What visual elements accompany the article, and how is medical cannabis represented visually? The visual analysis here focuses on the most salient objects in the visuals (see Machin & Mayr, 2012).

- *Ideological standpoints.* Ideology is here understood in a broad sense, as an "overarching aspect" of a text (Carvalho, 2008, p. 170). What overall positions and views on medical cannabis are in the forefront and which ones are backgrounded in the article? This is inferred by the sum of the analyses above (Carvalho, 2008).

It is important to stress that the different analytical steps are interconnected and cannot be viewed in isolation, and that the objective is to make the analysis informative for understanding recontextualisation and the discourses, topics, and perspectives offered in the construction of medical cannabis. It is also important to underline that the analysis is qualitative, seeking to see the complexity of the media discourse on medical cannabis and show nuances of the media discourse. Specific elements and patterns in the discourse have been followed up, for example, whether specific terms or discourses stand out and what topics are important for constructing medical cannabis in the media.

Moreover, it must be highlighted that discourse analysis is an interpretative method. For the sake of transparency, the presentation of results therefore quotes the materials extensively so the reader can judge the analytical points being made.

Results

On a general level, the construction of medical cannabis in Swedish newspapers is multifaceted, in the sense that it appears across themes and subgenres and involves different discourses, actors, and perspectives. Being medical *cannabis*, it more or less inherits a context of prohibition and association with social problems, which to some extent conditions how medical cannabis is constructed. To understand the recontextualisation of medical cannabis in the news media, it is therefore important to elucidate how the different discourses are interrelated (cf. Kępski, 2020; Sznitman & Lewis, 2015).

Three themes generated from the analysis will be presented: the construction of medical cannabis in relation to different topics; ambiguous constructions of medical cannabis; and different ways of discursively proving the medical effects of cannabis.

Medical cannabis in relation to different topics

Central for understanding the recontextualisation of medical cannabis is to identify which topics it is constructed around, because the topics to some extent set the framework for what is brought up in an article and what discourses are made relevant. In general, three macro-topics dominate the analysed materials: medicine and health, policy, and business, although law and entertainment also appear recurrently.[1] Medical cannabis appears many times as a subordinate theme and/or is mentioned briefly when cannabis is treated in a broader sense, although, as shown in Table 1, it also features as the focal point of some articles.

The diversity of macro-topics and of sub-genres mainly indicates two things. First, it means that medical cannabis is not a taboo topic in the Swedish press but can be regarded as a topic of legitimate controversy (Hallin, 1989). Second, medical cannabis is ascribed meaning in relation to different contexts and discourses, which in turn shape the ways in which it is treated.

Articles centring on medicine, for example, tend to provide insights into the therapeutic effects of cannabis, the symptoms it is relevant for, and sometimes into the status of medical cannabis in science. Here, discourses relevant in a medico-scientific context are also relevant for the media. An example of this is found in the article "Little evidence that cannabis is pain relieving" (*DN*, 16 August 2017), where the lead paragraph states, "Medical cannabis has become accessible in more and more countries. It is often used against pain. But the scientific basis for most pain conditions is weak, a new study shows".[2] This article, written by the *DN* medical reporter, links medical cannabis to pain relief as early as the second sentence, and in the third sentence it links medical cannabis to a scientific context and points out a specific study. The scientific focus becomes more apparent when a professor in biological research on drug dependence is quoted as the only actor, highlighting the scientific uncertainties around medical cannabis.

In contrast, some articles centring on policy, especially those about international events, construct the medical aspects of cannabis in a more distant manner. An example is the article "Medical marijuana legal in Thailand" (*Exp*, 27 December 2018), where the focus is on the novelty of the policy and on how Thailand's position differs from that of other countries in the region. The lead paragraph states that "Thailand becomes the first country in South East Asia to loosen its severe laws around marijuana. At the same time, its neighbour countries still have the death penalty for those who smuggle the drug, writes the *Daily Mail*" (*Exp*, 27 December 2018). Rather than specifying the medical potentials of the substance, the article frames the permission to use medical cannabis as a loosening of strict drug policies.

