

Strategies for Addressing Needle Debris Study (SANDS): A Content Analysis of Media Reports about Needle Debris and Discarded Drug Paraphernalia in Alberta, Canada

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Declarations:

Funding: No funding was received for this project.

Conflicts of interest: None of the authors have any conflicts of interest or any interests to declare.

Ethics approval: These data for the study are in the public domain, so ethical approval was not required by our institution.

Consent to participate: Not applicable.

Consent for publication: All authors have reviewed the submitted manuscript and consent to the authorship order and submission. No participants were part of this study, so publication consent was not required in that area.

Availability of data: These data and coding are not available. Articles used in the study are listed in full, from the media outlets and available in the public domain.

Code availability: Not applicable.

Author contributions: All authors contributed to the writing and review of the manuscript. CF led the group who conducted data analysis and coordinated the study process. FG searched for articles, screened titles, obtained the full text of the articles, and was responsible for data management. KN produced the graphic visuals and conducted the descriptive analysis. KN, JC, CG, AAN, JE, NK, AM, and GS, conducted data analysis using research software and generated categories. SLL helped to design the study and lead conceptualization. JJ was the senior academic on the project, responsible for research design, data analysis process, project management, and contributed to data collection and analysis.

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Abstract

Objectives: Media reports are known to influence public perceptions of mental health and harm reduction services. The purpose of this study was to analyze media reporting about needle debris and discarded drug paraphernalia, as they related to support for harm reduction services.

Methods: We conducted a structured search of media outlets in Alberta, Canada, from March 2015 to February 2022. We conducted content analysis of the text from the media reports.

Results: We identified a total of 112 articles from 6 outlets. Government officials and SCS employees were represented most often, at 27% each. About half of media reports included views associating needle debris and supervised consumption sites (52%), with beliefs that the sites produced needle debris, rather than mitigated it.

Conclusion: Media reports presented mixed views of needle debris and community impact from harm reduction. Advocates can consider different messaging for each group, based on these views.

Keywords: media reports, harm reduction, supervised consumption services, community, stigma, needle debris

Introduction

Media reports about the community impact of harm reduction services like supervised consumption services (SCS) may influence public attitudes about these services. One example of reported community impact from harm reduction services is needle debris, defined as discarded syringes or other drug paraphernalia that are left in public spaces after drug use. Needle debris can pose a risk for community members, and potentially contribute to concerns about SCS in Canadian cities.

Community impact from SCS, like needle debris, has received less research attention than the outcomes from within the sites (Caulkins et al., 2019). Needle debris has been linked to harm reduction programs like SCS (Alberta Health, 2020). Although there is evidence that SCS are lifesaving and cost-effective services (Khair et al., 2022), there is mixed support for SCS among the public and elected officials. Needle debris, as a proxy for community impact from SCS, has remained a prominent issue in Alberta, Canada. Needle debris was cited as public health risk in a government report (Alberta Health, 2020), despite questionable methodology in the accompanying report (Livingston, 2021).

There are health and safety risks associated with needle debris among people who use drugs and other community members, such as a risk of needlestick injuries resulting in possible transmission of human immunodeficiency virus (HIV). An intervention related to needle debris are needle exchange programs, which aim to prevent the transmission of blood-borne illness and are cost-effective (Jacobs et al., 1999). However, needle exchange programs have not been shown to decrease the number of needles discarded on the ground (Doherty et al., 2000). This finding demonstrates that needle exchange programs create benefit for clients, while gaps remain in the prevention of discarded drug paraphernalia.

Addressing public concerns around needle debris may increase public acceptance of (and thus, access to) harm reduction services like SCS. The purpose of this study was to analyze the content of media reporting about needle debris, differences among stakeholder perspectives in media reports, and any perceived link in media publications between needle debris and harm reduction services. This study informed a larger program of research about addressing community impact from harm reduction services.

Background

Harm reduction and needle debris

Harm reduction services aim to reduce the harm from drug use, rather than reducing drug use itself (Lenton & Single, 1998). Despite substantial evidence of the benefits of harm reduction (Hawk et al., 2017; Logan & Marlatt, 2010), this approach to addiction public health continues to be controversial in some jurisdictions. A harm reduction approach is at odds with the stated policy focus on recovery in Alberta, where sobriety is the primary goal of treatment (Alberta Mental Health and Addictions Advisor Council, 2022). While this study focuses on the Alberta context, it is notable that other Canadian jurisdictions have conservative views around addiction treatment. Examples like Insite (Bayoumi & Zaric, 2008; Strathdee et al., 1997) in Vancouver are comparatively rare, and it is worth considering the sociopolitical context of other venues to enhance access to harm reduction services for Canadians.

Needle debris is part of a broader policy conversation about drug use occurring in Canada among healthcare professionals and the harm reduction community. Needle debris occurs in part when people who use drugs do not have safe places to dispose of needles (Dwyer et al., 2016) or where fear of criminalization prevents people from carrying needles to disposal locations (Burriss et al., 2002; Caiaffa et al., 2003). When people use drugs at a supervised consumption site, all drug

paraphernalia is discarded safely in biohazard containers and does not end up in alleys or similar locations. Other jurisdictions have also reported that needle debris is not a consequence of supervised consumption sites, as the volume of needle debris did not increase following the opening of a supervised consumption site (Doherty et al., 1997; Doherty et al., 2000). By mitigating needle debris, it may be possible to decrease public resistance to supervised consumption sites, increasing access to harm reduction services and saving lives.

Media reporting and addiction

One way of assessing perceptions of public health measures is through media reporting. Media reports about mental health and substance use can shape public support for mental health policies (McGinty et al., 2018). For example, substance use was more stigmatized in media reporting and received less policy support than mental illness (McGinty et al., 2018). This may be explained in part by the misconception that mental illness may have a biological basis, while substance use was associated with weakness of character (McGinty et al., 2018). Stigmatizing language in media reports about people with opioid use disorder can also increase the perception of threat and danger among other groups (Ledford et al., 2022). Recognition of the role of media influence in public health and addiction policy led to updates to The Associated Press Stylebook (Froke et al., 2020), advising against terminology like ‘addict’ and ‘junkie’. The uptake of these recommendations has varied by author (Quan et al., 2020), and is not yet universal in Canadian media reports.

