Article

“We Support Harm Reduction”: Frame Analysis of Canadian News Media Coverage of the Opioid Crisis

Lorna Ferguson, Western University
Michelle N. Eliasson, University of Florida

Abstract

This study examines news media framing of the opioid crisis in Canada to advance an understanding of the dominant discourses and identify the narratives shaping public and policymakers’ opinions and preferred solutions. We conducted a content and frame analysis of 2,273 Canadian news articles published between January 2016 and December 2019. The analysis revealed that harm reduction and treatment were the preferred solutions instead of criminalization, and public health framing predominantly occurred. The overall tone emerged as empathetic and softer and, generally, the leading policy choices and opioid crisis were framed contradistinct from past drug epidemics.

Keywords: Opioid Crisis; Media Framing; Frame Analysis; Harm Reduction.
Introduction

News media play a role in shaping ideas about politics, policies, and attitudes concerning ongoing events and issues. This occurs through the selection, salience, agenda-setting, and framing by news media telling the audience what and how to think about events and issues, affecting what is said and by whom, the type of debates, and the preferred solutions (Boyd, 2013; McGinty et al., 2016). For example, in the early 1900s, the opium crisis news coverage involved sensational narratives about Chinese men preying on white women in opium dens and coercing them into opium addiction (Orsini, 2017). Studies show that these narratives established a precedent in the framing and criminalization of drug use and drugs and contributed to the 1908 Opium Act, an ill-advised (i.e., based on sensationalized misinformation) drug law shaped by class, race, and gender fears (Alexander, 2010; Boyd, 2013). Research further documents news coverage having such impacts as the 1980s crack cocaine crisis sensational reportage influencing the criminalization, racial stereotyping, and stigmatization of Black people (Musto, 1987; Alexander, 2010). Therefore, depending upon how news media depict events and issues, public and policymakers’ views on whether something warrants attention and in what ways and how to resolve it can be impacted (Nielsen & Bonn, 2008).

One recent matter garnering significant media attention is the opioid crisis. The opioid crisis is a complex, multifaceted issue intersecting with factors such as mental health, age, sex/gender, location, and race/ethnicity (Astals et al., 2008; Vashishtha et al., 2017). Adding to this complexity, the perception of appropriate solutions to address this crisis for governments, law enforcement, the general public, medicine, pharmacology, community programs, media, public health, and health policy is often incompatible (Morin et al., 2017). To illustrate, supervised injection sites (SISs) are debated. SISs are designated spaces, mobile and permanent, in which people who use drugs can do safely, with access to clean supplies and under the supervision of trained staff who can revive individuals in the event of an overdose (Lofaro & Miller, 2021). Some government officials oppose them and halt their implementation, advocating for enforcement approaches instead (Gee, 2018), whereas certain health professionals emphasize research evidence to highlight their demand, need, and effectiveness (Bambang, 2018; Lofaro & Miller, 2021). Due to varying perspectives, aligning views
and public opinions with research is necessary for developing and implementing policies and programs successfully.

News media highlight and contribute to discrepant such views and tactics as they provide regular examinations of social events and issues for the public and policymakers to understand (Entman, 1989; Nielsen & Bonn, 2008; Orsini, 2017). Most studies conducted on news coverage of the opioid crisis focus on the United States (US). Despite being bordering regions, the US and Canada differ in multiple ways, such as the political, healthcare, and public policy systems, which can be reflected in the mediatic coverage of events and issues (Zhang et al., 2017). Thus, US studies may not be applicable in the Canadian context, emphasizing the need for research in Canada. Existing studies on Canadian news coverage, although limited, examine the opioid crisis through a few perspectives, such as the dichotomous presentation of opioid users and stigmatized language describing the crisis (Webster et al., 2019; Quan et al., 2020; Johnston, 2020). This creates a gap in the Canadian scholarship which our study thus aims to address by employing a new approach, frame analysis by Entman (1993), to examine how Canadian news media frame the opioid crisis. Such research contributes to and extends current research by exploring how news media in Canada assigns blame and advances the problem and frames the causes, judgements, solutions, and treatments.

**Literature review**
*The Opioid Crisis*

Canada has the second-highest per-capita consumption rate of opioids globally (Quan et al., 2020), and the opioid crisis is currently a growing epidemic impacting all Canadian regions. For example, thousands of deaths are caused by opioids each year; between January 2016 and March 2019, an estimated 12,800 Canadians died due to opioid-related overdoses (CIHI, 2020). In addition to these deaths, the opioid crisis caused an average of sixteen hospitalizations a day during 2016 (Belzak & Halverson, 2018). Scholars argue that numerous factors impact and contribute to opioid use, increasing the healthcare system’s challenges with combatting this crisis. For example, Morin and colleagues (2017) found that 87% of opioid users suffered from a mental health disorder in Ontario, thus requiring specialized healthcare resources. Further, this crisis not only impacts individuals who use opioids but also the many families
subjected to opioid use and addiction, influencing health issues, poverty, and other adverse outcomes for affected Canadian communities and institutions (Bardwell et al., 2021).

The global impact of the opioid crisis has captured the attention of news media throughout the last decade and, consequently, influenced a growing body of literature on news media and this crisis. To this end, studies analyzing the news framing of the opioid crisis are mostly US-based (Eichenlaub & Nasher, 2021; Hswen et al., 2020; Lawson & Meyers, 2020; McGinty et al., 2016, 2019; Orsini 2017), with only a few focusing on Canada (Johnston 2020; Matthias et al., 2019; Quan at al., 2020; Webster et al., 2019; Wild et al., 2019) and other countries (i.e., Ghana) (Thompson & Ofori-Parku, 2020). Altogether, such research highlights various trends in how the opioid crisis, opioid users, causes, and solutions are framed and discoursed by news media, acutely, though, from the US context, as the ensuing literature shows.