This type of abstract construction of medical cannabis can also be noted in many business-centred articles, which not only appear in the economy pages but sometimes also in the sports and international news sections. For example, in an economy brief about an investment in the cannabis industry, it is stated that "The investment is placed in the company Surterra Wellness, which operates in medical cannabis" (*DN*, 8 August 2018). Such a construction reduces medical cannabis to a type of commodity. Another business article, about the company Stenocare, states that they sell "cannabis products for pain relief to Danish hospitals" (*Exp*, 26 October 2018). Although this construction provides more information about the function of medical cannabis, it is primarily made relevant as a commodity.

Ambiguous constructions of medical cannabis

Looking more precisely at the ways in which medical cannabis is ascribed meaning in the analysed materials, this study finds that it is many times vaguely and ambiguously

Table 1. Examples of macro-topics and specific topics of articles with medical cannabis (MC) as the main focus. Subgenre, actors, and main construction relate to the specific topic stated. The journalistic voice is excluded. Examples of specific topics and main constructions are summaries, not quotations. The examples were chosen with the aim of showing variation in the materials.

Macro-topic	Specific topic	Subgenre	Actors speaking on MC	Main construction of MC
		AB		
Entertainment	Star uses cannabis for pains	Entertainment	Celebrity/patient	MC to self-medicate
Policy	Cannabis helped against pains	Debate	Citizen/patient	Cannabis can help against pain and anxiety
Labour market	Job ad about cannabis	Sw. news	State agency, business	Ad about MC is controversial
Law	Forbidden to marketise MC	Sw. news	(Other newspaper is referred to)	One cannabis medication is allowed. Company warned for marketising MC services
Lifestyle/ health	Cannabis in health products	Lifestyle	Medical/scientific	Some say cannabis has healing effects
Medicine	Patients licensed MC	Sw. news	Patient, medical/ scientific	MC to relieve pains
Policy	MC in Thailand	Int. news	Political	MC as a new policy
		DN		
Business	Wrigley to invest in MC	Economy	Business	MC as commodity, abstract
Law	Sentenced for growing cannabis for medical use	Sw. news	Citizen/patient, juridical, medical	Medicine vs. Swedish law
Medicine	Cannabis medication for children to be allowed	Sw. news	Medical/scientific	MC to be used against specific illness
Medicine	Danish doctors divided on MC	Int. news	Medical, patient, business	Debate on the medical effectiveness of MC
Policy	Give sick MC	Letter to the editor	Citizen/patient	Cannabis helps with anxiety
		Exp		
Business	Cannabis corporation oversubscribed	Business	Economic	MC as a commodity, against pain
Entertainment	Tina Thörner uses cannabis for pains	Entertainment	Celebrity	Uses cannabis oil for pain
Medicine	More get cannabis by prescription	Sw. news	Business, scientific	Evidence on MC unclear
Sports/ business	Floyd Landis sells cannabis products	Sports	Business/celebrity	MC helps Landis's health, also a commodity

(continued)

Table 1. (continued)

Macro-topic	Specific topic	Subgenre	Actors speaking on MC	Main construction of MC
		SvD		
Business/health	Enterprise wants to open cannabis clinic in Sweden	Sw. news	Business, scientific	Dispute over medical effects
Business	Cannabis the new gold	Culture (feature)	Scientific, citizen/patient, business	CBD and health, and as business
Medicine	Cannabis medication to be allowed	Sw. news	Scientific	Specific medication
Law	CBD oil sold but is prohibited	Sw. news	Scientific	Some oils are questionable
Policy/medicine	Long waits for MC	Sw. news	Scientific, citizen/patient	MC against certain conditions

Notes. AB = Aftonbladet; DN = Dagens Nyheter; Exp = Expressen; SvD = Svenska Dagbladet.

constructed in relation to two things: how the media explain what medical cannabis is, and how it is differentiated from cannabis as a recreational drug.