Media reports around addiction reflect the increasing public health crisis associated with overdose and drug poisoning deaths. News coverage relating to opioid addiction has increased dramatically after 2016 (Quan et al., 2020; Wild et al., 2019). A study of media reports about the opioid epidemic found that about half of the articles assessed contained stigmatizing language (McGinty et al., 2019). These reports identified unsafe or over-prescribing as a primary cause of opioid addiction (Quan et al., 2020; Webster et al., 2020). Young people were reported to be the most affected by opioid use disorder, with policing as the most widely proposed solution (Webster et al., 2020). Media reports tended to contain less stigmatizing language if opioids were discussed as a public health issue, rather than a criminal issue (Quan et al., 2020). There were also preferences for different terminology among members of the public. For example, the term ‘overdose prevention site’ had significantly higher support among the public than the term ‘safe consumption site’ (Barry et al., 2018).

Additionally, researchers have assessed language use in media around harm reduction, which also saw an increase in publications after 2016 (Wild et al., 2019). There were over ten times the amount of negative reporting of harm reduction, compared with positive coverage (Wild et al., 2019). SCS were also identified as the primary form of harm reduction service available, with naloxone being the only other prominent topic (Wild et al., 2019). While there has been investigation around the use of stigmatizing language and topics covered by media, we identified a gap in understanding of how media reporting may present the community impact from SCS and needle debris, potentially influencing the acceptability of SCS.

Objectives

The purpose of this study was to analyze the content of media reporting about needle debris, differences among stakeholder perspectives in media reports, and any perceived link in media publications between needle debris and harm reduction services.

Methods

We conducted a structured search for media articles about needle debris from Alberta, Canada, and analysed the resulting articles using a content analysis approach. We applied a structured approach to searching and screening media reports.

Sources

We selected ten news outlets to search for relevant publications, based on our knowledge of media in Alberta. For example, the Canadian Broadcasting Corporation (CBC), Canadian Television Network (CTV), and Global News publish separate divisions for the major cities in Canada. The Calgary and Edmonton division of each of these larger news outlets were searched. We also identified the largest municipalities in the province, which were included in government publications about needle debris (Alberta Health, 2020). These cities were Grande Prairie, Fort McMurray, Red Deer, Medicine Hat, and Lethbridge, Alberta. We identified a local news outlet in each city (such as the Red Deer Advocate) and included these outlets in our search.

Search Strategy

We used the search “needle debris” in the search bar of each media outlet. We screened all search results for inclusion in the study. Two reviewers screened titles for inclusion, then any reports that appeared to be relevant were included for full text review. Duplicated articles within news outlets were excluded. After full text review, we progressed the included articles for content analysis.

Inclusion/Exclusion Criteria

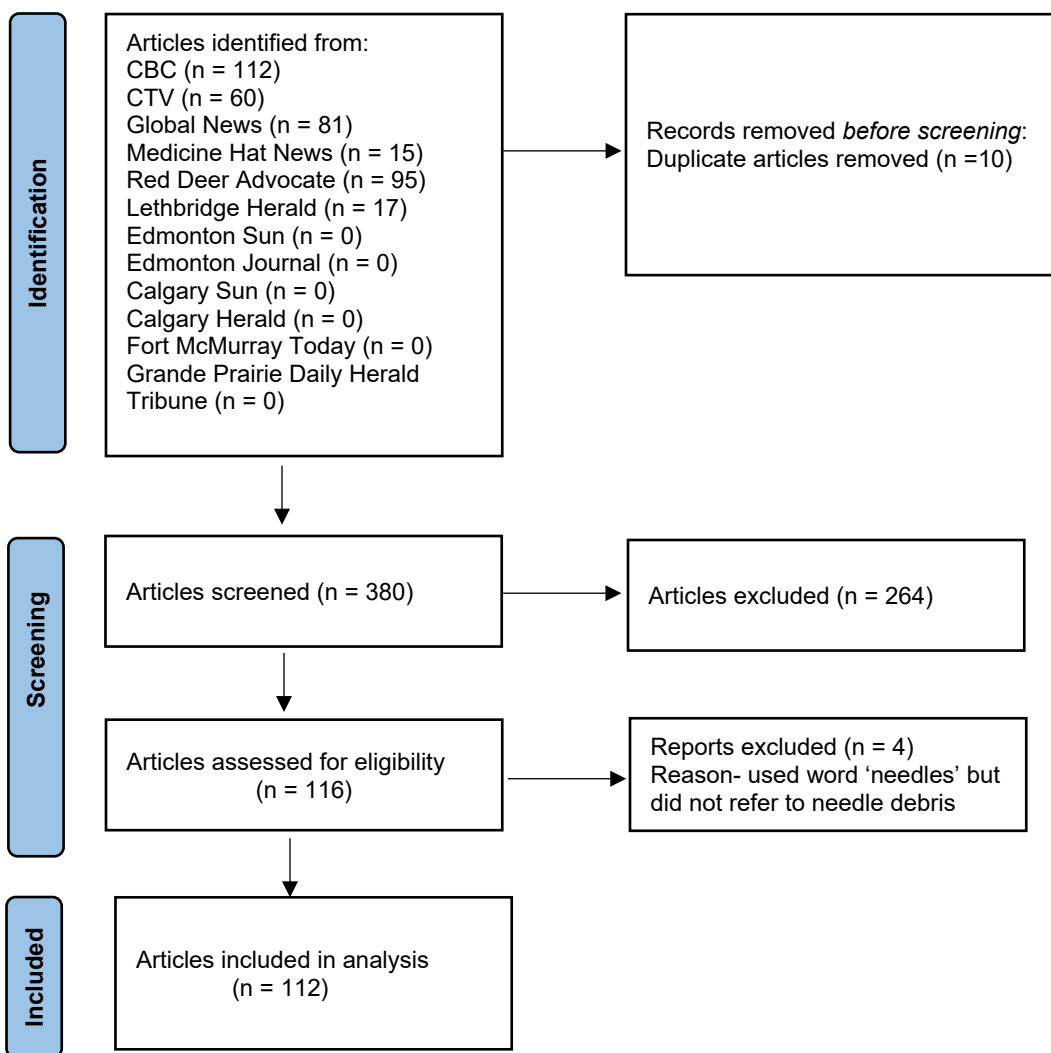
We excluded media publications dated prior to the year 2015, and outside of the province of Alberta, Canada. As other authors have reported a spike in harm reduction and opioid publications in 2016 (McGinty et al., 2019; Webster et al., 2020), we accepted 2015 as an acceptable starting point. We excluded radio and television broadcasts, instead including the print version of the articles. Articles were excluded if they discussed needle debris that was not related to substance use, such as non-medical needles and pine needles.

