

Comparative Analysis of Risk Communication in Canada and Bolivia

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Abstract

Indigenous Peoples living in Canada often experience significantly different ways of life than non-Indigenous peoples. This difference should be considered when creating risk communication messages. A one-size-fits-all approach is not enough, as evidenced by historical accounts of past pandemics and a comparative analysis of the COVID-19 response by Clearwater River Dene Nation and the Indigenous community response to the COVID-19 pandemic in the Bolivian Amazon. Risk communication for Indigenous Peoples should take into account the needs of individual communities and factors that make them differ so greatly from the general Canadian population.

The Canadian government appears to be behind in its ability to communicate risk effectively to Indigenous populations. It needs to consider a new direction for risk communication based on evidence of perceived successes of self-determined plans by other Indigenous Peoples in different regions of the world.

Keywords: COVID-19, Indigenous, pandemic response, risk communication, government

Research Question

How has the government improved risk communication with Indigenous populations during pandemics? Do these communities have the capacity to self-determine their responses for future pandemics?

Indigenous communities in Canada have experienced significantly lower rates of COVID-19 over the first six months of the pandemic, despite “poverty, overcrowding, limited health infrastructure and poor access to clean water” (Banning, 2020, para. 4). COVID-19 is a novel coronavirus strain that began a public health crisis around the globe in late 2019 (Jung, 2020). Indigenous communities worldwide are historically more susceptible to infectious disease and viruses due to higher rates of poverty, morbidity and mortality than their non-Indigenous counterparts (Kaplan, 2020). According to Banning (2020), Indigenous communities that use self-determined, strength-based, proactive risk communication strategies are faring significantly better than the general Canadian population, with only 422 cases on reserves across the country as of Aug. 6, 2020 (paras. 5, 14).

Resources permitting, Indigenous community leaders should have the ability to consult on the most appropriate emergency response for their residents, in contrast to the sweeping regulations for urban Canadians and those in centres with better access to resources. This sentiment is reinforced by Laupacis (2020), “Federal-provincial jurisdictional issues have hindered effective delivery of public health and health care for Indigenous Peoples under normal circumstances and must not be allowed to get in the way of an effective response to COVID-19.” (para. 5).

This analysis highlights some of the historical responses to pandemic events for Indigenous communities in Canada and the improvements in risk communication approaches within many communities over the last 102 years. It reinforces the argument that provincial and federal governments could have more success working with Indigenous communities by providing capacity and not enforcing regulations that are irrelevant for remote and rural communities. This is supported by an article analyzing the Clearwater River Dene Nation’s

reactive response in comparison to the proactive COVID-19 response of remote Indigenous communities in the Bolivian Amazon. A discussion and analysis of the literature and recommendations for risk communication best practices for Indigenous communities follow.

Literature Review

The following literature review provides context about the history of Indigenous Peoples responding to pandemic situations and the capacity of Indigenous communities to respond to emergencies effectively. Two articles outline the pandemic responses of the Indigenous Peoples during the Spanish Flu in 1918 and the H1N1 Influenza in 2009. The third article provides insight into the evolution of the risk communication process.

Spanish Flu 1918: A Simulation

O'Neil and Sattenspiel (2010) performed a computer simulation to model the spread of the 1918 Spanish Flu among three fur-trading Indigenous communities in Manitoba, Canada. They hypothesized that increased movement between communities contributed to the spread of the influenza in one of the hardest-hit areas during that time. Within the first six weeks of the pandemic, Norway House, Manitoba had 50 residents die as a result of the virus, while two neighbouring communities had not yet seen a case, despite movement between settlements (O'Neil & Sattenspiel, 2010, p. 757). The simulation ran one thousand times for each parameter, simulating 200 days of the pandemic under summer and winter parameters to determine the potential spread in each season, as intercommunity mobility and personal contact differ (p. 762). The results of the simulation noted that if the pandemic had begun in the summer, the infection and death rates would have been significantly higher due to shorter travel times between communities and increased frequency of travel (p. 764). By 2009, the risk communication for

pandemic response in Indigenous communities improved seemingly because of heightened awareness of the needs of the people in these remote communities (Driedger et al., 2013).

Indigenous Response to H1N1 Pandemic Risk Communication

Driedger et al. (2013) examined the responses of Indigenous Peoples to the risk messaging provided during the 2009 H1N1 pandemic. In the first wave of the pandemic, 46 per cent of hospitalizations were peoples of Indigenous ancestry, while in the second wave, Indigenous Peoples represented nine per cent of hospitalizations, due in part to the history of poorer health outcomes (Driedger et al., 2013, p. 2). Their analysis addresses the government and public health authorities' ability to provide effective risk communication to different populations based on their perceptions of risk. The "one size fits all" approach does not work and must be adapted to consider how the receiver may understand the message, the level of trust the receiver has in the source and confidence in the information that is being provided (p. 2). The acknowledgment of these differences is supported by Sandman and Covello's (2001) theories to better approach risk communication.