**News Coverage**

Thematically, the existing scholarship on the opioid crisis news coverage addresses how opioid usage is framed (McGinty et al. 2016), the causes (Eichenlaub & Nasher, 2021), geographical differences (Hswen et al., 2020; Lawson & Meyers, 2020), and preventions, solutions, and treatments (Kennedy-Hendricks et al., 2019; McGinty et al., 2016, Orsini 2017). One such study by McGinty et al. (2016) explores whether opioid use is framed by US news media as a criminal activity or treatable health condition, finding that it is more often framed as a criminal justice issue. The authors also note that opioid-related news coverage often addresses the causes of the opioid crisis as being illegal drug activities. More recently, Eichenlaub and Nasher (2021) further highlight the causes of the opioid crisis are described by US news media as often related to pharmaceutical companies engaging in illegal activity, failures of the medical community, immigrants, and persons experiencing addiction issues. However, when comparing news media reportage of the opioid crisis versus the crack cocaine crisis, Shachar et al. (2020) note that the opioid epidemic is more often discussed concerning medical framing than criminal justice framing, in contrast to the crack cocaine epidemic.
Studies also focus on the various reactions to the opioid crisis. For instance, reactions that are most often mentioned by US news media, according to McGinty et al. (2019), are treatment, harm reduction, and prevention. Contrasting to an earlier study by McGinty and colleagues (2016), wherein US news coverage often pertained to law enforcement efforts to increase arrest rates and the prosecution of persons addicted to opioids as a way of addressing this crisis. Orsini (2017) similarly shows that news media primarily focus on covering stories related to drug seizures and efforts to decrease the supply of opioids. Regarding public health and harm reduction approaches, news media often report on SISs and syringe service programs (McGinty et al., 2019) and other medical-related treatments and preventions to decrease opioid usage and the crisis (Kennedy-Hendricks et al., 2019). Legal responses to the opioid epidemic remain the focus of news coverage; indeed, the news media frames are often related to criminal justice terms (Orsini, 2017).

One of the empirical trends within the existing scholarship is that there are specific ways that the media portrays individuals who use opioids. Webster et al. (2019) highlight a dichotomous presentation of opioid users as either individuals “innocently” following the order of doctors who prescribed medications or users that are addicted and involved in street crime. These dichotomies are further explored by Johnston (2020) by examining the racialization of opioid users in Canadian news media, finding that race/ethnicity impacts how opioid users are portrayed. Notably, white people surfaced as described as innocent victims, and Indigenous peoples are systematically ignored, stigmatized, and labelled addicts (Johnston, 2020).

Beyond exploring how users are depicted, studies also examine changes in news media’s portrayal of the opioid crisis. For example, Quan et al. (2020) performed a longitudinal study using social representation theory, discovering that the language used to describe opioid use has become less stigmatized over time, and the blame is attributed to pharmaceutical companies, doctors, and foreign countries. Additionally, Quan et al. (2020) explore the frequency of Canadian news coverage and find an increase in opioid-related articles in 2009, 2012, and 2016, coinciding with significant developments in the opioid crisis. Wild et al. (2019) similarly highlight an increase in Canadian news coverage during 2008 and 2016, revealing that health perspectives were more common than criminal perspectives. The varying information shared within news reportage and how news articles present and frame scientific information on the
opioid crisis are also explored. Matthias et al. (2019) use data from nine US and Canadian news outlets, finding that information about the opioid crisis is presented factually; however, there is rarely enough detail for the reader to assess the material critically.

On the whole, as shown, there is a larger quantity of US-based research on news coverage of the opioid crisis, and US studies emerged as addressing a more comprehensive range of perspectives, which was reflected in the policy recommendations. In this way, Canadian research appears underdeveloped, with gaps remaining in the literature that would be informative for policy implications and public perceptions, specifically regarding how the solutions, treatment, and causes are framed by news media. This study seeks to address this gap and offer a new approach through frame analysis to extend the current research base.

**Method**

This study used content analysis to examine the opioid crisis Canadian news coverage. Content analysis is a systematic approach to analyzing message characteristics (Neuendorf, 2002) often used in historical, communication, and media studies (Orsini, 2015). It is a valuable tool for analyzing existing cultural texts and information to gain understanding and insight into the society in which they are produced (Hesse-Biber & Leavy, 2011). For this, our sample involves news articles published from January 1, 2016, to December 31, 2019, available through the Canadian Major Dailies database, which gives online access to over thirty of Canada's top regional and national newspapers. Data scraping of this content occurred retroactively¹ for 2016 and 2017 and prospectively for 2018 and 2019.

The content within these news articles was analyzed to address the following research questions: 1. How has the opioid crisis been framed in Canadian news articles?; 2. What is the frequency of the frame elements and frames?; and 3. What is the dominant frame? To answer these questions, we employ a mixed analysis. Specifically, the first research question is addressed by utilizing the theoretical framework (frame analysis) and an iterative approach to reveal patterns in the data.

---

¹ This retroactive data scraping happened throughout 2018.
(frames). The number of times a frame appeared was recorded during the coding process in NVivo 12 software, answering question two. Through this, question three was responded to in that the most chronically coded frame emerged—in other words, the dominant frame.

**Data Collection**

News articles were collected from the Canadian Major Dailies database with a set of search terms. These include, for example, 'opioid crisis,' 'opioid epidemic,' 'opioid use,' 'opioid abuse,' 'opioids,' 'opioid overdose,' 'opiate,' 'naloxone,' 'fentanyl,' and 'carfentanil.' Articles featuring any one or more of these terms within the text (i.e., title, abstract, body) were gathered. The study inclusion criteria involve news articles as the document type, English as the language\(^2\), publication date between January 1, 2016, and December 31, 2019, and the opioid crisis in Canada as the sole focus. With this, 12,137 news articles were first downloaded.

A manual scan was first conducted, whereby headlines and publication dates were revised to rule out duplicates and flag others for closer inspection (e.g., if the headline did not establish a clear link to the opioid crisis). This removed 3,786 news articles. Then, the abstract (if one was present) of the news articles was read; 3,997 news stories were excluded during this review due to applicability and duplication issues. Lastly, the remaining news articles were read in full. Any remaining duplicates were removed at this point. These steps led to the exclusion of 2,081 news articles. Therefore, the final sample consists of 2,273 news articles on the opioid crisis in Canada from over the inclusion period (see Table 1). Consistent with the protocols for media content analysis (Neuendorf, 2002; Orsini, 2017), the articles were documented within an Excel spreadsheet, where basic information on each news article, such as the news site, word count, publication date, author, and title, and other information was detailed.