Title Screening and Selection of Evidence

A total of 112 articles were included in the final analysis, as illustrated in Figure 1.

Figures

Figure 1: Flow diagram of article screening and inclusion



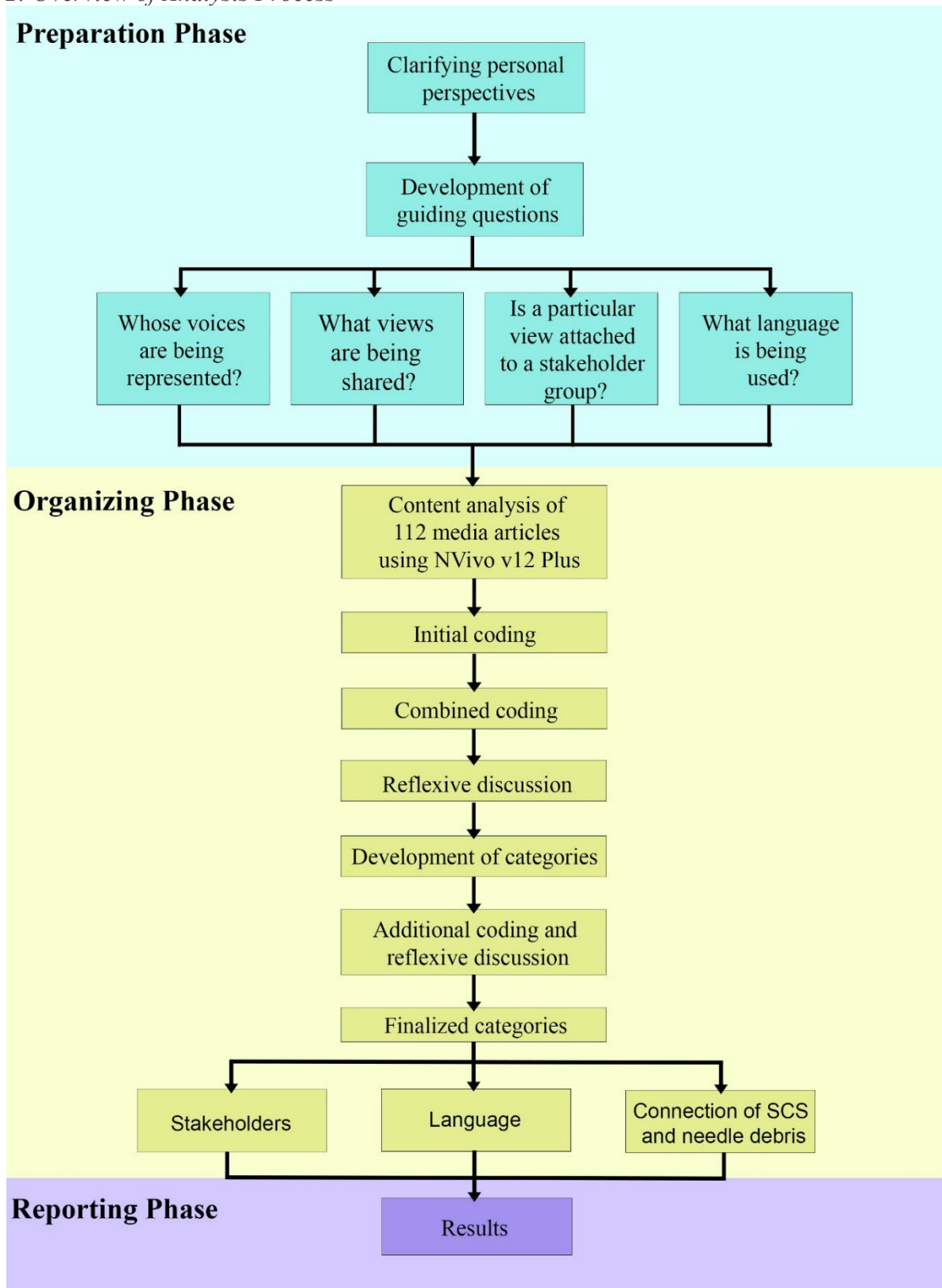
Content Analysis

Our analysis used a content analysis approach, similar to other analyses of media reporting on addictions (Webster et al., 2020; Wild et al., 2019). Content analysis is a method where researchers interpret text through a classification process of coding (Hsieh & Shannon, 2005). We employed a summative approach to content analysis, where we identified and quantified content within the text and assessed these quantities in context (Hsieh & Shannon, 2005). Consistent with the summative content analysis approach, we compared the occurrence of different perspectives, classified by speaker (Hsieh & Shannon, 2005). We also considered the broader context of these perspectives and how the context was presented.

Content analysis is characterized by structured coding and categorization of text (Vaismoradi et al., 2013). Content analysis generally has three phases: a *preparation* phase, where guiding questions are identified; an *organizing* phase, with open coding, grouping, and

categorizing the findings; and a *reporting* phase, where the results are shared (Elo & Kyngas, 2008). Figure 2 provides an overview of our analysis process for the media articles. A group of nursing students worked with researchers to conduct the analysis. These phases are described in more detail in the following sections.

Figure 2: Overview of Analysis Process



Preparation phase

The preparation phase of analysis began by identifying our own perspectives prior to the media analysis. These perspectives were useful to sensitize our team towards our views about harm reduction and how these views may contrast with the perspectives presented in the articles.

To begin the media analysis, we developed main sensitizing questions for the analysis. These questions were: Whose voices/which stakeholders are being represented in these articles? What views are being shared? What sort of language is being used? These questions informed coding in the subsequent phases of the analysis.