In relation to explanation and specification, several articles, especially briefs or articles that do not focus specifically on medical cannabis, refer to medical cannabis in passing. For example, one brief states that "Germany will legalise cannabis for medical use early next year, according to the minister of health, Hermann Groehe" (*DN*, 4 May 2016). Another brief states that "The epilepsy hospital Filadelfia in Danish Dianalund has begun treating patients with medical cannabis, DR Sjælland reports", and the article also uses the term "cannabis medication" (*DN*, 1 February 2017). Although the use of the term "medical cannabis" (or related terms such as "cannabis for medical use" or "cannabis medication") serves to distinguish this form of cannabis from cannabis for recreational use, the term obscures what type of medicine is specifically being referred to. If this is not explained, the reader remains uninformed as to whether it is herbal cannabis, specific medicines containing cannabis extracts, or medicaments containing cannabis. This type of collective reference has the effect of ascribing cannabis

medical potential in a routine manner and making it abstract. Such constructions can be compared to the article headlined "Cannabis product for children may be allowed", where the body text states that "It is the medication Epidiolex that will be allowed to be sold", and later that "The medication contains the cannabis substance CBD, but not the substance THC, which can cause hallucinogenic effects" (*Exp*, 20 August 2019). This later article focuses on a specific medicine, aimed at specific patients, and details how cannabis is constituted in the medicine, instead of making general references to medical cannabis.

Previous studies (Kępski, 2020; Sznitman & Lewis, 2015) have highlighted how media discourses on medical cannabis are differentiated from discourses on, most notably, illicit drugs. This is to some extent also demonstrated above, in articles that have a clear focus on the medical aspect of cannabis. However, this study also finds constructions where the boundaries between medical and recreational cannabis are blurred, which means that traditional notions of cannabis (as something controversial) play an important role in the process of recontextualisation and the reframing that is attached to it (see Reisigl & Wodak, 2009).

For example, a news brief states in the headline that "Zimbabwe legalises cannabis" (*DN*, 29 April 2018); a formulation that does not specify the form of the legalisation, and in light of other recent legalisation initiatives (Canada, Uruguay, several US states), it can give the impression that it is recreational cannabis that has been legalised. However, the first sentence of the brief specifies that it is the "production of cannabis for medical use" that has been legalised (*DN*, 29 April 2018). A similar construction is found in the brief "Cannabis legalisation imminent in Germany" (*DN*, 4 May 2016), whose body text reveals that the initiative concerns medical cannabis. Such constructions blur the boundaries between medical and recreational cannabis. Similarly, the article "Several countries allow cannabis" (*SvD*, 14 February 2019), which serves to contextualise how cannabis is allowed in different countries, centres on legal cannabis as such, treating medical cannabis and recreational cannabis as two ways of allowing cannabis. In relation to the US, it states that:

> In the US the drug is forbidden on a federal level, but about half of the states have created their own rules. The state of Colorado became the first in the US to decriminalise cannabis use in 2014. The states of Alaska, California, Maine, Massachusetts, Michigan, Nevada, Oregon, Vermont, and Washington, as well as the capital Washington, D.C., have then followed suit. The New York governor Andrew Cuomo also wants cannabis to be legal in his state. Most of the other states allow limited use of medical cannabis. (*SvD*, 14 February 2019)

By focusing on legal cannabis in general, the article presents medical cannabis as one of several allowable uses of cannabis rather than placing it in a context of other medicines. Another example can be found in the article "Premiere for legal cannabis in Thailand", where the lead paragraph states that "If you use cannabis in Thailand you will risk the death penalty. If it is not for medical purposes. Yesterday the first doses came to the country" (*AB*, 9 August 2019). Again, the focus is on cannabis viewed broadly, subordinating cannabis used for medical purposes to cannabis used for any purpose. It is also worth underlining that some articles that refer to medical cannabis also use the word "drug" (*drog/drogen* in Swedish, which connotes illicit drugs) to refer to cannabis in general. This is the case in this article about Thailand, as well as in the *SvD* article quoted above. Such lexical choices also serve to blur the differences between medical cannabis and cannabis-as-a-drug.

