



## What contributes to COVID-19 Online Disinformation Among Black Canadians - A Qualitative Study

Journal:	CMAJ
Manuscript ID	CMAJ-22-0983
Manuscript Type:	Research - Qualitative research
Date Submitted by the Author:	29-Jun-2022
Complete List of Authors:	Kemei, Janet; University of Alberta, Faculty of Nursing Alaazi, Dominic; University of Alberta, Faculty of Nursing Olanlesi-Aliu, Adedoyin; University of Alberta, Faculty of Nursing Tunde-Byass, Modupe; University of Toronto and North York General Hospital, Obstetrics and Gynaecology Sekyi-Otu, Ato; University of Toronto, Department of Surgery; William Osler Health System Mohamud, Habiba; Impact-Institute of Canada Salami, Bukola; University of Alberta, Nursing
Keywords:	Qualitative Research
More Detailed Keywords:	COVID-19, Black Population, Canada, Disinformation, Vaccine Hesitancy
Abstract:	<p>Background: Online disinformation and misinformation contribute to higher rates of COVID-19 infection and vaccine hesitancy in Black communities in Canada. Through stakeholder interviews, our research project sought to describe the nature of COVID-19 online dis/misinformation among Black Canadians and identify the factors contributing to this phenomenon.</p> <p>Methods: We conducted in-depth qualitative interviews with 30 Black stakeholders with insights on the nature and impact of COVID-19 online dis/misinformation in Black communities. We analyzed data using content analysis, drawing on analytical resources from intersectionality theory.</p> <p>Results: The stakeholders reported sharing of COVID-19 online dis/misinformation in Black Canadian communities, much of which involved social media interaction among family, friends, and community members and information shared by prominent Black figures on social media platforms such as WhatsApp and Facebook. Our data analysis shows that poor communication, cultural and religious factors, distrust of healthcare systems, and distrust of governments contributed to COVID-19 dis/misinformation in Black communities.</p> <p>Conclusion: Our findings suggest racism and underlying systemic discrimination against Black Canadians immensely catalyzed the spread of dis/misinformation in Black communities across Canada, which in turn exacerbated existing health inequities experienced by Black people. In addition to overcoming existing social and economic inequities, we propose collective efforts need to be made by individuals, community organizations, healthcare providers, and policymakers to address COVID-</p>

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

	19 dis/misinformation in Black communities.

SCHOLARONE™  
Manuscripts

1  
2  
3 **What contributes to COVID-19 Online Disinformation Among Black Canadians - A**  
4 **Qualitative Study**  
5

6 **Janet Kemei, PhD**

7 Postdoctoral Fellow

8 University of Alberta, Faculty of Nursing

9 Email: [Kemei@ualberta.ca](mailto:Kemei@ualberta.ca)  
10

11  
12 **Dominic A. Alaazi, PhD**

13 Research Associate, HIPP Research Program, University of Alberta  
14

15 **Adedoyin Olanlesi-Aliu, PhD**

16 Postdoctoral Fellow

17 University of Alberta, Faculty of Nursing  
18

19  
20 **Modupe Tunde-Byass, MD**

21 President, Black Physicians of Canada (BPC)  
22

23 **Ato Sekyi-Otu, MD**

24 Co-Chair of Health Task Force, Black Opportunity Fund  
25

26  
27 **Habiba Mohamud, PhD**

28 Community Leader, Edmonton  
29

30 **Bukola Salami, PhD**

31 Director: Intersections of Gender Signature Area

32 Associate Professor of Nursing

33 Principal Investigator: Health and Immigration Policies and Practices Research Program (HIPP)

34 University of Alberta, Faculty of Nursing

35 Email: [Bukola.salami@ualberta.ca](mailto:Bukola.salami@ualberta.ca)  
36  
37

38 **Declaration of Authors**

39 We confirm that this manuscript has not been published elsewhere and is not under consideration  
40 by another journal.

41 All authors have approved the manuscript and agree with its submission to CMAJ.

42 All authors declare no competing interests  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

## Abstract

**Background:** Online disinformation and misinformation contribute to higher rates of COVID-19 infection and vaccine hesitancy in Black communities in Canada. Through stakeholder interviews, our research project sought to describe the nature of COVID-19 online dis/misinformation among Black Canadians and identify the factors contributing to this phenomenon.