The Evolution of Risk Communication

Sandman and Covello (2001) discuss the evolution and revolution of risk communications to "guide the new partnership and dialogue of government and industry with the public" (para. 2). They provide obstacles, stages and rules for approaching risk communication and using it to motivate people to react more appropriately to the risk situation. They outline four major obstacles to risk communication including incomplete or a lack of related data, distrust of sources, selective reporting by the media and factors that affect a person's ability to process the risk (para. 5). Sandman and Covello also identify four stages of the evolution of risk communication including ignoring the issue, learning to explain the risk data in a simplified way,

creating dialogue with the community, and finally, treating the public as a partner. The third stage includes the release of the Seven Cardinal Rules of Risk Communication, in which the fourth stage can be fully realized by following such rules (Sandman & Covello, 2001).

Comparative Analysis

Clearwater River Dene Nation: A Reactive Pandemic Response

A combination of tactics used to mitigate a COVID-19 outbreak at Clearwater River Dene Nation (CRDN) taught other rural areas in the country how to avoid their own outbreaks (Allen, 2020). The successful tactics are identified as a collaboration with other communities and governments; communication by leaders and Elders; travel restrictions including a curfew and check stops; remote testing; temporary housing for those self-isolating; and emergency relief for chronic issues like poverty and health problems. Allen breaks down the implications of each tactic, outlining the benefit to the protection of the community members. This comprehensive emergency response was formulated after the worst COVID-19 outbreak in an Indigenous community struck CRDN with nearly 300 cases of the virus and five deaths (Allen, 2020, para. 9). Allen stresses the themes of community effort, serving all members equally with culturally sensitive methods and protecting the population.

Allen's analysis contributes to the narrative that Indigenous communities can better determine the needs and goals of their respective nation more accurately than the provincial and federal governments. The tactics described in the article resulted in complete containment of the outbreak and established guidelines for similar success in other remote communities.

In contrast, an opinion editorial published in the *National Post* argues that geographic lockdowns on reservations are oppressive for non-Indigenous peoples as they become unable to access their second homes and cabins on Indigenous land (Gurney, 2020). Gurney likens the

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strict COVID-19 response by rural and Indigenous communities to that of Stephen King's *The Stand* in its dystopian attempt to isolate from others and avoid the virus (paras. 2-3). Although the author recognizes rural communities' lack of access to resources, and thus vulnerability to COVID-19, he describes the travel restrictions as "jarring" (para. 6). Gurney suggests allowing those with summer homes on reserve land and those with a need to transit through such areas to receive special benefit to do so; so long as they do not use local resources in any capacity (para. 7).

The final statement notes the need to allow life to go on as normal as possible while still respecting the capacity of rural areas to keep their residents safe and healthy (Gurney, 2020). The CRDN and many other Indigenous communities' ability to alleviate the effects of the pandemic across the country prove the travel restrictions effective, among the other tactics. This response came after disaster struck and was thus a reactive approach; in comparison, the proactive approach taken in the Bolivian Amazon further supports the tactics presented by CRDN and the fourth stage of risk communication as outlined by Sandman and Covello (2001).

Indigenous Community Response in the Bolivian Amazon: A Proactive Pandemic Response

Kaplan et al. (2020) analyze the COVID-19 response of Indigenous Peoples living in the Bolivian Amazon and argue that voluntary collective isolation is more beneficial to the safety of the community than the sweeping regulations of the country. This is due to both the lifestyle differences between those living in cities and towns versus those living in remote communities with a reduced ability to effectively comply with federal regulations that do not consider the cultural and local norms of the community (Kaplan et al., 2020, p. 1728). The Beni Department, a northern region of Bolivia, is sparsely populated with around 16,000 Indigenous Peoples

spread across 100 villages (p. 1728). The leaders of this region enacted a two-phase, proactive risk communication plan to support the health and safety of those living in the Beni Department.

The first phase was centred around awareness and prevention with coordination of tribal leadership, information provisioning, collective decision-making, collaboration with government and public health authorities, purchase and training for use of personal protective equipment and medical care for non-COVID-19 diseases to avoid contraction in hospitals (p. 1730). The transition between the first and second phases included isolation support with “medication, testing and basic necessities, as well as community blockades and enforcement of rules” (Kaplan et al., 2020, p. 1730). The second phase is centred around reporting of cases to local authorities and residents, mapping the cases, coordinating isolation responses by connecting with the appropriate parties, testing and contact tracing, and managing the infected patients. Their plan took the unique needs and lack of resources in Indigenous communities into account while allowing for adaptation depending on circumstances. The goal of this article is to promote strategies that will save lives in communities that cannot respond the same way as those in urban centres (p. 1733).