\(^2\) This occurred given the language constraints of the authors presenting concerns surrounding the use of translation software with an inability to verify the accuracy of such translations.
Table 1. Ranked Composition of the Final Sample of News Sources, 2016-2019 (N=2273)

<table>
<thead>
<tr>
<th>News Source</th>
<th>Total (%)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Globe and Mail</td>
<td>212 (9.3)</td>
</tr>
<tr>
<td>Toronto Star</td>
<td>169 (7.4)</td>
</tr>
<tr>
<td>National Post</td>
<td>161 (7.1)</td>
</tr>
<tr>
<td>The Ottawa Citizen</td>
<td>127 (5.9)</td>
</tr>
<tr>
<td>CBC News</td>
<td>125 (5.5)</td>
</tr>
<tr>
<td>Daily News</td>
<td>116 (5.1)</td>
</tr>
<tr>
<td>Global News</td>
<td>109 (4.8)</td>
</tr>
<tr>
<td>Financial Post</td>
<td>101 (4.4)</td>
</tr>
<tr>
<td>The Montreal Gazette</td>
<td>94 (4.1)</td>
</tr>
<tr>
<td>CTV News</td>
<td>93 (4.1)</td>
</tr>
<tr>
<td>Leader Post</td>
<td>93 (4.1)</td>
</tr>
<tr>
<td>The Province</td>
<td>90 (4.0)</td>
</tr>
<tr>
<td>Sudbury Star</td>
<td>89 (3.9)</td>
</tr>
<tr>
<td>The Leader</td>
<td>89 (3.9)</td>
</tr>
<tr>
<td>Edmonton Journal</td>
<td>85 (3.7)</td>
</tr>
<tr>
<td>Vancouver Sun</td>
<td>72 (3.2)</td>
</tr>
<tr>
<td>Winnipeg Free Press</td>
<td>61 (2.7)</td>
</tr>
<tr>
<td>Calgary Herald</td>
<td>59 (2.6)</td>
</tr>
<tr>
<td>The StarPhoenix</td>
<td>55 (2.4)</td>
</tr>
<tr>
<td>Guardian</td>
<td>53 (2.3)</td>
</tr>
<tr>
<td>Windsor Star</td>
<td>50 (2.2)</td>
</tr>
<tr>
<td>Kamloops This Week</td>
<td>47 (2.1)</td>
</tr>
<tr>
<td>Telegraph-Journal</td>
<td>47 (2.1)</td>
</tr>
<tr>
<td>CityNews</td>
<td>42 (1.8)</td>
</tr>
<tr>
<td>The Canadian Press</td>
<td>34 (1.5)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>2273 (100.0)**</td>
</tr>
</tbody>
</table>

*Percentage is in relation to the final sample.
**Percentages have been rounded and may not total 100.0%.

Data Analysis and Theoretical Framing

Data analysis was undertaken with NVivo 12 software through the following process. First, each news article was manually coded based on four frame elements—problem definition, causal interpretation, moral evaluation, and treatment recommendation—as Entman (1993) informed. In this way, this study uses the frame elements
documented by Entman (1993) to group the frames systematically. *Problem definition* pertains to the fundamental issues and discussions on the problem or debate at hand, such as related to the central topic of the story and its principal actors. *Causal interpretation* involves interpreting and identifying what is influencing and/or responsible for the opioid crisis, including attributing benefits or risks. *Moral evaluation*, which includes advancing moral judgements and reporting on the effects, risks, and benefits of the opioid crisis, was coded when there was an assessment of the factors affecting and creating the problem. This involves secular beliefs, morals, and social prescriptions. Finally, *treatment recommendation* concerns the proposals of remedies, solutions, and treatments for the problem, including their effectiveness.

Upon completion of coding the frame elements, initial codes were operationalized and defined based on prior research\(^3\). These were refined throughout the analysis through an iterative approach. Then, prevalent themes and narratives, topic(s) selected and discussed, keywords, and the nature and extent of each code’s emphasis were examined. Stylistic techniques were also analyzed, such as word choice, quotations, and the mention of groups, organizations, or individuals. Lastly, to classify codes into frames ('frame building'), Matthes and Kohring’s (2008) procedure is employed, requiring researchers to systematically group codes together to result in a pattern interpreted as a frame. Therefore, frame analysis theory provided the frame elements, prior research and direct content analysis revealed the codes, and frames emerged and were refined through iterative analysis and systematic grouping. Arriving at the final frames constructed the coding instrument, which was employed to subsequently code all news articles in the final sample. Lastly, the constant comparison method was utilized, whereby the frames underwent a continual revision process, with the analyzed data being recurrently compared to previously coded news articles (Schulenberg & Chenier, 2014).

**Results**

*Problem Definition*

The majority of news articles defined the problem in the context of opioid-related harms, such as deaths and hospitalizations. This occurred primarily by emphasizing

---

these outcomes through facts, figures, and statistics. For example, one article states "4,460 dead, up from 4,100 in 2017 and 3,017 in 2016" (Forani, 2019). Problem definition was also articulated through stories, which were occasionally used to advance a particular solution or provide a proposal for a solution. An article reporting on Vancouver's battle with the crisis writes that "after 11 people died of drug overdoses in a single week, advocates say they expect more of the same until politicians replace the toxic street supply with safer drugs" (Brown, 2018).

When defining the problem in the context of harm, many news articles point out that men are disproportionately impacted. One example discusses that males "are most at risk" as for "overdose deaths in 2018, only 295 were females. Males accounted for 1,194 deaths" (Petruk, 2019). Other trends specific to men are that the opioid crisis primarily affects those working in the trades and between 19 and 59 (e.g., Slattery, 2016; Johnson, 2017; CBC News, 2019). Some news articles also claim particular race/ethnic groups are affected, such as South Asian people, Indigenous peoples and communities, and white people. Articles subsequently claim a 'hidden epidemic' (Chan, 2018) with race/ethnicity and gender implications that are not addressed or recognized. Others stress that many involved in the opioid crisis have sought help and treatment and accessed health services in the past (e.g., mental health services) and have had previous contact with law enforcement. Alternatively, while many articles detail these patterns, others also describe that the crisis affects everyone. Despite studies stating that the opioid crisis affects specific people and groups with particular backgrounds (see, e.g., Johnston, 2020), media reportage of who is impacted appears not always reflective of such trends.