The visuals used in the articles – and especially the choice of depicting the symbolic cannabis plant or its leaf – can in some instances also serve this type of ambiguity. Such visualisation occurs mainly in articles that textually do not focus primarily on medical cannabis. However, the article "Patients have gotten cannabis by prescription" (*AB*, 13 February 2017), focusing on medical cannabis, includes a photograph centred on a cannabis plant, something that captures cannabis in general more than the medicine being reported about (Bediol, herbal cannabis packaged in a plastic container). Such a visualisation can be contrasted with the article "Cannabis product may be allowed" (*SvD*, 20 August 2019), which is illustrated with a photograph taken inside a pharmacy, where one sees a shelf full of medicine containers and a person seen from behind reaching for medicines on the shelf. In this example, the visual representation serves to place medical cannabis in a pharmaceutical context.

Proving the medical effects of cannabis

An important dimension of the media's recontextualisation of medical cannabis is how the medical potential of it is constructed and what discourses constitute the basis of this. Here, three ways of constructing the medical potential of cannabis are presented: witness discourse, strong science discourse, and weak science discourse.

An important perspective on medical cannabis in the media is patients' accounts, which provide authenticity to the reports, and discursively prove the medical effect of cannabis. The materials offer several instances in news, features, and opinion pieces where users of cannabis, both in Sweden and abroad, attest to the medical effects of cannabis. In the article "Increased pressure for legal cannabis" (*SvD*, 21 January 2015), a key actor is a man who is said to (illegally) have self-medicated with cannabis.

> Jens Waldmann is one of the people who want to allow marijuana for medical use. After years of depression and anxiety, he was given a long list of prescription medicines. He claims that the only effect was that he became addicted.
>   – In the end I felt that I could not waste my life being in the foetal position, he says.
>   When he faced the choice of starting with strong and addictive benzodiazepines, he instead started to self-medicate with cannabis that he grew at home. He smoked twice a week, and he claims that this meant that he could manage his life. Jens Waldmann got married, had children, and opened a tattoo studio.
>   – As concerns side effects, I have not noticed any. Well, except that the police came and took me, he says. (*SvD*, 21 January 2015)

Although Waldmann's use of cannabis is not medical in a strict sense because it has not been sanctioned by a doctor, his account, in conjunction with the journalistic voice, medicalises (Pedersen & Sandberg, 2013) his cannabis use. Also, the journalistic voice uses the term "self-medicate" to refer to his cannabis use, which serves to discursively provide him the status of a patient. Waldmann's experience is a positive one, as are many of the patients' experiences of cannabis for therapeutic use quoted in the materials (see Lewis et al., 2015).

Another way of making arguments credible is linking them to science. Carvalho (2005) calls the strategy of placing discourse in a scientific context *scientification*. In this analysis, I found this strategy to be important for ascribing credibility to different statements about the medical effect of cannabis. Two ways in which scientification appears need to be highlighted. One is strong science discourse, which links a statement either to specific voices in the scientific and medical community or to specific studies. The other is weak science discourse, which links a statement to science in a much looser way.

In a news feature about divided opinions on medical cannabis in Denmark, strong science discourse is used both to prove the medical potential of cannabis and to construct uncertainty around it. The article quotes physician and clinic owner Tina Horsted as saying,

> – There is plenty of international research that shows that cannabis has positive effects, among others, on people with spinal cord injuries and among cancer patients against nausea and vomiting during chemotherapy. In addition, there are fewer side effects than with the use of several other analgesic medications. The only times that we have seen side effects are when patients have overdosed, and then it has mainly been about hallucinations, she says. (*DN*, 3 November 2018)

Although an entrepreneur, Horsted also has scientific expertise, being a physician treating patients with cannabis. In this quotation, she proves the medical effects of cannabis, although in vague terms, by referring to "international research", and can also provide an experience-based account of the risks of medical cannabis, which are said to be minor. Horsted's positive approach to cannabis in the same article offsets the perspectives of Anders Beich, the president of the Danish College of General Practitioners. Beich constructs scientific uncertainty around medical cannabis when he is quoted as saying that "We are expected to prescribe preparations that are not approved as medication. Myself, I say no if the patients ask me. I lack both the experience and scientific basis to lean against" (*DN*, 3 November 2018). In the same article, the journalistic voice explains that the state of the art on medical

cannabis is unclear due to the difficulties of researching something that is considered an illegal drug, and it goes on to say, "But according to a study published in The National Academic Press [*sic*] in 2017, the active substances in the cannabis plant can lessen pain symptoms for, among others, adult patients with chronic pain", adding that the positive effects are "modest" according to the study (*DN*, 3 November 2018). In this way, the journalistic voice provides the reader with a close, although limited, insight into what research says on medical cannabis, a strategy that also serves to bridge the claims of the other two speakers.