**Methods:** We conducted in-depth qualitative interviews with 30 Black stakeholders with insights on the nature and impact of COVID-19 online dis/misinformation in Black communities. We analyzed data using content analysis, drawing on analytical resources from intersectionality theory.

**Results:** The stakeholders reported sharing of COVID-19 online dis/misinformation in Black Canadian communities, much of which involved social media interaction among family, friends, and community members and information shared by prominent Black figures on social media platforms such as WhatsApp and Facebook. Our data analysis shows that poor communication, cultural and religious factors, distrust of healthcare systems, and distrust of governments contributed to COVID-19 dis/misinformation in Black communities.

**Conclusion:** Our findings suggest racism and underlying systemic discrimination against Black Canadians immensely catalyzed the spread of dis/misinformation in Black communities across Canada, which in turn exacerbated existing health inequities experienced by Black people. In addition to overcoming existing social and economic inequities, we propose collective efforts need to be made by individuals, community organizations, healthcare providers, and policymakers to address COVID-19 dis/misinformation in Black communities.

## Introduction

Black Canadians are disproportionately affected by COVID-19.<sup>1</sup> For example, as of September 2020, data tracking COVID-19 cases in Toronto indicated Black people accounted for 24% of positive cases despite constituting only 9.3% of the city's total population.<sup>2</sup> Black people and other racialized communities in Canada are also more likely to be hospitalized with COVID-19 than White and East Asian people.<sup>3</sup> COVID-19 online dis/misinformation may have contributed to these disparities by posing a threat to COVID-19 vaccine acceptance among Black Canadians.<sup>4,5</sup> Growing evidence indicates lower COVID-19 vaccination rates among Black Canadians than other segments of the population.<sup>6</sup> A report from Statistics Canada shows only 56% of Black Canadians reported willingness to receive a COVID-19 vaccine as opposed to 77.6% of the general population.<sup>7</sup>

The susceptibility of Black Canadians to COVID-19 online disinformation, vaccine hesitancy, infections, and hospitalizations may be attributed to several individual- and structural-level factors, including socioeconomic status, crowded living environments, cultural barriers, racial discrimination, poor access to healthcare, and poor housing, that make it difficult for this population to adhere to public health directives.<sup>8</sup> Similarly, anti-Black racism, structural inequities, and dis/misinformation contribute to high rates of COVID-19 infections among Black Canadians.<sup>9</sup> Racism is deeply entrenched and normalized in Canadian institutional policies and practices, contributing to discrimination against Black people in Canada.<sup>10</sup> The ongoing racial disparities in health outcomes and racism within the Canadian healthcare system have sparked

1  
2  
3 dis/misinformation related to mistrust of healthcare organizations by Black communities,<sup>11</sup> thus  
4 increasing vaccine skepticism and hesitancy.  
5

6 Dis/misinformation can promote negative health behaviors that can exacerbate the negative  
7 impact of COVID-19.<sup>12</sup> Dis/misinformation contributes to the high rate of COVID-19 infection  
8 and low rate of COVID-19 vaccination among Black Canadians. To our knowledge, no  
9 qualitative studies examine COVID-19 online disinformation in Black communities in Canada.  
10 Therefore, our research project sought to describe the nature of COVID-19 online  
11 dis/misinformation among Black Canadians and identify the factors contributing to this  
12 phenomenon. This study defines misinformation as false or erroneous information that is  
13 unintentionally deceptive, and disinformation as incorrect information intended to mislead,  
14 deceive, or influence public opinion.<sup>13</sup>  
15  
16

## 17 **Ethics Approval**

18  
19 The study was approved by the Research Ethics Board of the University of Alberta  
20 (Pro00114392). Participants reviewed the information letter via mail and gave written informed  
21 consent.  
22

## 23 **Methods**

### 24 **Study design and participant selection**

25  
26 We conducted in-depth individual interviews with 30 Black stakeholders with insights into the  
27 COVID-19 experiences of Black communities. This sample size is within the range of a  
28 descriptive qualitative research study.<sup>14</sup> One of the authors (JK) and a research assistant  
29 developed a database of Black Organizations in Canada, from which we recruited community  
30 leaders, Black-led organization leaders, and Black service providers. We also used snowballing  
31 to recruit additional participants. The research team developed an interview guide with input  
32 from an advisory committee of Black community leaders from across Canada. The interviews  
33 were completed from February to April 2022. We conducted all interviews in English via Zoom  
34 or telephone, as per the participant's choice. Interviews were semi-structured, lasted  
35 approximately 1 hour, and were audio-recorded and transcribed verbatim.  
36  
37  
38