News articles also defined the problem in the context of government and law enforcement, explicitly surrounding perceived inaction. For instance, one states that “the government’s lack of urgency in dealing with this crisis is negligent and inhumane” (Lawlor et al., 2018). Most articles identifying issues related to government officials and agencies conveyed a negative tone, discussing dissatisfaction with their responses to the crisis. Related to law enforcement, one key topic was equipping police with naloxone. Articles explain that the police oversight agency, the Special Investigations Unit (SIU), had a policy necessitating an investigation into incidents involving naloxone use where the outcome was a citizen overdose and/or death. Multiple articles document police speaking out against this policy as it presents liability concerns and
attempts “to extend its reach by scrutinizing life-saving or medical treatment by police officers” (Yogaretam, 2018). However, when the SIU revised this policy in 2018, articles then drew attention to the agencies and officials not equipped with naloxone as problems. Hence, news articles switched from condemning law enforcement using naloxone to condemning those that did not.

Addiction-related issues also emerged as a problem defined. News articles regularly detailed the number of people addicted to opioids and who battle with addictions. Coverage in this frame was typically relayed episodically and focused on individual experiences. Relatedly, addiction stigma was often discussed. Many articles describe that, due to stigma, there is difficulty understanding addiction and providing adequate/tailored addiction treatments and supports, leading to barriers in accessing help and services. Consequently, several articles outline that people would rather "risk their lives" than seek or reach out for help (Zwarenstein, 2018). Through this, articles focused on altering perceptions on addiction and calling for better and more treatment and support. As one article notes, "I always say that addicts get judgement and anybody who is suffering from another disease gets sympathy. Our son wasn't a bad person, he was a sick person. He suffered from a disease" (Martin, 2018).

Most articles reported a "long way to go" for dealing with drug addiction issues (Valleau, 2019) and minimal treatment opportunities for individuals to overcome addiction. Others emphasize that the general public, and any policies or solutions recommended and implemented, should be more sympathetic to those in the throes of addiction. In terms of the tone, news articles often took an empathetic standpoint regarding this matter, frequently highlighting perspectives that advocate for more services, treatment, support, and sympathy regarding addiction and individuals experiencing addiction. Also, articles define the problem in terms of the comorbidity of addiction and mental illness, stressing that those with mental health challenges are at higher risk of opioid addiction. Lastly, the other problem defined is people experiencing pain and their connection to the opioid crisis. In particular, articles stress that those dealing with pain (i.e., 'pain patients') are not provided with adequate guidance and support, leading to a "war on patients coping with pain" (Mah, 2018), addiction, and physical dependence (e.g., Miller, 2016).
Causal Attribution

Much of the blame for the opioid crisis was assigned to fentanyl and its analogues. While there are many instances of this occurring, some quotes are: "fentanyl [creates] an ‘epidemic within an epidemic’" (Ubelacker, 2017) and “because of fentanyl, every drug is a potential killer” (Young, 2019). Also, illicit drugs were commonly assigned blame. News articles frequently noted that both fentanyl and its analogues and illicit drugs combined are to blame. The current solutions are also indicated as playing a part in the opioid crisis. This blame allocation relates to strategies adopted to manage, prevent, and reduce the associated harms. Multiple articles highlight that the current treatments produce a cyclical effect, wherein individuals are provided with no or only some treatment and do not receive the help needed. Thus, news articles stress that people are stuck continuously interacting with opioids and other drugs, and the opioid crisis is perpetuated. To illustrate, one article writes, "as for the treatment side, which involves weaning people off the powerful synthetic painkillers, 'it's a chronic relapse issue – people may need to try several times'" (Kaufmann, 2018a).

The criminalization of drug use (i.e., through legislation) is also assigned blame. Articles outline that laws can increase the dangers of drug use and put drug users in harm's way; thus, leading to more significant amounts of opioid-related harms. One notes that "'we're losing people every day,' [Dr. Virani] said. 'And that's for a number of reasons: one is the policy framework that criminalizes people who use substances and continues to be an impediment to people actually seeking out care" (Cole, 2018) and another that "the current regulatory regime is ineffective" for curbing the opioid crisis (Ghoussoub & Schmunk, 2019). Additional blames attributed concerning the current approaches are 1. addictions strategies bringing about stigma, a lack of understanding, and mistreatment of those with addiction; 2. treatment for pain management and opioid use disorder is not practical, and a barrier to recovery; 3. naloxone use and practices are unsuccessful at times which places people at risk of overdosing once it has worn off; and 4. prescription practices are contributing to opioid-related harms.

The producers and sellers of opioids were also blamed for the opioid crisis, including legal and illegal opioid manufacturers and dealers. News articles focus on legal producers and sellers and the "aggressive and misleading marketing tactics"
contributing to the crisis (Bains, 2018a). One illustration of this is an article stating that the legal producers and sellers "falsely marketed opioids as less addictive than other pain drugs and helped trigger an overdose crisis that has killed thousands" (Jeffords, 2019). This also relates to physician prescribing practices, whereby the supposed increase in opioids being prescribed and lack of perceived regulation is blamed as the 'origin' of the crisis (Ireland, 2016), with one result being opioids "funneled into the black market" (Humphrey, 2017). Prescription opioids are commonly blamed as the precursor to escalations in drug use, specifically illicit drug use. However, articles typically note both prescriptions and illicit drug use as responsible.

Other health professionals were assigned blame too. Examples of this are: “doctors didn’t set out to do harm, but we helped create the crisis” (Marsden, 2018) and “for dental extractions, for example, non-opioids should be a first line of prescribing; we need to think twice about whether an opioid prescription is needed after wisdom-teeth removal” (Ma, 2019). Notably, there is variance in the tone of reports in this frame: some have a negative tone, whereas other articles, while they hold health professionals responsible for contributing to the crisis, also justify that they mainly did not intend for this consequence to happen.

The remaining causal attribution frames are mixed/contaminated/‘bad’ drugs by illicit producers and sellers, the addictive and powerful nature of opioids, addiction stigma acting as a barrier to accessing help, and a general lack of, and access to, help. Other blame for the crisis is a lack of specialists and treatment for addictions and pain, withdrawal treatment, housing and mental health supports, and adequate space and staff for treatment. The last is issues with accessing treatment. For this, blame is attributed to the high costs for treatment and services preventing access to these services, individual and social factors (e.g., homelessness) resulting in an inability to access treatment and services, suburban and rural patients not being able to access/not having equal access to such facilities, long wait times to access help, and those who live on Indigenous reservations having issues with accessing treatment.