In contrast to what is shown above, the materials also offer examples of weak science discourse, which can be found, for example, in entertainment articles about a Swedish artist who admits having a liberal view on cannabis. In one article the artist says that "people who do studies have shown that cannabinoids are very healing for, among other things, seizures, cancer, skin diseases and headaches" (*Exp*, 23 February 2017). In another article, the artist states that cannabinoids "can heal pain, depression, counteract cancer—and if you have anorexia, it can be very good to smoke to get back your appetite" (*AB*, 15 February 2017). The latter article is supplemented by one where a representative of the Swedish Medical Products Agency problematises the artist's statements on cannabis as well as the scientific basis of medical cannabis. He is quoted as saying, for example, that "To claim that anorexia nervosa can be treated with cannabis sounds like an oversimplification" (*AB*, 15 February 2017). The weak scientific statements of the artist are here countered by an expert with links to the scientific community (strong scientific discourse). A similar example is found in an article that focuses on a company's attempts to open cannabis clinics in Sweden. The press contact of the company is quoted, for example, as referring to "extensive studies done around the world", and saying that it is possible to observe an "increasingly interesting and important study research where opiates can be phased out

for cannabinoids" (*SvD*, 6 January 2020). Which studies this representative refers to remain unknown, while many of his statements are offset by a quoted professor who specifically refers to a meta-study on medical cannabis. In this way, strong science discourse is used to counteract weak science discourse. Similar constructions have been noted in previous studies (Abalo, 2019a).

Concluding discussion

With the aim of understanding how the news media recontextualise the medical potential of cannabis, this study shows a dynamic treatment of medical cannabis in Swedish newspapers, where medical cannabis is established as a topic of legitimate controversy (Hallin, 1989). The therapeutic use of cannabis constitutes the main focus in several articles across the studied newspapers, although medical cannabis many times is given minor attention in relation to broader accounts on cannabis and illicit drugs. Here, it is worth noting that the conservative newspaper *SvD* has published much about cannabis and drug policy, which indicates an interest in the topic, but perhaps also a latent will for policy change. This is interesting because conservatives in Sweden have historically played an important role in pushing for harsher drug policies (Lenke & Olsson, 2002). It is also worth noting that *AB* (independently social democratic) and *Exp* (independently liberal), unlike the other two newspapers, have in their editorial pages expressed the need for a more pragmatic take on medical use of cannabis, although briefly and on single occasions. All of this needs to be understood in the context of increased tolerance towards medical cannabis in many countries – not least in neighbouring Denmark – an increased (international) tolerance towards cannabis as a recreational drug, and the growing debate about Swedish drug policy in general and the suitability of cannabis as medicine specifically. This echoes Månsson's (2016, p. 280) claim that "novel ways of handling and discussing cannabis

abroad may challenge prohibitionist Swedish constructions of the substance", as well as Swedish studies that have shown the turn to, and the establishment of, a more pluralistic discussion of cannabis in the media (Abalo, 2019a, 2019b; Månsson, 2016).

The study suggests that, in the Swedish media, cannabis is not treated as either medicine or illicit drug, but that medical cannabis is often intertwined with discourses about cannabis as a recreational drug (cf. Kępski, 2020; Sznitman & Lewis, 2015). The media also have difficulty in expressing a sensitivity for the varieties of medical cannabis, and, at times, they also have trouble discursively separating cannabis taken as a medication and that used for recreation.