Organizing phase

In the organizing phase, we used an inductive process of content analysis to create individual codes and categories, which are groups of ideas that are relatively homogenous (Graneheim & Lundman, 2004). Nursing students worked in four groups of two people, supported by senior researchers, to analyze 112 media articles. The media articles were organized alphabetically, and 28 articles was assigned to each student pair accordingly. NVivo v12 Plus was used as data management software.

We started by creating codes at the level of a sentence or phrase, which is an appropriate ‘meaning unit’ for qualitative content analysis (Graneheim & Lundman, 2004). After a first review of the articles, we discussed the initial coding. We returned to the analysis, coding multiple sentences to build upon our initial codes. We reached a consensus that supervised consumption sites and needle debris were highly connected in these articles. Later in the analysis process, we consolidated all the coding into categories and reviewed all the articles again to ensure that coding was comprehensive. The reporting phase of the content analysis is presented in the results section of this article.

Rigour

The central factor for rigour in summative content analysis is credibility (Hsieh & Shannon, 2005). Credibility refers to the ideas of discovering the findings that relate to the phenomenon, rather than pre-conceived ideas (Lincoln & Guba, 1985). Credibility is enhanced through prolonged engagement, persistent observation, and triangulation (Lincoln & Guba, 1985). In this study, we achieved prolonged engagement by repeated reading of the media reports and iterative cycles of analysis. We used the comparison of different stakeholders’ perspectives in media reports and peer debriefing as persistent observation strategies, to ensure we identified salient elements of the different perspectives in the media reports (Morse, 2015). Additionally, we triangulated media sources and had multiple investigators (Denzin, 1978; Morse, 2015), achieving two techniques of triangulation. Each of these strategies contributed to the credibility in this study and the overall trustworthiness of our approach.

Results

Sample

We reviewed a total of 112 media reports from six news outlets in Alberta, Canada (see Table 1). Of the local media outlets, the Red Deer Advocate reported the most stories about needle debris.

Table 1: Total included articles by media source

Media Outlet	Total Included Articles (n)
CBC	26
CTV	16
Global News	15

Lethbridge Herald	12
Medicine Hat News	7
Red Deer Advocate	36

Media reports that met the inclusion criteria are illustrated in Table 2 and dated from March 20, 2015, to February 15, 2022. The decreasing number of articles in 2020 and 2021 could indicate less public interest in needle debris, or that the issue was displaced by reporting on COVID-19.

Table 2: Number of included articles by year

Year	Number of articles (n)
2015	2
2016	2
2017	5
2018	32
2019	41
2020	24
2021	6
2022*	1

**Only January-February 2022*

We identified three main categories through the content analysis of the articles: the representation and distribution of different viewpoints, the use of people-first versus non-people-first language, and the perceived link between SCS and needle debris.

Representation of different viewpoints

We contrasted the viewpoints of speakers across the media articles by the total number of words attributed to speakers from that group, compared with all the quotes in the articles (see Appendix B1 for details.).

Figure 3: Total words attributed to each stakeholder group

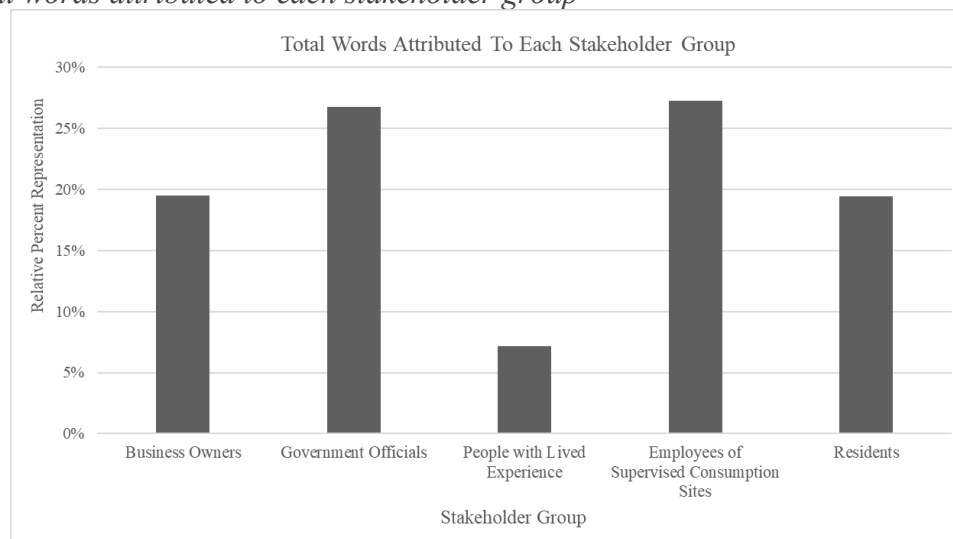


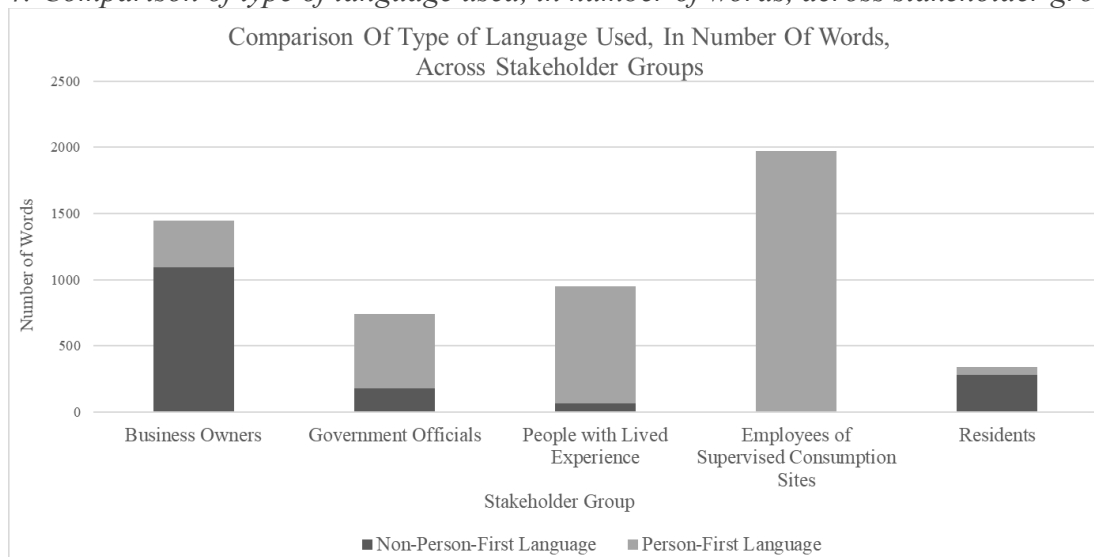
Figure 3 illustrates that government officials and employees of SCS have the highest representation in number of words quoted in the articles, while those who have lived experience of drug use have the fewest quotes.