39 An intersectionality theoretical lens<sup>15</sup> informed data collection and analysis. Intersectionality  
40 spotlights how the diverse elements of people's unique social identities could overlap to  
41 influence their experiences.<sup>15</sup> Multifaceted intersecting social identities affect the health of Black  
42 Canadians. Hence, intersectionality explains how multiple social identities such as race and  
43 gender simultaneously intersect with structural factors such as racism and poverty to contribute  
44 to unequal health outcomes.<sup>16</sup> Therefore, during the analysis, we considered issues related to age,  
45 gender, race, embedded inequalities, and intersecting influences. We collected data on gender  
46 from all participants and did not restrict demographic questions on gender to binary  
47 conceptualizations. We disaggregated demographic data by age, gender/sex, place of origin,  
48 location in Canada, religion, immunization status, and role within the Black community. We also  
49 recognize that Black communities are a heterogeneous group. Thus, we strived for representation  
50 from African immigrants, Caribbean immigrants, members of historic Black communities in  
51 Canada, and Blacks from the United States of America.  
52  
53  
54

### 55 **Data analysis**

1  
2  
3 The data collection and analysis processes were iterative. Three authors (JK, DAA, and AA)  
4 independently read three transcripts to familiarize themselves with the data and develop a coding  
5 framework. The Advisory Committee and the Principal Investigator (BS) reviewed the draft  
6 coding framework and provided input. Using the NVivo 12 software, JK read all transcripts and  
7 applied the coding framework to complete the data coding and analysis. We undertook an  
8 inductive content analysis,<sup>14</sup> drawing on analytical resources from intersectionality theory.<sup>15</sup> Data  
9 from the stakeholder interviews allowed us to reach data saturation. Preliminary results were  
10 shared with the advisory team members for their feedback to ensure the quality of data. Research  
11 team members observed reflexivity throughout the research process by maintaining subjective  
12 awareness of their multiple privileges, intentions, and assumptions.  
13  
14

## 15 **Results**

16  
17 We interviewed 30 stakeholders representing community leaders and Black service providers.  
18 Details on the sociodemographic characteristics of participants are provided in Table 1.  
19

### 20 **Nature of COVID-19 online dis/misinformation**

21  
22 According to participants, COVID-19 online dis/misinformation was widespread in Black  
23 communities and typically included misconceptions of COVID-19 as a fallacy and COVID-19  
24 vaccines as ineffective drugs with microchips. Participants indicated the belief that COVID-19  
25 was a hoax at the beginning of the pandemic led to a slower acceptance of recommended public  
26 health interventions and delays in seeking healthcare (P024). Lack of knowledge on vaccine  
27 development led to misinformation about vaccine safety, given its fast development (P008).  
28 Others believed one could acquire COVID-19 by getting vaccinated and that the vaccines were  
29 not essential, given that vaccinated people were still susceptible to COVID-19 infection (P024).  
30 Further, inconsistent information about vaccine dosages raised concerns about the efficacy of the  
31 vaccines within the community (P010).  
32  
33

34 Some Black community members believed the COVID-19 vaccine contained microchips that  
35 Bill Gates and other Western leaders could use to track people who were vaccinated (P025), thus  
36 compromising their privacy and increasing their vulnerability to racial profiling.  
37

38 COVID-19 vaccine mandates further increased this suspicion and skepticism among the Black  
39 population (P029). These misconceptions contributed to vaccine hesitancy in Black communities  
40 and increased the risks of infection.  
41

42 Social media interactions among Black people were dominated by a lack of knowledge about the  
43 vaccines, which raised concerns about vaccine shedding, adverse effects on reproductive health,  
44 and infertility caused by the vaccines (P020). Other participants cited controversies surrounding  
45 previous mandatory vaccine programs in some African countries, linking vaccines with anti-  
46 fertility agents (P025). Moreover, some believed the vaccines were a scam to depopulate Black  
47 communities (P021).  
48  
49

### 50 **Facilitators of COVID-19 online dis/misinformation**

#### 51 ***Miscommunication***

52  
53 Participants identified a lack of credible information sources, distribution of unverified  
54 information, and overwhelming conflicting information as facilitators of the spread of COVID-  
55  
56  
57

