The COVID-19 Pandemic: A Content Analysis of the Most Prominent Subject Matter Discussed in CBC News Articles

Paige Sumners
Department of Sociology, MacEwan University

Abstract
The present study examined the most prominent subject matter in CBC news articles during the COVID-19 pandemic in 2020. The sample was collected through a google web search that read “COVID-19 AND Coronavirus AND CBC news articles AND Alberta.” The 50 most recent news articles that appeared in this search and contained “COVID-19” or “Coronavirus” in relation to Alberta in the article headline were sampled. The article headlines were individually analyzed in a first-phase coding process and then re-examined for common themes. A qualitative content analysis determined that the most prominent subject matter in CBC news articles was statistics (50%) followed by general updates (22%), COVID-19 information (14%), current events (6%), and regulations (4%). An additional category titled ‘other’ (4%) was created for articles with subject matter that was unrelated to these themes. The analysis found that the most prominent news content in CBC news articles was related to fear inducing information which replicates the results from earlier studies on the H1N1 pandemic in 2009.

Introduction
COVID-19 been deemed a global pandemic as of January of 2020. Many news media outlets have been working with health professionals and the government to relay important information to the public. In the context of a pandemic, Luth, Jardine, and Bubela (2013), however, note that the type and amount of information that is being relayed to the public is not always necessary, nor does having a surplus amount of information about such events.

For example, prior to COVID-19, the H1N1 influenza in 2009 was the last global pandemic to surface. Since then, scholars have evaluated the approach that was taken by the news media in relation to the H1N1 virus. For example, Klemm, Das, and Hartmann (2016) found that news media content during the H1N1 pandemic in 2009 was highly fear inducing and heavily dramatized. The volume of information was excessively high and the content was primarily related to the threats associated with the H1N1 influenza (Klemm, Das, and Hartmann, 2016). Similarly, other scholars have completed content analysis’ on H1N1 television news content and the extent that appropriate health-related content was represented, finding that only a small fraction of the sample included important information pertaining to symptoms and preventative measures (Luth, Jardine, and Bubela, 2013).

COVID-19 is currently prevailing while the present study is being completed, which means that news media is actively transmitting information to the public. A qualitative content analysis has been designed to analyze the last 50 Canadian CBC news articles pertaining to COVID-19 to determine the information that is being relayed through the news. The goal of this content analysis is to provide a descriptive account of the most prominent subject matter found in the news articles. Ideally, future qualitative research would be conducted to determine how the prominent themes in news articles affect citizens’ thoughts and opinions on the COVID-19 pandemic, and ultimately, how it affects their behavior.
Method

Sample

The sample consisted of the 50 most recent CBC news articles that appeared through an online google search. The sample consisted of CBC news articles that included “COVID19” or “Coronavirus” in the article headings and were published between February 27, 2020 and April 2, 2020. The time frame was created in response to the 50 most recent articles that appeared when the search was completed on April 2, 2020 at 2:00pm. CBC news was the selected data source because it is one of the leading and most recognizable Canadian news websites covering material related to the COVID-19 pandemic in 2020.

Sample Selection

The sample was selected through an online google web search on April 2, 2020, at 2:00pm. The only filter that was selected in this search was ‘all results’. The four keywords; “COVID-19”, “Coronavirus”, “CBC” and “Alberta” were used to search for news articles relating to the COVID-19 pandemic of 2020.

Inclusion and Exclusion Criteria

Due to the surplus amount of articles that CBC news was releasing each day containing information on the pandemic, the present study is limited to an online search that only examines articles pertaining to Alberta in particular. This was decided in an attempt to gain a better understanding of the subject matter in CBC news articles over a longer time period. Articles that appeared in this online search that did not include “Alberta” or cities in Alberta in relation to “COVID-19” or “Coronavirus” were excluded from the sample. Additionally, any articles that appeared in the search that were not published by CBC were also not used.

Units of Analysis

The units of analysis for this study were the words and phrases that were present in 50 CBC news article headlines in response to the COVID-19 pandemic of 2020.

Coding Procedure

After locating 50 CBC news articles that fit the content analysis criteria, each individual article’s headline statement in the sample was examined for its subject matter. The first-cycle coding process consisted of coding for words and phrases in each article headline to capture the type of content that would be discussed in each article. The information gathered from the first-cycle coding process was then re-examined in a second phase of coding in which the existence of general themes was established. Finally, each article’s content was evaluated to determine the type of subject matter that was related to each theme.

Design

A content analysis was used to provide a descriptive account of the most prominent subject matter found in CBC news articles that contained “COVID-19” or “Coronavirus” in the article headline. The discourse analysis was qualitative in nature as the subject matter was identified, coded, and based on generated themes as a result of the words and phrases in 50 CBC news article headlines.

Results

The content analysis revealed four prominent themes within the sample of news articles (n=50) (as shown in Table 1). In order of prevalence, the themes that were established were: statistics, general updates, regulations, and expert opinions. Two articles from the sample were standardized as ‘other’ because their article heading and/or content did not fit into the identified themes.

| Date          | Article Headline                                                                 | Theme          |
|---------------|---------------------------------------------------------------------------------|----------------|
| March 31, 2020 | “Two more Calgary seniors homes confirm cases of COVID-19, bringing total to 3” | Statistics     |
| April 1, 2020 | “Alberta sees two more COVID-19 deaths, 117 new cases”                         | Statistics     |
| March 25, 2020 | “What you need to know about COVID-19 in Alberta on Saturday, March 25”         | General updates|
| March 28,     | “What you need to know about COVID-19 in Alberta”                               | General updates|
Statistics referred to article headlines that discussed numerical information relating to the newly confirmed cases of COVID-19 or newly confirmed deaths due to the COVID-19 virus in Alberta. Of the 50 CBC news articles (n=50), 25 articles (50%) contained headlines referring to the number of confirmed cases or deaths in relation to the COVID-19 virus. Articles referring to statistical information on confirmed cases and deaths were the most prominent subject matter found in the sample. Articles with headlines that contained this information included content referencing specific victims, the total cases of COVID-19 per zone in Alberta, and statistical figures of total confirmed cases and deaths of COVID-19 to-date based on known testing and confirmation. Other visuals consisted of graphs depicting reported cases by health zone in Alberta and the number of COVID-19 patients that were in the hospital being treated for COVID-19 per day.