The use of people-first versus non-people-first language

We identified two main types of language used in these articles: person first and non-person first language. In this study, person-first language was considered as words or expressions that recognize and prioritize one's humanity (Cortina, 2013). Person-first language included words like 'people' or 'person' (such as, 'person who uses drugs'). In contrast, non-person first language uses labeling causing disconnection (Cortina, 2013). In this study, non-person first language included terms like 'addict', 'junkie', or 'problem'.

We quantified the use of non-person-first language and person-first language (Table B2 has precise figures) and cross-referenced the use of each type of language to which stakeholder voice was being represented in each reference. Figure 4 displays the respective usage of each type of language by each stakeholder group.

Figure 4: Comparison of type of language used, in number of words, across stakeholder groups



The type of language varied widely based on the stakeholder voice, with business owners and residents using a majority of non-person first language. In contrast, government officials, people with lived experience, and employees of supervised consumption sites used primarily person-first language. An example of each of the types of language use for each stakeholder group is illustrated in Table 3.

Table 3: Sample quotes from each stakeholder group of each language type

Stakeholder	Person-First Language Example	Non-Person First Language Example
Business owners	In a statement posted to his Facebook account, Hamilton said that while he supports the concept of harm reduction and recognizes the SCS' clientele are "hurting and caught in a vicious cycle of addiction," his actions have been intended to protect his business.	"I don't even want to imagine a crowd of strung out, high individuals frequenting our establishment and hanging out in our parking lot," said De Jong. "A supervised consumption site should not be placed anywhere near a location that serves

	<i>(Local business owner raising more concerns about Lethbridge's supervised consumption site)</i>	families and young children, and the fact that we are a 24-hour location only adds to the list of interesting scenarios that we might encounter." <i>(Consumption site concerns Tim's official)</i>
Government officials	"We are focusing on needles and shopping carts, but what about the people?" Jefferies added, noting every drug addict is someone's sister, brother, mother, father, son or daughter. <i>(Grassroots movement to clean up Red Deer is gaining momentum)</i>	Now-Premier Jason Kenney said the programs help "addicts inject poison into their bodies" and are no long-term solution to substance abuse. <i>(Mobile supervised consumption site inadequate to meet Lethbridge's needs, critics say)</i>
Residents	"This is about seeing what we can do to help...This is about finding solutions, not pointing fingers." Dohl and other residents back the city's demand the province fund a drug treatment centre for Red Deer. While a daytime warming shelter is available to homeless people during the winter, there aren't too many options during summer days before shelter beds open in the evening, said Shirley Hocken, secretary-treasurer of the Riverside Meadows Community Association. She believes homeless people need access to public washrooms, showers and laundry facilities. <i>(Illegal activities cause concern in Red Deer neighbourhood)</i>	Sheltering and enabling an addiction will not result in lessening the problem. It will actually add to it for it will encourage the old adage; if you build it, they will come...Cleaning up discarded needles and homeless camps by the city is not helping, as there are no consequences for those creating the problem. Why should they? No cost to them. But it is an ever-increasing cost to the city, and a proposal to shelter addicts will only add to it. <i>(Letter: 24/7 shelter in Red Deer will add to drug problems)</i>
Lived Experience	"I think he is listening to people that are being ignorant and you know, they're doing it out of fear because they're scared. And it isn't reflecting reality, people are addicted to drugs. And it's not because they're all bad people," says Adams. "It is because people are hurting, or using it to, like, numb the pain and things like that. It's a real thing – just like alcoholism."	At the same time, Dennis understands, and even sympathizes with, the many people who have been victimized by crime and who feel that homeless addicts are ruining the city [...] Dennis knows the sight of addicts bothers shoppers and business owners. <i>(‘A little love can go a long way,’ says a Red Deer opioid user who supports overdose prevention)</i>

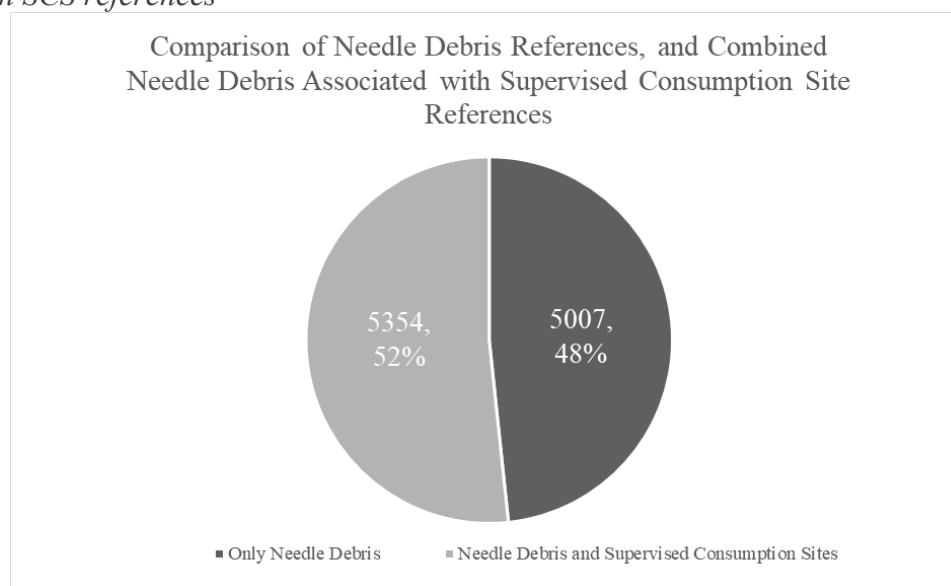
	<i>(‘A system of chaos for addicts and communities’ Province releases report on supervised consumption sites)</i>	
SCS	Schoen said people who frequent supervised consumption sites are often homeless and living with mental health issues. Staff help clients look for affordable housing options. <i>(Edmonton’s supervised consumption sites ‘making an impact’ in first year)</i>	No examples

It is also notable that the article headlines also contained non-person first language, such as “Drug use turns Red Deer bridge into ‘zombie apocalypse’”. While we did not count the headlines in the stakeholder word counts, it is notable that non-person first language was present in the labelling of these articles.