1  
2  
3 19 online dis/misinformation in Black communities. Most participants were concerned that  
4 credible information about the disease was not readily available to Black communities, causing  
5 anxieties and panic within Black communities and pushing people to rely on social media,  
6 friends, and family for COVID-19 information (P003).  
7

8 Credible information about the disease from governments and health authorities was not  
9 accessible by the majority of Black community members. Black communities vastly prefer face-  
10 to-face communication, but much of the credible information from these sources was distributed  
11 via electronic and print media, such as television and newspaper outlets (P009). This  
12 incompatibility made credible information inaccessible, especially to Black people who worked  
13 frontline jobs or multiple jobs and lacked time to access these sources (P017). Further, Black  
14 people with limited digital literacy faced barriers to accessing credible information, causing them  
15 to depend on COVID-19 information relayed by others, which increased their risk of exposure to  
16 dis/misinformation (P025).  
17  
18

19 Black communities also faced many conflicting messages from multiple sources, including social  
20 media, governments, health authorities, healthcare practitioners, expert opinions, and  
21 international organizations such as the World Health Organization. The conflicting messages  
22 from these sources (P004) degraded the credibility of information from public health agencies.  
23 This made Black communities susceptible to COVID-19 online dis/misinformation, including  
24 inaccurate messages that downplayed the seriousness of the pandemic and the efficacy of  
25 COVID-19 vaccines.  
26  
27

28 An overwhelming abundance of unverified COVID-19 information circulated within the  
29 networks of Black communities. With the lockdowns in full force, social media platforms such  
30 as Facebook and WhatsApp offered more accessible ways to interact and share information  
31 about the pandemic. Black communities predominantly consist of immigrants who use social  
32 media to maintain transnational ties with family or friends residing in their home countries.  
33 Therefore, social media became a source of information fatigue through which COVID-19  
34 dis/misinformation spread (P020).  
35  
36

### 37 ***Cultural and religious factors***

38 Most participants explained how Black Canadians are highly attached to their countries of origin.  
39 Thus, rumors originating in their land of birth spread quickly in the diaspora community because  
40 of the strong ties between the two (P009). Such culture-based disinformation included beliefs  
41 suggesting religious faith and natural health remedies were more effective than vaccines in  
42 combatting the spread of COVID-19. Because most Black people are religious, they were readily  
43 susceptible to this kind of dis/misinformation, and even more so if such rumors were spread by  
44 religious leaders (P009). Although all participants reported being immunized, they observed that  
45 some Black community members opposed COVID-19 vaccines. In particular, some Black people  
46 viewed these vaccines and their developers as anti-Christ agents; misrepresentation of the  
47 scriptures created fear and contributed to refusal and a delayed acceptance of COVID-19  
48 vaccines in Black communities.  
49  
50  
51

52 Consistent with traditional African worldviews, Black people were inclined to believe  
53 misinformation about herbal supplements being an effective preventive remedy or treatment for  
54 COVID-19 infection (P030). Most participants explained that these beliefs mainly spread  
55 through social media (P001), bringing about a false sense of security that exposed more  
56  
57  
58



1  
2  
3 community members to the disease while discouraging their use of approved care supports  
4 (P008).  
5

### 6 ***Distrust of health care systems***

8 Some participants referenced the history of medical racism and continuous exploitation of Black  
9 people in the medical system as a factor that diminished trust in governments and health  
10 organizations. Participants referenced past injustices, such as the Tuskegee experiment (1932-  
11 1972), in which U.S. Public Health allowed African-American men with syphilis to go untreated  
12 as a way of chronicling the progression of the disease (P001). Participants acknowledged the  
13 cumulative trauma to Black communities caused by racism in health systems that have  
14 continuously failed them (P001). These histories increased Black people's skepticism about  
15 COVID-19 and its vaccines, rendering them vulnerable to alternative truths about the disease  
16 (P019).  
17  
18