General updates referred to article headlines that included the statement “What you need to know about COVID-19 in Alberta” with a specified date attached to the remainder of the headline. General updates were the second most common headlines in the articles in which 11 articles (22%) of the sample (n=50) contained a general update of news and events related to the COVID-19 pandemic. Content within these article headlines contained subsections that offered general COVID-19 updates. The first subsection was deemed “The latest” which included confirmed cases and deaths and recent changes made under the pandemic conditions such as changes to the transit system schedules. The next subsection was titled “What you need to know in Alberta” which provided information pertaining to events happening due to the virus such as lay-offs, the downturn of the economy, and financial aid programs. The last subsection of note was “Self-assessment” which provided the link to the Alberta Health Services self-assessment tool and included up-to-date regulations in the event that current or future symptoms occurred.

COVID-19 Information included article headlines referring to COVID-19 tests or testing procedures and expert opinions or projections under the circumstances of the virus. COVID-19 information was present in 7 of the articles (14%) in the sample (n=50). Information pertaining to the testing of COVID-19 included information on how testing occurs, how professionals were keeping up with testing, and the expansion of perimeters of those being tested at the current time. Expert opinions were related to frequently asked questions with answers pertaining to the spread of COVID-19 and the precautions individuals could take in an attempt to end the spread. Expert projections concerned the amount of estimated intensive care and number of cases to appear in the near future as a result of the COVID-19 virus.

Current events referred to articles that discussed information about events that were taking place in response to COVID-19. Three articles (6%) discussed information relating to current events. Current event articles included content related to information on budget cuts and high tensions in specific areas of employment.
**Regulations** included news article headlines that updated the public on changes or updates to certain bills or policies in response to COVID-19. Only 2 articles (4%) included content referring to up-to-date regulations that had been implemented. In this sample, regulations referred to changes in renters and landlord regulations in response to the economic downturn and information regarding the number of people allowed in collective gatherings during COVID-19 circumstances.

Finally, Other was created in an attempt to code two articles (4%) that did not fit into the identified themes. One article pertained to the deletion of a tweet that included false information about a cure for the COVID-19 virus and the other referred to the Chief of medical health who was in isolation.

**Discussion**

This content analysis was completed in an attempt to describe the most prominent subject matter found in CBC news articles while the COVID-19 pandemic in 2020 was prevailing. Scholars have argued that circulating more information during pandemic outbreaks does not always amount to positive results (Luth, Jardine, & Bubela, 2013). Other scholars have found that when more information is circulated, ‘alarmist’ content becomes the focus for the transmission of information (Klemm, Das, & Hartmann, 2016). ‘Alarmist content’ has been identified by Vasterman and Ruigrok (as cited in Klemm, Das, & Hartmann, 2016) as being “when an event is described in terms of risk, including updates on the number of infections, hospitalizations or deaths, as well as when a threat is described as ‘extremely contagious’ or ‘deadly’ (p.15).

The content analysis of CBC news articles replicated this finding in that the most prominent theme that was found was the statistics on the number of deaths and newly confirmed cases of COVID-19 and therefore, stressing threat related information rather than information regarding precautionary or safety measures” (Klemm, Das, & Hartmann, 2016). Furthermore, the sample selection of the content analysis revealed that there were excessive amounts of news articles each day and that much of the information being transmitted was repetitive in nature. This content analysis revealed general updates to be the second most prominent themes in the sample providing up-to-date recounts of all information that had already been transmitted to the public which meant that readers were not actually receiving any new information.

In their study, Luth, Jardine, and Bubela (2013) analyzed media coverage on the H1N1 pandemic in 2009 and found that the majority of television news content was dedicated to vaccination processes and the daunting events associated with it such as shortages and long line-ups. This finding demonstrates that even in the event of solutions such as vaccinations, the alarming content was still the main focus in the news content. Other studies have analyzed whether news articles supported or did not support the vaccination for H1N1 and found that the majority of news articles were in favor of vaccinations (Rachul, Ries, and Caulfield, 2011). These findings demonstrate that positive outcomes can be formed as a result of ‘alarming’ content because it allows individuals to make informed choices about their decision to become vaccinated.

**Limitations**

A number of limitations were present in this study. First, the present content analysis only analyzed news articles from one specific news source with data related to one province. Only 50 news articles were examined for their content and this is only a small fraction of the news articles that CBC publishes. Therefore, these findings are not generalizable of CBC news content in its totality. Next, this analysis included news articles that appeared in a google search in which the last 50 articles that met the criteria for this specific analysis were used. Therefore, time disparities were present in that not every article that was published each day was used, nor was an article per day used in the sample. Lastly, the analysis is only a descriptive account of news content and does not explain why the themes related to the subject matter appeared in the articles. Therefore, future qualitative research should be conducted to determine how this subject matter affects citizens’ thoughts and opinions on the COVID-19 pandemic and ultimately, how it affects their behaviour in terms of future vaccinations that may be created.

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