The perceived link between SCS and needle debris

In the media articles, needle debris was frequently associated with SCS, with speakers stating that SCS contributed to needle debris accumulation in municipalities. Figure 5 compares the references to needle debris on its own and references to supervised consumption sites and needle debris together in the articles, by the number of words.

Figure 5: Comparison of needle debris references, and combined needle debris associated references with SCS references



In all references to needle debris, there was a total of 10,361 words, of which 5354 (52%) words were also included in references to supervised consumption sites, while 5007 (48%) referred to needle debris on its own.

Discussion

Our analysis contributes to the understanding of needle debris as a perceived community impact of harm reduction programs, such as SCS. Media reports represented varied perspectives from various stakeholders in Alberta, and some voices being more prominent than others. The articles in this study continue to include non-person-first language and stigmatising language, despite the changes in the Associated Press stylebook. Additionally, the public attributes the cause of needle debris to SCS in about half of the articles. Our article contributes to the harm reduction discourse by adding an analysis of media perspectives on needle debris and discarded drug paraphernalia.

In our analysis, business owners and residents opposed the presence and operation of a SCS, citing concerns around increased crime and disorderly behaviour. Although there is an acceptance of the purpose of SCS among the media reports in this analysis, business owners saw SCS as negatively impacting their businesses. Devaney and Berends (2008) identified syringe disposal bins as an effective way to engage business owners to contribute to the community issue of needle debris. We did not see this finding repeated in the current study, as business owners represented in these articles resisted engagement with harm reduction.

Residents were cited with the highest use of non-person-first language in our study, at 82% of quotes. It may be that the focus on recovery in Alberta (Alberta Mental Health and Addictions Advisor Council, 2022) is a political response to resident views. Conversely, it may be that residents are influenced by the emphasis on recovery, or stigma about drug use. The views of residents highlight the need for education and engagement from health and policy leaders, to decrease stigma against people who use drugs and increase support for harm reduction services. Stigma has been identified as a barrier to enacting public health strategies around addiction (McGinty et al., 2019). Personal stories and descriptions of barriers can increase public support for addiction treatment without increasing stigma (McGinty et al., 2018), and these types of narratives could be included in future media reports.

Our research found limited representation of people with lived and living experience of drug use, with their views being 7% of the views cited. This finding is similar to other evidence, where Webster et al. (2020) reported people with addictions were represented in 7.5% of articles from 2000-2016 and 4.2% from 2016-2017. It is not immediately clear why people who use drugs have such little representation in these articles. It may be that the relative vulnerability of people who use SCS means that people with lived experience are less available to speak to the press. The stigma directed towards people who use drugs, or fear of being identified by police, may also limit their participation in interviews. Reporters can be encouraged to create opportunities for people with lived experience to participate in media interviews, without being identified.

Differences in language

Our results contribute an additional perspective on the use of person-first language in media reports. Previous studies have considered other approaches, such as whether a tone is positive, negative, or neutral/balanced (Wild et al., 2019). McGinty et al. (2019) found that around half of articles use stigmatizing language. Our study found more person-first language at 70% than Quan et al. (2020), who identified 17% of language as person-first in 2018. This finding suggests that the Alberta context may have more person-first language reports than are available in national media sources.

Our study adds an analysis of how different stakeholder groups use person-first language, or not, as the use of stigmatizing language varied by stakeholder groups. People with lived

experience and employees of supervised consumption sites used person-first language, while business owners and area residents used primarily non-person-first language. These results provide insight into stakeholder perspectives about SCS and needle debris. There may be opportunities approach stakeholders with tailored messages about needle debris, knowing how they are represented in media reports.

Our findings are similar to other studies as the media representation of needle debris and harm reduction services continues to include stigmatising language. The AP Stylebook (Froke et al., 2020) advocates for person-first language. However, many media outlets continued to use proscribed terms after this change, with 94% of articles continuing to use stigmatizing terms after The Stylebook was changed (Bessette et al., 2022). Person-first and humanizing language could reduce stigma around mental health and substance use (McGinty et al., 2018). It is known that small changes in language, which are known as framing effects, can shift attitudes on topics like harm reduction (Barry et al., 2018). Therefore, media outlets are encouraged to ensure their reporting uses person-first language and that the importance of this language is communicated to the public.

The perceived connection between SCS and needle debris

Wild et al. (2019) found that SCS was the primary harm reduction strategy mentioned in Canadian media coverage from 2000-2016. Our study adds that SCS were discussed in conjunction with needle debris in nearly half of the assessed articles. Stakeholders our study identified the SCS as the cause of needle debris. However, researchers found that harm reduction programs did not increase needle debris in communities (Doherty et al., 2000; Tookes et al., 2012). There is a need to understand the gap between the perception of needle debris and numbers of discarded needles. There is an opportunity for media outlets and researchers to inform the public about the potential for SCS to reduce needle debris, so people who use drugs have a safe place to dispose of their needles and seek support.

Limitations

This study is limited by its scope of including one jurisdiction, as we wanted to identify articles reported in the same political context. Other jurisdictions and media outlets may report on these issues with different considerations. There may have also been other perspectives voiced before 2015, the cut-off date for articles to be included in this study. Future studies could use news databases to potentially identify other relevant sources. The perspectives of stakeholders may also be different in areas where there is a higher general acceptance of harm reduction. Future studies could include additional analysis of needle debris before and after the opening of an SCS, to bring additional context to media reports. Media reports may have value to identify a need for needle debris interventions, and the value in monitoring these reports as an indicator could be explored in future research.