Discussion & Analysis

The evolution of risk communication outlined by Sandman and Covello (2001) is evident throughout the history of pandemic response within Indigenous communities in Canada and the Bolivian Amazon. Each resource demonstrates risk communication through the stages, with the Spanish Flu risk communication in stage one, ignorance, H1N1 in stage two, simplification of complex data, CRDN progressing through stage three, two-way communication, and peoples indigenous to the Bolivian Amazon in stage four, collaboration. To reach the fourth stage, risk

communication must embody the Seven Cardinal Rules created by the Environmental Protection Agency in 1988:

1. Accept and involve the public as a legitimate partner;
2. Listen to the audience;
3. Be honest, frank and open;
4. Coordinate and collaborate with other credible sources;
5. Meet the needs of the media;
6. Speak clearly and with compassion;
7. Plan carefully and evaluate performance. (Sandman & Covello, 2001)

Since the 1918 Spanish Flu pandemic hit in winter and travel times between communities went beyond the incubation and recovery times, the virus never made it to the other communities (O'Neil and Sattenspiel, 2010, p. 764). It is also suggested that local news reports allowed those communities to prepare and avoid contracting the virus through isolation (p. 764). This simulation provided insight into the factors that may have influenced the spread of the Spanish Flu in remote communities in Canada and highlights the significance of community transmission, one of the biggest contributors to the spread of COVID-19 and one of the main focuses of pandemic risk communication. The decision to isolate seems as if it was a self-determined choice based on the circumstances, not a decision backed by dedicated risk communication, which supports the notion that risk communication was in stage one.

During the outset of the 2009 H1N1 pandemic, Indigenous communities saw a delay in reception of pandemic supplies and instead received a shipment of body bags from the federal government (Driedger et al., 2013, p. 3). Research included focus groups of Indigenous community members and interviews of key informants such as senior public health officials and government representatives. The results concluded that Indigenous Peoples felt the risk communication they received made them feel as though their lives were less valued, that they were singled out as being a risk factor for their ancestry and that they were the “guinea pigs” for

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a new vaccine (pp. 4-6). While the government was trying to provide for the Indigenous populations within Canada, the people did not see it that way and were reluctant to get the vaccine as it became available which was likely due to ineffective risk communication. The Canadian government elected to identify Indigenous populations as a priority group for vaccinations which resulted in a conspiracy theory response as many felt stigmatized by the government (p. 6). This study gives public health officials and government entities fuel to adapt its messaging to be more cognizant of the potential for stigmatization and to be “positioned within a post-colonial context” (Driedger et al., 2013, p. 7). The lack of dialogue with people in the remote communities served supports the notion that risk communication was in stage two.

Risk communication during the COVID-19 pandemic varies in its stage based on geographic location: for those living in Canada, risk communication seems to be progressing through stage three for those living in remote communities with different needs than urban residents. For those living in urban centres and larger towns, risk communication seems to be in stage four which could be due to fewer (or less prominent) of the four obstacles to the effectiveness of risk communication (Sandman & Covello, 2001, ‘Obstacles to Risk Communication Effectiveness’). The comprehensive community collaboration of Beni Department officials, anthropologists, physicians and tribal leaders in the Bolivian Amazon seems to be a clear indication of risk communication reaching stage four.

Conclusion & Recommendations

The research question asks if risk communication has improved over the course of several pandemics and whether Indigenous communities have the capacity to self-determine their response strategies to these pandemics. According to Laupacis (2020), government issues have historically hindered the delivery of public health to Indigenous Peoples and should not hinder

the pandemic response further. The literature review outlines how the 1918 Spanish Flu was spread between Indigenous communities in Manitoba, the Indigenous response to government risk communication during the 2009 H1N1 pandemic and the evolution of risk communication. The analysis examined the lessons learned by CRDN during the COVID-19 pandemic and reviewed the collaborative pandemic plan for Indigenous Peoples living in Bolivia.

The strict response by Indigenous communities during the COVID-19 pandemic reinforces the need for self-determined emergency response and risk communications to reach the fourth stage of risk communication, as explained by Sandman and Covello (2001). The two-phase plan offered by the Beni Department in Bolivia encapsulates the fourth stage of risk communication to better reach those living remotely with less access to resources. It appears that the Canadian government and public health officials are slowly adapting their risk communication efforts for the benefit of Indigenous Peoples, but have not yet reached a place of partnership and collaboration. It is recommended to consider the two-phase plan with community-specific adaptations. Curtice and Choo (2020) support the sentiment of Indigenous leaders first determining their community's needs and devising an appropriate plan before governments step in to provide solutions (para. 5).

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