19  
20 Systemic racism has consistently posed challenges to the health of Black people and exacerbated  
21 the health disparities they face. Participants highlighted how exposure to racism and  
22 discrimination has left the community feeling disregarded, reinforcing mistrust of healthcare  
23 organizations and diminishing efforts at increasing vaccine acceptance (P024). Participants  
24 revealed that many Black people would rather believe the information obtained from social  
25 media than messages communicated by healthcare professionals. This attitude served to  
26 undermine public health responses to the pandemic. Participants also indicated that inequitable  
27 distribution of the vaccines and testing kits reinforced the distrust Black people had with respect  
28 to healthcare systems. Specifically, despite reporting a higher number of COVID-19 infections  
29 and deaths, Black communities were not prioritized when test kits were distributed; yet, they  
30 were being increasingly asked to get vaccinated (P018). Thus, addressing racism represented a  
31 more pressing need for Black communities than adherence to public health interventions.  
32  
33

### 34 ***Distrust of governments***

35  
36  
37 Participants described dis/misinformation within the Black community that occurred because of  
38 experiences of discrimination and differential treatment based on race and skin color. Racism has  
39 perpetuated distrust of governments due to the lack of commitment to addressing inequities faced  
40 by Black Canadians, especially in the areas of education, employment, housing, policing,  
41 childcare, and healthcare (P019). According to participants, Black people's perceptions of  
42 government influenced how they responded to public health interventions addressing the  
43 pandemic (P014). For instance, compared to other ethno-racial groups, more Black Canadians  
44 worked in frontline jobs and used public transport, where a lack of opportunities for physical  
45 distancing increased their risk of COVID-19 infection. Thus, Black communities' belief that  
46 governments are indifferent to their plight increased their skepticism of COVID-19 interventions,  
47 including vaccines. Participants expressed that governments should acknowledge anti-Black  
48 racism within institutions and should work on building trust with Black communities (P003,  
49 P008).  
50  
51

### 52 **Interpretation**

53  
54  
55  
56  
57



1  
2  
3 This descriptive qualitative study on COVID-19 online dis/misinformation among Black  
4 Canadians adds to the literature on ethno-racial experiences of the pandemic. We identified the  
5 nature of COVID-19 online dis/misinformation in Black Canadian communities and four themes  
6 that explain the facilitators of this phenomenon among this demographic: miscommunication,  
7 cultural and religious factors, distrust of healthcare systems, and distrust of governments.  
8

9  
10 Our study found that social media, especially instant messaging platforms such as Facebook and  
11 WhatsApp, became a conduit through which dis/misinformation about COVID-19 spread in  
12 Black communities. During the lockdowns, people predominantly relied on social media to keep  
13 up with information about the pandemic, including forwarding information to spread awareness  
14 within the community. However, this form of information exchange also carried the dangers of  
15 dis/misinformation, contributing to the risks of COVID-19 infections and poor health outcomes  
16 among Black Canadians.<sup>17</sup> For example, anti-vaccine groups weaponized Black people's  
17 historical encounters with healthcare systems to coerce Black communities into rejecting  
18 COVID-19 vaccines.<sup>18</sup> Accordingly, we found dis/misinformation about COVID-19 as a fallacy,  
19 COVID-19 vaccines as ineffective, vaccines as microchips, and vaccines as agents of infertility  
20 and death with the potential to eradicate the Black population.  
21  
22

23 As a consequence, a 20-point gap developed between vaccinated White Canadians (65%) and  
24 Black Canadians (45%).<sup>19</sup> The upsurge in online dis/misinformation thus exacerbated health  
25 inequities experienced by Black communities. It also undermined public health interventions to  
26 curb the spread and impact of COVID-19.<sup>8</sup>  
27

28 Firm beliefs in cultural practices such as religious faith and natural health remedies contributed  
29 to dis/misinformation within Black communities. These beliefs corroborated findings from  
30 previous studies suggesting that consuming herbs, water containing magnesium and zinc, and  
31 foods rich in vitamin C, D, and E could help overcome COVID-19 infection.<sup>20</sup> Further, most  
32 Black people are religious and tend to believe information from their spiritual leaders,<sup>21</sup> yet, in  
33 the context of COVID-19, some was dis/misinformation. Hence, some Black people were  
34 hesitant to get vaccinated due to their religious beliefs, although some religious leaders were  
35 noted for encouraging their congregations to get vaccinated.<sup>22</sup>  
36  
37