Although this has consequences for how medical cannabis is given meaning, this ambiguity nevertheless is an expression of the dialectical relation between discourses and their surrounding contexts (Fairclough, 2009). Cannabis is itself a polysemic and ambiguous signifier, whose meaning very much depends on the context in which it is framed. Its historical association with illicit drugs has loaded the term in a way that makes it difficult to totally separate medicines deriving from the cannabis plant from associations to illicit drugs. This substance-centrism is good for the media because it makes (medical) cannabis a hot topic, something that serves the commercial logic of the media (see Karidi, 2018), although it also leads to ambiguities concerning the meaning of medical cannabis. Moreover, this ambiguity is also informed by how the medical potential of cannabis is treated by its proponents. Some tend to medicalise their cannabis use (Pedersen & Sandberg, 2013; Zarhin et al., 2018), something that this study also shows examples of, which serves to blur the boundaries between cannabis prescribed by a doctor and other types of cannabis. Furthermore, there is an industry with commercial interests in medical cannabis, something that in turn affects its discourse. Previous studies (Abalo, 2019b; Månsson, 2016) have shown the emergence of

economic discourses in relation to cannabis in Swedish newspapers, something that is also visible in relation to medical cannabis. When treated in an economic or business context, the medical dimensions of cannabis tend to be backgrounded, which also hinders achieving clarity on what medical cannabis really is. On top of this, scientific uncertainty and disputes exist between medical experts over the effects of cannabis as a medication, which complicates the task for the media even more. However, the problems of reporting on science-related topics transcend medical cannabis (see Allan, 2002; Boykoff & Boykoff, 2004; Lidskog & Olausson, 2013; Prosser, 2010; Schäfer, 2017; Tieberghien, 2014).

The problem of the media lies in how to tame the polysemy inherent in medical cannabis as a term and concept, in order to avoid ambiguity and to provide clear-cut understandings of it. Few, if any, reporters in a newsroom are trained to evaluate the quality of a study or the scientific accuracy of different statements and propositions. And even if the knowledge is there, it is far from certain that there would be time available for such evaluation. This study has shown strategies to deal with these issues; one such strategy is to pit weak science discourse against strong science discourse, a strategy that is not always employed.

It is important to stress that the difficulties of the media do not diminish their responsibility. Media discourse can play a significant role in how drug policy is shaped (Acevedo, 2007; Tieberghien, 2014), and the association of cannabis with medicine has the potential of legitimising cannabis in a broader sense (Lewis & Sznitman, 2019). Although none of the analysed newspapers have embraced the liberalisation of either cannabis or medical cannabis, the study's results show that the media offer room for both proponents and critics of medical cannabis, and for both facts and ambiguity. In a situation where the meaning of cannabis is being renegotiated across the world, it is important that the news media reflect on their own role in shaping the

public's varied understandings of medical cannabis.

Limitations

A limitation with this study, aside from that it only studies Swedish news media – and not media more broadly – and only qualitatively, is that it examines neither the production side of the media nor the consumption of media content. Future research on drugs and the media needs to focus more on these two dimensions. Knowledge about how newsrooms and other media organisations discuss, organise, and routinise content about drugs is important for understanding how drugs become a topic in the public sphere. In relation to this, it would also be fruitful to investigate journalists' understandings of cannabis-related questions. Furthermore, examining how media consumers in the Nordic countries make sense of media content on drugs, especially cannabis, can enrich our understanding of the power of the media for making sense of drugs in these seemingly changing times.

ORCID iD

Ernesto Abalo https://orcid.org/0000-0001-9515-4691

Supplemental material

Supplemental material for this article is available online.

Notes

1. It should be noted that the topics were identified inductively, without any strict coding.
2. All excerpts have been translated into English by the author.

References

Abalo, E. (2019a). Rifts in the hegemony: Swedish news journalism on cannabis legalization. *Journalism Studies*, *20*(11), 1617–1634. doi: 10.1080/1461670X.2018.1533416.

Abalo, E. (2019b). Struck by the potentials of cannabusiness: Exploring the relationship between neoliberal ideology and journalism in the reporting on legal cannabis. *tripleC (communication, capitalism & critique) Journal for a Global Sustainable Information Society*, *17*(1), 86–100. doi: https://doi.org/10.31269/triplec.v17i1.1070

Abuhasira, R., Shbiro, L., & Landschaft, Y. (2018). Medical use of cannabis and cannabinoids containing products: Regulations in Europe and North America. *European Journal of Internal Medicine*, *49*, 2–6. https://doi.org/10.1016/j.ejim.2018.01.001

Acevedo, B. (2007). Creating the cannabis user: A post-structuralist analysis of the re-classification of cannabis in the United Kingdom (2004–2005). *International Journal of Drug Policy*, *18*(3), 177–186. https://doi.org/10.1016/j.drugpo.2006.11.008

Allan, S. (2002). *Media, risk and science*. Open University Press.