---

4 These were discussed briefly given their infrequent mentioning in the news articles.
Moral Evaluation

Moral evaluations were scarcely offered throughout news articles, with most coverage advancing judgements in the context of specific topics (e.g., harm reduction). One frame emerged as the community's risk in the forms of public safety issues, crime/disorder, and violence. This outlines the implementation of SISs and their risk to the community. For example, a news article that reports on a Calgary senior having concerns about a proposed mobile SIS states that "we already have problems with the Drop-In Centre and if you have a safe-injection, it'll only get worse...A lot of seniors here are scared to death because they can't defend themselves, and there's a lot of families with kids, too" (Kaufmann, 2018b). The general public also conveys fears surrounding whether a mobile unit would "attract more unstable individuals" and being attacked "by a man believed to be high on drugs," as well as worries that the development of SISs "affects property values" (ibid.).

News articles detail that SISs, mobile or permanent, are harmful/damaging to the community as they lead to “needles being found in the local coffee shop bathrooms, in the local park, in the local schoolyard” around the area of these sites (Lunn & Zimonjic, 2016). Others describe how these increase crime and disorder in the areas serviced, fueling property and drug-related crime. Also expressed is that the SISs can create violence and intimidation in communities due to increased open drug dealing in the surrounding area. Further, articles discuss that clients of SISs linger, producing an encampment-style feel outside the facility, which scares residents and children in these areas. Finally, coverage highlights that drug use and users at SISs are likely to affect public safety in other ways, such as through discarded needles around the site and increased bags and shopping carts cluttering sidewalks. Thus, these risks to the community advance the notion that drug use in particular areas designated by these SISs for tackling the opioid crisis is harmful and represents a significant community safety concern.

Moral judgements in articles about drug use present it as "wrong," as reported in previous literature; however, most emerged in favour of, and advocate for, harm reduction. Contrary to the above, news coverage stresses that if SISs are not implemented, the risk to the community will increase. For example, one article reports that "others believe the facility is having a positive impact in Calgary" and "it was
amazing actually how quickly it began that spots that were frequented regularly by drug users were no longer being used" (Wood, 2018). Thus, there are contrasting moral evaluations about risks to the community, both positive and negative in tone.

Health risks are also within this frame element. For example, one article notes that the available figures do not reflect the "new HIV outbreak among people who inject drugs" (Mcphee, 2018). Articles also outline that one of the biggest problems resulting from the crisis is sharing needles, causing sharp increases in other diseases. For instance, articles emphasize that infectious diseases like HIV and hepatitis C are rising (e.g., Krugel, 2017). Prominent concerns relate to people injecting in public, generating fears over discarded needles in the surrounding area, transferring diseases, and drugs in public where others can become exposed.

Stigmatizing language is utilized in the context of drug users throughout articles, albeit infrequently. A few articles referred to users as "junkies." To illustrate, a mother discussing her son, who had recently died due to an opioid overdose, states that "he is a junkie, I get that; But he's also a human being that deserves his life and was taken from us" (Mathieu, 2018). Those described as addicts were not typically stigmatized or demonized in articles, contrary to past crises. Instead, articles report that addiction is a complex disorder that requires harm reduction approaches, treatment, support, and services. Several also equate addiction with disease: "addiction took my wife. Addiction is a disease. No one chooses to be an addict, just like no one chooses to be a diabetic" (Campbell, 2018). These articulations are consistently throughout articles, indicating an empathetic, softer view of this crisis.

Another health risk morally evaluated through an empathetic approach surrounds drug users consuming drugs in unsafe, unclean environments due to opponents of harm reduction approaches halting SISs implementation. To illustrate, one article quotes Dr. Mark Tyndall, the British Columbia Centre for Disease Control executive medical director, stressing: "right now we're asking people to go in back alleys and buy from gangsters, and that just doesn't make any sense this far into the epidemic" (Bains, 2018b). Thus, drug users are portrayed as victims of addiction and substances struggling due to a lack of treatment and in danger due to the current approaches to managing the crisis. This framing departs from previous research on drug narratives, which typically criminalizes drug use and calls for the punishment of
drug use and drug users, indicating a shift toward a public health narrative across many stories (McGinty et al., 2016; 2019). This signifies that moral advancements in news articles concerning drug users and those living with addiction speak for a need for treatment, not criminalization.

Contrary to the framing of drug users, drug dealers are portrayed as predatory and a risk to both communities and health in articles. In an article discussing drug traffickers being arrested, it quotes a spokesperson for Medavie Health Services Wester stating: "you’re not dealing with an ethical person, you’re dealing with a drug dealer. You can’t trust the word of a drug dealer" (Hill, 2018). Articles also note that there should be a zero-tolerance approach to punishing dealers because they "kill thousands of people over their lifetime" (Allen, 2018). Additional discussions state that drug dealers plied youth with free meth samples, do not care about quality control or safe dosages (and therefore do not care about the safety and health of individuals and the communities), swoop in on communities, and pose significant risks to drug users. As a result of these moral advancements, news articles frequently express that drug dealers should be punished harshly. This suggests that news media coverage emphasizes a punitive approach toward drug dealers, whereby law enforcement strategies are the primary solution.

Treatment Recommendation

For recommended treatments, a significant number of news articles cite the "four pillars" strategy to solving the crisis, which includes prevention and education, harm reduction, treatment and recovery, and enforcement and justice (e.g., Cross, 2018; Eliot, 2017; Merali, 2016). Many articles advocate for these approaches to be employed in conjunction and provided with the most resources as the most propitious for tackling the crisis. Although, harm reduction was cited as the leading preferred solution—in essence, a majority of articles advocate for adopting an array of harm reduction approaches. Opponents of harm reduction (e.g., the general public, government officials) typically advanced moral judgements. For instance, as the above documents regarding SISs, news articles featured arguments about harm reduction strategies being harmful to communities, having the propensity to enable drug use and abuse, and sending the wrong message concerning drug use to youth and the general public. Typically, however, the overall tone concerning these approaches is positive,
suggesting that news articles are advancing the position that these will assist with the opioid crisis. Instances of harm reduction being promoted are "hard reduction is a major part of [addressing the opioid crisis]" (Gerein & Clancy, 2016) and "we support harm reduction, access to evidence-based treatment and decriminalization of all drugs for personal consumption" (Junker, 2018).