38 Other participants highlighted how communication about COVID-19 and vaccines failed to  
39 reach Black communities. They emphasized the challenges of conflicting COVID-19 messages  
40 and the lack of paid time for frontline workers to get vaccinated. The participants also identified  
41 the role of language barriers in hampering access to accurate information, given that some Black  
42 community members had inadequate English and/or French language skills. Language barriers  
43 during the COVID-19 pandemic resulted in decreased adherence to public health directives and  
44 recommendations.<sup>23,24</sup> Hence, the lack of multilingual resources that are culturally appropriate  
45 exacerbated the knowledge gap about the COVID-19 pandemic for members of Black  
46 communities.  
47  
48

49 Our results show how systemic racism significantly exacerbated the health disparities  
50 experienced by Black people in Canada. Although our participants were all fully vaccinated, they  
51 noted that some members of their communities were vaccine-hesitant due to distrust of vaccine  
52 manufacturers, healthcare systems, and governments. This hesitancy is largely construed to be  
53 the result of historical experiences of racist medical procedures, which should be addressed while  
54 considering the role of ethnocultural beliefs about health and ill-health. COVID-19 online  
55 dis/misinformation in Black communities is also perpetuated by ongoing racism and unconscious  
56  
57  
58

1  
2  
3 biases within contemporary healthcare organizations,<sup>25</sup> including the enduring lack of culturally  
4 appropriate healthcare services for Black patients.<sup>26</sup> Hence, there is a need to use an anti-racist  
5 and anti-oppressive framework to guide health agencies in addressing inequalities within the  
6 healthcare system and understand how social and economic conditions, structural racism, and  
7 systemic discrimination can engender quality-driven trust.<sup>27</sup> Such confidence is noted to be  
8 paramount in promoting the use of preventative services (O'Malley, 20.<sup>28</sup>  
9

10  
11 Our study found that Black communities did not believe governments and public health agencies  
12 were honest, transparent, and consistent in their communication regarding the COVID-19  
13 pandemic. Mis/disinformation about COVID-19, especially at its initial stages, proliferated,  
14 causing confusion and eroding trust in health authorities. Public health authorities must take  
15 responsibility for communicating accurate information in an accessible manner while  
16 acknowledging racism and other forms of oppression as the root causes of distrust among  
17 racialized communities.<sup>27</sup>  
18

19  
20 Our study further shows the need to engage community-based healthcare clinics with respect to  
21 promoting COVID-19 vaccine uptake and eliminating language and cultural barriers to vaccine  
22 access. For instance, such a model in California indicated community-engaged approaches  
23 rooted in principles of authentic partnership that include trust-building, power-sharing, and co-  
24 learning are crucial for addressing public health crises such as the COVID-19 pandemic.<sup>25</sup> This  
25 approach identified barriers to vaccine uptake that were then addressed by providing culturally  
26 appropriate care.<sup>6</sup>  
27

### 28 **Strengths and Limitations**

29  
30 Using descriptive qualitative inquiry and a semi-structured interview guide allowed us to obtain  
31 information directly from stakeholders without restricting their voices. The semi-structured,  
32 open-ended questions encouraged a researcher-participant dialogue that generated rich insights  
33 on COVID-19 online dis/misinformation in Black communities. However, our inability to recruit  
34 participants from the Caribbean and some provinces (e.g., Quebec) with large Black populations  
35 is a limitation of study. Our participant recruitment also relied on purposive and snowball  
36 sampling techniques, which led to a largely homogenous sample in which most participants  
37 identified as Christian and cisgender.  
38  
39

### 40 **Conclusion**

41  
42 Underlying systemic racism and related inequities in Canada created mistrust for public health  
43 authorities and contributed to Black people's preparedness for alternative truths about COVID-  
44 19. Cultural and language barriers to credible information and an overreliance on social media  
45 contributed to this vulnerability. Addressing COVID-19 online dis/misinformation should be  
46 done with a health equity lens and ideally be a collective effort involving individuals, community  
47 organizations, healthcare providers, and policymakers.  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