Boykoff, M. T., & Boykoff, J. M. (2004). Balance as bias: Global warming and the US prestige press. *Global Environmental Change*, *14*(2), 125–136. https://doi.org/10.1016/j.gloenvcha.2003.10.001

Carvalho, A. (2005). Representing the politics of the greenhouse effect: Discursive strategies in the British media. *Critical Discourse Studies*, *2*(1), 1–29. https://doi.org/10.1080/17405900500052143

Carvalho, A. (2008). Media(ted) discourse and society: Rethinking the framework of critical discourse analysis. *Journalism Studies*, *9*(2), 161–177. https://doi.org/10.1080/14616700701848162

Davis, A. (2010). Politics, journalism and new media: Virtual iron cages in the new culture of capitalism. In N. Fenton (Ed.), *New media, old news: Journalism & democracy in the digital age* (pp. 121–137). Sage.

EMCDDA. (European Monitoring Center for Drugs and Drug Addiction). (2018). *Medical use of*

cannabis and cannabinoids: Questions and answers for policymaking. December 2018. EMCDDA. https://www.emcdda.europa.eu/system/files/publications/10171/20185584_TD0618186ENN_PDF.pdf

EMCDDA. (European Monitoring Center for Drugs and Drug Addiction). (2019). *Sweden country drug report 2019*. EMCDDA. https://www.emcdda.europa.eu/system/files/publications/11354/sweden-cdr-2019_0.pdf

Fairclough, N. (1995). *Media discourse*. Edward Arnold.

Fairclough, N. (2009). A dialectical-relational approach to critical discourse analysis in social research. In R. Wodak & M. Meyer (Eds.), *Methods of critical discourse analysis* (pp. 162–186). Sage.

Goldberg, T. (2004). The evolution of Swedish drug policy. *The Journal of Drug Issues*, *34*(3), 551–576. https://doi.org/10.1177%2F002204260403400305

Haines-Saah, R. J., Johnson, J. L., Repta, R., Ostry, A., Young, M. L., Shoveller, J., Sawatzky, R., Greaves, L., & Ratner, P. A. (2014). The privileged normalization of marijuana use: An analysis of Canadian newspaper reporting, 1997–2007. *Critical Public Health*, *24*(1), 47–61. https://dx.doi.org/10.1080%2F09581596.2013.771812

Hall, S., Critcher, C., Jefferson, T., Clarke, J., & Roberts, B. (2013). *Policing the crisis: Mugging, the state, and law and order* (2nd ed.). Macmillan.

Hallin, D. C. (1989). *The uncensored war: The media and Vietnam*. University of California Press.

Hedlund, F. (2019, June 19). Användningen av medicinsk cannabis ökar [The use of medical cannabis is increasing]. *Läkartidningen*. https://lakartidningen.se/aktuellt/nyheter/2019/06/anvandningen-av-medicinsk-cannabis-okar/

Karidi, M. (2018). News media logic on the move? *Journalism Studies*, *19*(9), 1237–1256. https://doi.org/10.1080/1461670X.2016.1266281

Kępski, P. (2020). Defining "the marijuana problem": An analysis of the Polish daily press, 2015–2016. *Nordic Studies on Alcohol and Drugs*. Advance online publication. https://doi.org/10.1177/1455072520936807

Kim, H., & Kim, S.-H. (2018). Framing marijuana: How US newspapers frame marijuana legalization stories (1995–2014). *Preventive Medicine Reports*, *11*(2018), 196–201. https://doi.org/10.1016/j.pmedr.2018.07.003

Lenke, L., & Olsson, B. (2002). Swedish drug policy in the twenty-first century: A policy model going astray. *Annals of the American Academy of Political and Social Science*, *582*(1), 64–79. https://doi.org/10.1177%2F000271620258200105