The primary harm reduction approach covered by news emerged as naloxone. Many articles outline the implementation, use, and widespread distribution of naloxone as a prolific solution to assist with the opioid crisis. As an illustration, one notes that "naloxone is not a cure, or foolproof, but experts agree that as it is pushed out by the provincial government, by cities and public health units, by police services, firefighters, paramedics, pharmacists, and doctors across Canada, it remains central to combating the opioid crisis sweeping the country" and that "naloxone is equipping thousands of people in our community to recognize an emergency and respond in an appropriate way when that emergency happens. That's not just a band-aid, that's a community-wide change" (Beattie, 2018). Articles also discuss that the accessibility of naloxone (i.e., free, being distributed widely, and take-home kits) and the availability of training on how to use them are substantial factors impacting their success.

SISs emerged as another principal harm reduction approach. To note, many articles cite both naloxone and these sites as necessary, suggesting that combining these tactics is preferred. Others outline that SISs and overdose prevention sites are also essential. Articles advance that they can reduce overdoses, spread blood-borne diseases, and provide health care when and where needed. Some also discuss their implementation, impact, and funding allocated to advance this as a preferred solution by showing their demand and effectiveness (e.g., Hampshire, 2016; Larsen, 2016). The following exemplifies this: "International and Canadian evidence shows that, when properly established and maintained, supervised consumption sites save lives and improve health without increasing drug use or crime in the surrounding area" (The Canadian Press, 2017). Articles additionally discuss the need for drug testing services at these sites as another harm reduction tactic employed to tackle the problem of mixed drugs resulting in opioid-related harms. Further, drug testing's widespread availability is offered as a solution as people are not experiencing harm only at supervised injection sites. The remaining harm reduction strategies mentioned in the
news articles are 1. providing a safe, clean supply of drugs; 2. the decriminalization of drugs and drug use; and 3. the use of Suboxone instead of methadone.

The need for treatment was also touted as a solution—that is, a health care/public health approach instead of criminalization or a law enforcement approach. Examples of this occurring are: "When we're looking at treating opioid use, we need to be understanding it through a health lens, not just through a criminal lens ... We have to look at what kinds of treatment options are available for people" (Gerster, 2018) and "Change the approach on the opioid crisis ... treat it as a public health issue instead of a criminal justice issue" (Short, 2019). Thus, news coverage in this frame promotes this as a health crisis, not a criminal issue. Articles also discuss funding allocation and the expansion of treatment and services to solve the opioid crisis. It emerged that comments on treatment and services are used to highlight a need for more, indicate their usage, and show their demand. The remaining in this frame highlights the need for and better access to treatment and services. This occurred specifically for the management of pain, opioid use disorder, those who overdose, those with mental health and addictions issues, and Indigenous-specific and youth-specific treatment and services.

Relatedly, funding and resources were often discussed in the context of treatment being advanced as a solution. Typically, articles report on granted funding to highlight the implementation and support of this solution. Articles also discuss funding as recommended and needed for providing more and better treatment and services. The remaining ways funding is recommended as a solution is for SISSs, better/more health services, improving and increasing access to treatment services, naloxone kits, bolstering the role of physicians, treatment centres, and promoting harm reduction. Thus, funding is recommended as a solution in multiple ways and for many different solution options, suggesting that news articles are advancing that it is necessary to develop or implement the other solutions discussed.

A critical area for funding and resources for combating the opioid crisis was education and training. Most news coverage regarding training relates to naloxone use and administration. News articles specify that training individuals on how to use naloxone in emergency times will reduce opioid-related harm and assist with the opioid crisis. Areas where this training is emphasized are in schools (primary, high
school, and universities and colleges), in libraries, within Indigenous reservations, and for anyone with family and friends struggling with addiction. Regarding education, one of the key points stressed is that children and youth need to be informed about drug use, opioids, and the opioid crisis to reduce youth-specific opioid-related harms. Articles also stress that these educational conversations and messages need to be evidence-based, non-manipulative, and rationally communicated (i.e., unlike "just say no" campaigning) to be effective. Education is further highlighted as a solution for the safe use of prescription opioids, fighting addiction, and opioid prescriptions and consumption.

Frame Element and Frame Frequencies

Table 2. Frame Elements and Frame Frequencies

<table>
<thead>
<tr>
<th>Frame Element</th>
<th>Frame</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem Definition</td>
<td>Topic: Harm</td>
<td>917</td>
</tr>
<tr>
<td></td>
<td>Actor: Government/Law Enforcement</td>
<td>369</td>
</tr>
<tr>
<td></td>
<td>Topic: Addiction</td>
<td>324</td>
</tr>
<tr>
<td></td>
<td>Topic: Pain</td>
<td>199</td>
</tr>
<tr>
<td></td>
<td>Topic: Help/Support/Treatment</td>
<td>131</td>
</tr>
<tr>
<td></td>
<td><strong>Frame Element Total</strong></td>
<td><strong>1940</strong></td>
</tr>
<tr>
<td>Causal Attribution</td>
<td>Attribution: Fentanyl and Analogues</td>
<td>1043</td>
</tr>
<tr>
<td></td>
<td>Attribution: Illicit Drugs</td>
<td>965</td>
</tr>
<tr>
<td></td>
<td>Attribution: Current Approach</td>
<td>932</td>
</tr>
<tr>
<td></td>
<td>Attribution: Producers and Sellers</td>
<td>657</td>
</tr>
<tr>
<td></td>
<td>Attribution: Prescriptions</td>
<td>611</td>
</tr>
<tr>
<td></td>
<td>Attribution: Health Professionals</td>
<td>567</td>
</tr>
<tr>
<td></td>
<td>Attribution: Mixed Drugs</td>
<td>529</td>
</tr>
<tr>
<td></td>
<td>Attribution: Addiction</td>
<td>479</td>
</tr>
<tr>
<td></td>
<td>Attribution: Help/Support/Treatment</td>
<td>380</td>
</tr>
<tr>
<td></td>
<td><strong>Frame Element Total</strong></td>
<td><strong>5263</strong></td>
</tr>
<tr>
<td>Moral Evaluation</td>
<td>Risk: Community</td>
<td>603</td>
</tr>
<tr>
<td></td>
<td>Risk: Health</td>
<td>425</td>
</tr>
<tr>
<td></td>
<td><strong>Frame Element Total</strong></td>
<td><strong>1028</strong></td>
</tr>
</tbody>
</table>
Each frame's frequency is presented in Table 2 according to the four frame elements. As shown, most frames involve recommending solutions (n=5,705) and assigning blame (n=5,263). The third most frequently discussed frame element was problem definition, which captured 1,940 frames throughout the articles. Lastly, the least discussed frame element pertained to moral judgements (n=1,028). Turning to the frames, the most prominent were opioid-related harms as the problem (n=917), fentanyl and its analogues as to blame (n=1,043), the risk to the community and public safety as the most significant moral concern (n=603), and harm reduction as the solution (n=1,591). These frequencies suggest that news stories typically cite opioid-related harms and then offer harm reduction approaches as a solution to these harms.