## References

1. Innovative Research Group. The Impact of COVID-19 on Black Canadians 2020 Sept 2. <https://innovativeresearch.ca/wp-content/uploads/2020/09/ACCEC01-Release-Deck.pdf>. (Accessed 2022 Apr 20).
2. City of Toronto. COVID-19: status of cases in Toronto. Sept 2020. <https://www.toronto.ca/home/covid-19/covid-19-latest-city-of-toronto-news/covid19-status-of-cases-in-toronto/> (Accessed 2022 Apr 20).
3. Ahmed R, Jamal O, Ishak W, Nabi K, Mustafa N. Racial equity in the fight against COVID-19: a qualitative study examining the importance of collecting race-based data in the Canadian context. *Trop Dis Travel Med Vaccines*. 2021;7:15.
4. Bowman G. Nationwide COVID mandate protests fueled by online misinformation: expert. CityNews Everywhere Feb 19, 2022. <https://vancouver.citynews.ca/2022/02/19/covid-mandate-convoys-misinformation/>
5. Farooq F, Rathore FA. COVID-19 Vaccination and the challenge of infodemic and disinformation. *J Korean Med Sci*. 202;36:e78.
6. Eissa A, Lofters A, Akor N, Prescod C, Nnorom O. Increasing SARS-CoV-2 vaccination rates among Black people in Canada. *CMAJ*. 2021;193:E1220-E1221.
7. Statistics Canada. *COVID-19 vaccine willingness among Canadian population groups*. Ottawa. 2021. Available: <https://www150.statcan.gc.ca/n1/pub/45-28000/2021001/article/00011eng.htm> (accessed 2022 May 26).
8. Ala A, Wilder J, Jonassaint NL, Coffin CS, Brady C, Reynolds A, Schilsky ML. COVID-19 and the uncovering of health care disparities in the United States, United Kingdom and Canada: Call to action. *Hepatol Commun*. 2021;5:1791-1800.
9. Mensah J, Williams CJ. Socio-structural injustice, racism, and the COVID-19 pandemic: A precarious entanglement among Black immigrants in Canada. *Studies in Social Justice*. 2022;16 : 2022.
10. Government of Canada. Building a Foundation for Change: Canada's Anti-Racism Strategy 2019–2022. <https://www.canada.ca/en/canadian-heritage/campaigns/anti-racism-engagement/anti-racism-strategy.html> (Accessed 2022 May 26).
11. Cook SD. Mistrust of health system part of vaccine hesitancy in Black communities, advocates say. CBC News. March 21, 2021. <https://www.cbc.ca/news/canada/edmonton/alberta-vaccine-hesitancy-black-community-1.5955501> (Accessed 2022 Apr 20).
12. Loomba, S., de Figueiredo, A., Piatek, S.J. et al. Measuring the impact of COVID-19 vaccine misinformation on vaccination intent in the UK and USA. *Nat Hum Behav*. 2021; 5: 337–348
13. Lazer DM, Baum MA, Benkler Y, Berinsky AJ, Greenhill KM, Menczer F, Metzger MJ, Nyhan B, Pennycook G, Rothschild D, Schudson M. The science of fake news. *Science*. 2018;359:1094-6.
14. Sandelowski M. Whatever happened to qualitative description? *Res Nurs Health*. 2000;23:334-40.
15. Crenshaw K. Demarginalizing the intersection of race and sex: A Black feminist critique of antidiscrimination doctrine, feminist theory and antiracist politics. *University of Chicago Legal Forum*. 1989;1:8. <http://chicagounbound.uchicago.edu/uclf/vol1989/iss1/8>