Lewis, N., Broitman, D., & Sznitman, S. R. (2015). Medical cannabis: A framing analysis of Israeli newspaper coverage. *Science Communication*, *37*(6), 675–702. https://doi.org/10.1177/1075547015608507

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. https://doi.org/10.1016/j.drugpo.2019.01.005

Lidskog, R., & Olausson, U. (2013). To spray or not to spray: The discursive construction of contested environmental issues in the news media. *Discourse, Context and Media*, *2*(2013), 123–130. https://doi.org/10.1016/j.dcm.2013.06.001

Machin, D., & Mayr, A. (2012). *How to do critical discourse analysis*. Sage.

Månsson, J. (2016). The same old story? Continuity and change in Swedish print media constructions of cannabis. *Nordic Studies on Alcohol and Drugs*, *33*(3), 267–285. https://doi.org/10.1515%2Fnsad-2016-0021

National Academies of Science, Engineering, and Medicine. (2017). *The health effects of cannabis and cannabinoids: The current state of evidence and recommendations for research*. The National Academies Press. https://doi.org/10.17226/24625

Olausson, U. (2011). "We're the ones to blame": Citizens' representations of climate change and the role of the media. *Environmental Communication*, *5*(3), 281–299. https://doi.org/10.1080/17524032.2011.585026

Olsson, A. (2017, February 13). Marijuana för första gången godkänt som licensläkemedel [Marijuana approved as a license medication for the first time]. *Vårdfokus*. https://www.vardfokus.se/

webbnyheter/2017/februari/marijuana-for-forsta-gangen-godkant-som-licenslakemedel/

Pedersen, W., & Sandberg, S. (2013). The medicalisation of revolt: A sociological analysis of medical cannabis users. *Sociology of Health & Illness*, *35*(17–32). https://doi.org/10.1111/j.1467-9566.2012.01476.x

Prosser, H. (2010). Marvelous medicines and dangerous drugs: The representation of prescription medicine in the UK newsprint media. *Public Understanding of Science*, *19*(1), 52–69. https://doi.org/10.1177/0963662508094100

Reisigl, M., & Wodak, R. (2009). The discourse-historical approach (DHA). In R. Wodak & M. Meyer (Eds.), *Methods of critical discourse analysis* (pp. 87–121). Sage.

Schäfer, M. S. (2017). How changing media structures are affecting science news coverage. In K. H. Jamieson, D. M. Kahan, & D. A. Scheufele (Eds.), *The Oxford handbook of the science of science communication* (Electronic ed.). Oxford University Press. 10.1093/oxfordhb/9780190497620.013.5

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. https://doi.org/10.1016/j.drugpo.2015.01.010

Tham, H. (1992). Narkotikakontroll som nationellt projekt [Narcotics control as national project]. *Nordisk Alkoholtidskrift*, *9*(2), 86–97. https://doi.org/10.1177%2F145507259200900211

Tieberghien, J. (2014). The role of the media in the science-policy nexus: Some critical reflections based on an analysis of the Belgian drug policy debate (1996–2003). *International Journal of Drug Policy*, *25*, 276–281.

Tuchman, G. (1978). *Making news*. Free Press.

van Dijk, T. (2009). Critical discourse studies: A sociocognitive approach. In R. Wodak & M. Meyer (Eds.), *Methods of critical discourse analysis* (pp. 62–86). Sage.

Vickovic, S. G., & Fradella, H. F. (2011). Medical marijuana in the news. *The Southwest Journal of Criminal Justice*, *8*(1), 67–96. http://www.swacj.stonehousestamps.com/swjcj/archives/8.1/Medical%20marijuana.pdf

Ware, M. A. (2020, July 23). Medical cannabis. Encyclopedia Britannica. https://www.britannica.com/science/medical-cannabis

Zarhin, D., Negev, M., Vulfsons, S., & Sznitman, S. R. (2018). Rhetorical and regulatory boundary-work: The case of medical cannabis policy-making in Israel. *Social Science & Medicine*, *217*, 1–9. https://doi.org/10.1016/j.socscimed.2018.09.047