Discussion

The current study analyzes 2,273 news articles published from January 2016 to December 2019 in Canadian news media to uncover the framing of the opioid crisis, specifically pertaining to the problems outlined, reasons assigned, morals advanced, and solutions recommended. We conducted a content and frame analysis to reveal the frame elements and frames, their frequencies, and the dominant frames. The purposes of this are to advance an understanding of the discourse and identify what narratives are shaping public and policymakers’ opinions and preferred solutions. We present several key findings that advance the literature on the opioid crisis, particularly with respect to media framing.

First, the prevalence of treatment recommendation frames indicates a dominant narrative inconsistent with past research on the mediatic coverage of drug crises. Previous scholarship has found that news media typically promote increases in

<table>
<thead>
<tr>
<th>Treatment Recommendation</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recommendation: Harm Reduction</td>
<td>1591</td>
</tr>
<tr>
<td>Recommendation: Treatment</td>
<td>1326</td>
</tr>
<tr>
<td>Recommendation: Education and Training</td>
<td>843</td>
</tr>
<tr>
<td>Recommendation: Authorities</td>
<td>588</td>
</tr>
<tr>
<td>Recommendation: Resources</td>
<td>583</td>
</tr>
<tr>
<td>Recommendation: Strategy and Guidelines</td>
<td>471</td>
</tr>
<tr>
<td>Recommendation: Research</td>
<td>303</td>
</tr>
<tr>
<td><strong>Frame Element Total</strong></td>
<td><strong>5705</strong></td>
</tr>
</tbody>
</table>
law enforcement approaches and drug sentencing (Coyle, 2002), social control frames (Beckett, 1995), and reducing the supply of drugs (Jernigan & Dorfman, 1996) as responses to drug crises. In contrast, our findings show that harm reduction and treatment were the preferred approaches to tackle the opioid crisis outlined in news articles. Specific strategies favoured were naloxone, SISs, drug testing, the safe supply of drugs, and decriminalization. Further, news articles also primarily advanced that drug users are innocent and victims in need of help and that drug use will prevail, so it is best to reduce the associated harms. However, drug dealers and traffickers (both nationally and foreign) were demonized, whereby a law enforcement approach was justified through arrests and charges and authorities being quoted as promoting harsh sentences. This can have the effect of perpetuating societal discourses around the victimization of users and the criminalization of drug dealers, despite the evidence suggesting that the majority of opioid-related harms result from prescription opioids (Belzak & Halverson, 2018). This said, criminalization also occurred in the context of legal producers and sellers (i.e., doctors, pharmacies), albeit less than illicit drug dealers, wherein their practices were scrutinized, and some were punished, or punishment was advocated for.

Second, the opioid crisis was disseminated as a public health issue, with news articles recognizing the importance of, and supporting, adopting a health care model containing treatment, services, and recovery options to combat the crisis. Explanations for this departure from past research may be that the opioid crisis is a unique drug-related issue because the population involved are 90% white, 75% are from rural areas, and 75% of users become addicted to drugs from consuming prescription opioids (Cicero et al., 2014; Johnston, 2020). However, race/ethnicity was not the focus of many news articles, indicating that race/ethnicity is not an issue typically covered by news media when those affected are predominantly white. This is contrary to other drug epidemics and historical drug narratives (Dunne, 2017; Orsini, 2017). Rather, articles on the crisis are mainly episodic, whereby events or occurrences involving specific individuals are reported on (e.g., a story on a youth overdosing) instead of thematic to emphasize the broader context and societal responsibility (e.g., race implications) (Schulenberg & Chenier, 2014). This can influence subsequent policy discussions by directing the discourse and public desire toward a treatment approach as an optimal solution.
Third, news articles seemed to have representation issues. The literature on the opioid crisis has found that individual white drug users are portrayed as primarily blameless victims of their biology and deserving of help (Netherland & Hansen, 2017), and the stories are sympathetic and tragic (Netherland & Hansen, 2016). This is consistent with the findings of this research. Additionally, fentanyl and illicit drugs were attributed the majority of the blame for the crisis, not including prescription opioids, suggesting that news articles are advancing an attribution of responsibility that is not in line with research evidence on the opioid crisis. News media may be misrepresenting what is most contributing to the opioid crisis, which can impact ill-fitting and inappropriate policy solutions. Lastly, no news articles discussed the place of residence impacting the opioid crisis, aside from issues with accessing help in Northern Canada, omitting information on rural versus urban trends and implications.

Another predominant frame was the problem of opioid-related harms. Articles discussed the deaths, overdoses, poisonings, and hospitalizations to provide context and promote an understanding of the crisis. In this, it was identified that men, those working in trades, single persons, those who have had previous contact with the law, and those who have sought help, treatment, and health services in the past are significantly affected by the opioid crisis. However, articles advanced solutions specific to women (e.g., rooming-in and bonding, addictions help, support, and treatment), but none were offered or discussed for men. Furthermore, the trend of higher rates of non-fatal and fatal opioid overdose and death for Indigenous peoples has been referenced in recent literature on the crisis, yet news articles do not reflect this. This can skew public perceptions of opioid-related harms (Johnston, 2020).