Conclusion

Stakeholders have different views on needle debris, which are illustrated in media reports by the use of non-person-first and person-first language. These stakeholders are also represented in varying proportions in media articles, government officials and SCS employees being cited most often. Absent from many media articles are the voices of people with lived or living experience of using drugs. Supervised consumption sites are also associated with needle debris in about half of media articles in this study. Needle debris was associated with SCS in about half the media reports, which indicates a need for additional public education about the role of SCS in mitigating discarded drug paraphernalia. Media outlets also need to examine language use for stories about SCS and needle debris to align with the AP Stylebook.

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Appendix A: List of Included Articles

Title	Date	News Outlet
Nowhere else to go	March 20, 2015	Red Deer Advocate
Harm reduction in the battle against addiction	July 23, 2015	Red Deer Advocate
Recovering addict cleaning up downtown	April 13, 2016	Red Deer Advocate
City calls on province to pick up syringe debris costs	March 7, 2017	Red Deer Advocate
Debate heats up around safe-injection sites proposed in Edmonton	March, 26, 2017	CBC
City of Red Deer releases guide for how to handle needle debris	August 28, 2017	Red Deer Advocate
Red Deer's fentanyl death rate is the worst in Alberta, council hears	October 2, 2017	Red Deer Advocate
Red Deer needs to find a solution to syringe debris	December 11, 2017	Red Deer Advocate
Turning Point has mixed feelings over city's \$500k spending on homeless camp cleanup	January 26, 2018	Red Deer Advocate
Red Deer business owners not keen to revisit downtown SCS proposal	March 26, 2018	Red Deer Advocate
Cleaning up drug debris top priority for Lethbridge drug outreach organization	March 27, 2018	CBC
Dozens of used needles found near Lethbridge elementary school, petition calls on City to address issue	May 24, 2018	CTV
Preteen pricked by discarded needle in parking lot of Lethbridge church	May 31, 2018	CTV
Needle concerns elicit response from mayor	June 4, 2018	Lethbridge Herald
Needle issue divides City Council	June 12, 2018	Lethbridge Herald
Safe consumption site says Lethbridge parents would have more to worry about if it didn't exist	June 14, 2018	Global News
Province announces expansion to Lethbridge supervised consumption site	June 15, 2018	Global News
Lethbridge residents hope to change needle distribution practices	June 16, 2018	Medicine Hat News
Rally over needle debris looks to send petition to city council	June 16, 2018	Lethbridge Herald
Lethbridge volunteers do sweep to combat drug-used needle debris crisis	June 27, 2018	Global News
Stan Siwik Pool on list of Lethbridge locations affected by needle debris	July 18, 2018	Global News
Needle distribution will continue Lethbridge City Council defeats resolution	July 24, 2018	Global News
Potential safe consumption neighbours upset	July 31, 2018	Medicine Hat News
Consumption site concerns	August 7, 2018	Medicine Hat News

Illegal activities cause concern in Red Deer neighbourhood	August 28, 2018	Red Deer Advocate
Red Deerians frustrated by needle debris	August 30, 2018	Red Deer Advocate
Red Deer bars complain of homeless people and carts driving away customers	September 7, 2018	Red Deer Advocate
Kids tested for HIV after touching needles found in Lethbridge playgrounds	September 12, 2018	CBC
Red Deer grassroots campaign takes aim at drugs, homelessness	September 20, 2018	Red Deer Advocate
Grassroots movement to clean up Red Deer is gaining momentum	September 21, 2018	Red Deer Advocate
24/7 shelter in Red Deer will add to drug problems	September 24, 2018	Red Deer Advocate
Red Deer calls on Alberta government to pay for consequences of gaps in addiction services	September 24, 2018	CBC
Alberta municipalities gather in Red Deer for fall conference	September 25, 2018	Red Deer Advocate
Red Deer gets behind online campaign	September 26, 2018	Red Deer Advocate
Drug use turns Red Deer bridge into 'zombie apocalypse'	November 7, 2018	Red Deer Advocate
Proposed safe drug consumption service goes to public meeting Tuesday	November 10, 2018	Red Deer Advocate
Firefighters see needle clean-up requests quadruple with no area really untouched	November 16, 2018	CBC
City officials say needle collection strategies are paying off in Lethbridge	November 21, 2018	Global News
Fenced-off SCS site development approved by Red Deer city council for seven years	December 10, 2018	Red Deer Advocate
Part of downtown Red Deer covered in trash over the weekend	December 17, 2018	Red Deer Advocate
Red Deer taxpayers left paying for needle debris, cannabis legalization shortfall, says council	January 14, 2019	Red Deer Advocate
New needle recovery team finds 50 to 80 used syringes per day around Calgary	January 16, 2019	CBC
Calgary Alpha House rolls out government funded used needle collection program	January 17, 2019	CTV
Calgary consumption site's approval to operate up for renewal as report shows crime has risen nearby	January 29, 2019	CBC
Significant increase in public safety concerns near Sheldon M Chumir Health Centre	January 29, 2019	CTV
Reports of needles have dropped since opening of Edmonton's supervised consumption sites	January 30, 2019	Global News
Controversial supervised consumption site in Calgary gets 1-year lifeline from Health Canada	January 31, 2019	CBC
Dispute over location for Medicine Hat consumption site heats up as overdoses increase	February 4, 2019	CBC

Mobile supervised consumption site being planned carefully, organizer tells opponents	February 6, 2019	CBC
Downtown Red Deer look forward to Winter Games	February 12, 2019	Red Deer Advocate
Community members clash over Red Deer supervised drug consumption site	February 28, 2019	CBC
Edmonton's first supervised injection site turns one	March 26, 2019	CTV
Group defends plans for Forest Lawn mobile supervised injection site	May 7, 2019	CBC
Dogs and drugs don't mix. Red Deer business wants to leave downtown after 18 years	May 21, 2019	Red Deer Advocate
Red Deer city council wants province to pay entire clean-up cost for needle debris	May 27, 2019	Red Deer Advocate
Calls to police near Calgary consumption site increased in 1st quarter of 2019 report	May 30, 2019	CBC
Red Deer city councillors are hopeful provincial review will point to need for local drug treatment centre	June 10, 2019	Red Deer Advocate
Local business owner raising more concerns about Lethbridge's supervised consumption site	July 5, 2019	Global News
MHPS begin to 'clean up' greenbelt camps	July 6, 2019	Medicine Hat News
Edmonton's supervised consumption sites making an impact in first year	July 10, 2019	CBC
Red Deer parks workers are cleaning up double the number of homeless camps as last year	July 10, 2019	Red Deer Advocate
Overdose prevention site has become more dangerous Red Deer RCMP	July 25, 2019	CTV
City doing its best to clean up used drug needles	July 26, 2019	Red Deer Advocate
Lethbridge mom concerned after she say her son was stuck by a needle	August 3, 2019	CTV
Lethbridge city council approves town hall to hear concerns about drug crisis, needle debris	August 6, 2019	Global News
Red Deer supervised drug consumption site facing backlash, online harassment	August 12, 2019	CBC
City councillor's motion seeks to stop funding for Lethbridge's supervised consumption site	August 15, 2019	Global News
Former EPS chief Knecht to lead review of Alberta's supervised consumption sites	August 18, 2019	CTV
Lethbridge council votes down motion to halt funding for supervised consumption site	August 19, 2019	CBC
Province to announce details of supervised consumption site review	August 19, 2019	CTV
ARCHES Lethbridge report challenges complaints of increased crime, needle debris	August 23, 2019	Global News
Supervised consumption sites don't increase crime	August 26, 2019	Red Deer Advocate

I work near overdose prevention site in Red Deer. This is what I see every day	September 30, 2019	Red Deer Advocate
Red Deer calling on province to help with needle debris cleanup	October 1, 2019	CTV
Alpha House partnership reduces needles on street, frees up emergency calls	October 16, 2019	CBC
Calgary needle collection efforts pick up 6,570 units in first 6 months	October 16, 2019	CTV
New partnership rids Calgary streets of over 6K needles in first 6 months	October 16, 2019	Global News
Red Deer woman concerned after encountering busted needle drop box	November 15, 2019	Red Deer Advocate
Group backs off on Lethbridge needle pickup plan	November 19, 2019	CTV
Alberta students design robot to pick up needles in parks	November 28, 2019	CBC
Lethbridge Downtown Clean and Safe Strategy asks for more city support	December 3, 2019	Global News
Lack of 24/7 homeless shelter is bemoaned by a Red Deer city councillor as \$400,000 is slated for camp, needle clean-up	January 9, 2020	Red Deer Advocate
More than 240 lives in Red Deer hang on the province's decision about overdose prevention sites, say advocates	January 23, 2020	Red Deer Advocate
'A little love can go a long way,' says a Red Deer opioid user who supports overdose prevention	January 24, 2020	Red Deer Advocate
Red Deer's overdose prevention staff want to counter misinformation	January 24, 2020	Red Deer Advocate
A system of chaos for addicts and communities Province releases report on supervised consumption sites	March 5, 2020	CTV
A system of chaos Supervised Consumption Services Review Committee releases findings	March 5, 2020	CBC
City SCS may face more problems than other Alberta sites	March 5, 2020	Lethbridge Herald
Government review says Lethbridge SCS has 'most problems in the province'	March 5, 2020	CTV
Mixed reaction to province's review of supervised consumption sites across Alberta	March 5, 2020	CBC
Report on social impacts of injection sites a wake-up call	March 5, 2020	Global News
Look at the effects, not perception	March 13, 2020	Lethbridge Herald
Mobile supervised consumption site inadequate to meet Lethbridge's needs, critics say	July 16, 2020	CBC
ARCHES to shutter SCS	August 12, 2020	Lethbridge Herald
Lethbridge supervised consumption site to close at end of August after audit finds 1.6M dollar shortfall	August 13, 2020	CBC

People will die needlessly advocacy group says as closure date looms for ARCHES	August 13, 2020	CBC
Supervised consumption site users speak on ARCHES closing	August 13, 2020	CTV
Lethbridge braces for closure of Canada's busiest supervised consumption site	August 31, 2020	CBC
Lethbridge patrol notes increased overdoses, needle debris since ARCHES closure	September 14, 2020	Global News
Needle debris spreads in city	September 16, 2020	Lethbridge Herald
Needle debris, drug usage spreading further around Lethbridge since supervised consumption site closed	September 17, 2020	Medicine Hat News
'Nightmare' home in Pines neighbourhood shut down for 90 days because of drug activity	September 18, 2020	Red Deer Advocate
Needle debris a prickly problem	September 19, 2020	Lethbridge Herald
Ritchie residents voice concerns about new homeless shelter in 99th Street warehouse	November 11, 2020	CBC
2020 year in review- September	December 31, 2020	Lethbridge Herald
Application made for harm reduction site	February 4, 2021	Lethbridge Herald
Clean Sweep program expanding	April 22, 2021	Medicine Hat News
Clean Sweep program expanding	April 22, 2021	Lethbridge Herald
Province to close supervised consumption site in Calgary's Beltline following deadliest year for opioid deaths	May 28, 2021	CTV
Alberta government sued over new rules for supervised sites for drug use	August 20, 2021	CBC
Amies in new role heading up Downtown	November 4, 2021	Lethbridge Herald
Business owner in Lethbridge says safe consumption site negatively impacting neighbouring community	February 15, 2022	Medicine Hat News

Appendix B: Total number of words per stakeholder group

Table B1: Speakers by total number of words

Stakeholder	Number of Words	Percentage of words
Business owners	5766	19%
Government officials	7916	27%
People with lived experience	2122	7%
Employees of SCS	8072	27%
Area Residents	5748	19%

Table B2: Comparison of person-first and non-person-first language by stakeholder

Stakeholder	Person-First language N (%)	Non-person First language N (%)
Totals	3820 (70%)	1624 (30%)
Business owners	350 (24%)	1094 (76%)
Government officials	558 (76%)	181 (24%)
People with lived experience	882 (93%)	65 (7%)
Employees of SCS	1968 (100%)	0 (0%)
Area Residents	62 (18%)	279 (82%)