There were also no discussions on how this crisis impacts LGBTQ+ communities, despite literature highlighting remarkably high rates of substance abuse and opioid misuse among these groups (Canadian Mental Health Association, 2018; PHAC, 2019). The coverage for these crisis issues thus appeared consistent with prevailing news coverage norms and routines; issues related to those groups who are typically represented in the media are reported on more, and those that are characteristically not included in mainstream coverage are left out of the discussion (Shih et al., 2008; Johnston, 2020). News articles must highlight and inform the public and policymakers about the most heavily affected populations instead of presenting narratives and frames that omit them from the conversation to inform on this crisis and promote
specific policy options appropriately. This exclusion and misrepresentation of who is affected by the crisis and in need of help provides a platform to particular individuals and groups, diverting attention from necessary interventions across the broader demographic groups affected by the opioid crisis. It remains to be seen whether future policies will address these problems.

Fourth, fentanyl and its analogues and illicit drugs are assigned most of the blame for the crisis. Articles detail that both have exceedingly contributed to the high rates of opioid-related harms. The former attribution is consistent with a national report by the Public Health Agency of Canada (PHAC) (2019), outlining that fentanyl and its analogues "continue to be a major driver of this crisis;" however, as previously mentioned, prescription drugs influence opioid-related harms as much as, if not more than, illicit drugs. One could speculate that news media advancing illegal drugs over prescription opioids as contributors to the crisis may be due to news media reinforcing the rhetoric that drug use is morally "wrong" (Bright et al. 2008), which is an ideology that has underpinned a prohibitionist response as using illicit drugs is "morally corrupt" (Cheung, 2000; Orsini, 2015). Examples of this were depicted through the moral judgements offered throughout the news articles, such as drug use increases crime and disorder and affects community safety. However, few moral evaluations were portrayed in news media reportage, and a prohibitionist response was not advanced as a solution.

Finally, the opioid crisis emerged as framed as an entirely different type of drug crisis compared to past epidemics. The overall tone of the coverage was sympathetic and empathetic and depicted a softer view, promoting a less punitive, more humanistic response approach. It appears that the public and policy responses have reflected this too, as harm reduction tactics have been emerging as the preferred policy solution (see Taha, Maloney-Hall, & Buxton, 2019), which is a distinct route from past crises (Johnston, 2020; Orsini, 2015; 2017; Reinarman, 1992; Sirin, 2011). News articles considerably advanced treatment, support, recovery, services, and a health care model, with most citing the benefits to the community, individual health, and society. While these shifts in coverage and societal and policy changes concerning drugs and drug epidemics are overall positive, it may be that the demographics of those who are mainly affected by and involved in the opioid crisis (i.e., white, middle-class) (Cicero et
al., 2014; Johnston, 2020) are influential considerations for the framing of the crisis and subsequent solutions.

The present study results have implications for the literature on the opioid crisis in Canada and policymaking, the public, and others alike. The views mirrored in news coverage reflect public and policy responses promoting progress and evidence-based drug policies, and the stigma associated with drug use is not perpetuated. Instead, it is highlighted as needing to be reduced to improve the state of the opioid crisis and reduce the associated harms. Our findings indicate that a paradigm shift is occurring. As other studies have suggested, this progress may be more about the demographics involved in the crisis than an advancement in public consciousness and news coverage representations of drugs and drug epidemics. This can impact policy based on misrepresentations, resulting in responses that do not necessarily fit with the reality of the crisis. Thus, the framing of drug issues should be carefully scrutinized and critically examined in the future because of the power of the media to influence public discourse.

Limitations

No research is without limitations. First, purposive sampling is prone to researcher bias. However, steps were taken to attenuate this issue, such as double-coding and using a theoretical framework, existing literature to construct codes, and the constant comparison method. Another limitation is the representativeness of the final sample of news articles, particularly as only English articles were included, so the findings may not represent French Canadian news coverage. Future research examining specifically or including such news articles is vital for a fuller understanding of this topic. Third, a primary issue with using news articles stored through an online database is that news platforms can edit, change, and remove articles at any point. While articles were downloaded in PDF form, when going back to retrieve these articles for clarification (e.g., if an image was referenced, which is information not stored by the Canadian Major Dailies database), we were sometimes unable to retrieve articles downloaded at the time of data collection. Thus, news articles can edit or remove their content, indicating that news articles downloaded during data collection may not presently include all the analyzed information. To mitigate this limitation, further study of Canadian news media framing of the opioid crisis, such as different years and/or new
sources, is required to establish key patterns and differences in the scholarship and, thus, a base of knowledge.

Lastly, it is challenging to conclusively establish what effect these frames have on the public and policymakers. As mentioned in the literature review, existing scholarship has identified that the framing by news media makes a significant contribution in shaping public opinion and directs the readers to specific types of solutions for drug crises. However, this claim has also been scrutinized as existing literature indicates that these depictions can be interpreted and perceived in various ways by different audience members (Shaw et al., 2010). Despite news media’s agenda-setting and framing powers being impactful, interpretations of what is reported can vary based on interests, outlooks, sex/gender, age, socioeconomic status, and personal experiences (Orsini, 2015; 2017). Therefore, different audiences can interpret and perceive news media reportage and framing differently. While this research can have important implications for policymaking, what this impact is cannot be definitively concluded.
References


CIHI. (2020). Canadian Institute of Health Information. URL: https://www.cihi.ca


Cole, Y. (2018, November 25) Calgary Herald: Lethbridge swamped by 54 overdoses in one week; blood tribe reports ‘extreme spike.’ URL:


Gerster, J. (2018). Alternatives to Opioids Encouraged: New Guidelines Seek to make Painkillers 'Last Thing that we Turn to': Provincial Doctors' College. URL: https://www-lib-uwo-ca.proxy1.lib.uwo.ca/cgiben/


Jeffords, S. (2019, May 27). Ontario to join B.C.’s proposed class action against opioid manufacturers. URL: https://www.ctvnews.ca/health/ontario-to-join-b-


Mah, B. (2018). Edmonton Journal: War on Drugs Has Become War on Patients Coping with Pain. URL: https://edmontonjournal.com/war-on-drugs-has-become-war-on-patients-coping-with-pain


Zwarenstein, C. (2018). My use of Opioids may be Legal, but that Doesn't make Me Better: There's a Tectonic Rift between Who Decides Policy and Who Suffers its