16. Bowleg L. The problem with the phrase women and minorities: intersectionality-an important theoretical framework for public health. *Am J Public Health*. 2012 Jul;102(7):1267-73. doi: 10.2105/AJPH.2012.300750.
17. Collins-Dexter B. Canaries in the coal mine: COVID-19 misinformation and Black communities. *Harvard Kennedy Centre (Shorenstein Center)*. 2020. Available: <https://shorensteincenter.org/canaries-in-the-coal-mine/>. (Accessed 2022 Feb 15).
18. Dodson K, Mason J, Smith R. Covid-19 vaccine misinformation and narratives surrounding Black communities on social media. First Draft. October 13, 2021. <https://firstdraftnews.org/long-form-article/covid-19-vaccine-misinformation-black-communities>. (Accessed 2022 May 26)
19. Innovate Research Group. COVID-19 vaccine confidence. Black Canadian perspective. 2021. Available: <https://innovativeresearch.ca/wp-content/uploads/2021/07/Black-Canadian-Vaccine-Confidence>. (Accessed on May 16, 2022)
20. Arshad MS, Khan U, Sadiq A, et al. Coronavirus disease (COVID-19) and immunity booster green foods: A mini review. *Food Sci Nutr*. 2020;8:3971-3976.
21. Obi-Ani N, Anikwenze C, Chukwudi M, Isiani M. Social media and the Covid-19 pandemic: observations from Nigeria. *Cogent Arts Humanit*. 2020;7:1-15.
22. Crary D, Smith P. Many faith leaders wary of religious exemptions for vaccine. CTV News. Feb 12, 2022. <https://www.ctvnews.ca/health/coronavirus/many-faith-leaders-wary-of-religious-exemptions-for-vaccine-1.5779007>. (Accessed May 16, 2022)
23. Craig S, Daurio M, Kaufman D, Perlin R, Turin M. The unequal effects of COVID-19 on Multilingual immigrant communities. RSC COVID-19 series, Publication#98. March 24, 2021. <https://rsc-src.ca/en/voices/unequal-effects-covid-19-multilingual-immigrant-communities>. (Accessed on 2022 April 20).
24. Huncar A. Lost in translation: Newcomers need COVID-19 information in their own languages, advocates say. March 31, 2020. CBC News. <https://www.cbc.ca/news/canada/edmonton/edmonton-language-barriers-covid-19-low-income-housing-1.5517122>. (Accessed on May 16, 2022)
25. AuYoung M, Rodriguez Espinosa P, Chen W-T et al. Addressing racial/ethnic inequities in vaccine hesitancy and uptake: lessons learned from the California alliance against COVID-19. *J Behav Med*. 2022:1-14.
26. Salami B et al. Access to mental health for Black youths in Alberta. *Health Promot Chronic Dis Prev Can* 2021;41(9):245-253.
27. Jaiswal J, LoSchiavo C, Perlman DC. Disinformation, misinformation and inequality-driven mistrust in the time of COVID-19: Lessons unlearned from AIDS denialism. *AIDS Behav*. 2020;24:2776-2780.
28. O'Malley AS, Sheppard VB, Schwartz M, Mandelblatt J. The role of trust in use of preventive services among low-income African-American women. *Prev Med*. 2004;38:777-85.

**Table 1:** Sociodemographic Characteristics of Participants

<i>Variable</i>	<i>n</i>	<i>%</i>
Age (years)		
25-34	5	16.67
35-44	10	33.33
45-54	10	33.33
55+	5	16.67
Gender		
Male	16	53.33
Female	14	46.67
Place of Origin		
West Africa	11	36.67
East Africa	10	33.33
North America	5	16.67
South Africa	2	6.67
North Africa	1	3.33
Europe	1	3.33
Location		
Alberta	15	50
Ontario	10	33.33
Nova Scotia	2	6.67
British Columbia	1	3.33
Manitoba	1	3.33
Saskatchewan	1	3.33
Religion		
Christian	27	90
Muslim	2	6.67
Others	1	3.33
Immunization status		
Fully immunized	30	100
Not immunized	-	-
Role		
Service provider	19	63.33
Community leader	11	36.67

Table 2: Themes

Theme	Participant quotes
<p><b>Nature of COVID-19 Online Dis/misinformation</b></p>	<p>They think [COVID-19] is a hoax... So if someone doesn't believe there's a problem, even if they have the disease, they're going to minimize it or they're going to deny it... So people would not seek help on time because they do not believe, or their perception is that the disease is not real. So, by the time they present to the hospital, it's too late, okay? (P024)</p> <hr/> <p>Some people say the vaccine was developed too fast, and if it is too fast how sure they are that it is effective... So, because of that, they don't believe in taking it, because it may have bad effects in future. (P008)</p> <hr/> <p>So when you have people say, "Oh, yeah, as soon as I got the vaccine, in fact I contracted COVID-19,"... So you are not seeing people saying, "It saved me from this." People are saying, "Well, you know, I still got the flu." So it was like, "Well, what's the point? If you're getting sick from getting the vaccine, what's the point of doing that? I'm not putting that foreign body or that toxin into my body."(P024).</p> <hr/> <p>The vaccine, they say, like I think when we got the vaccine, the first dose, and the second dose, and we thought like, "Oh, it's – that's going to be it... And again, there is another, a third dose... and again, there's another fourth dose, so we don't know when this is going to end. Because we still don't know like what is happening. (P010)</p> <hr/> <p>But, you know, the mis-spread of information on WhatsApp led some people to believe that this was some instrument that was being used to control the population by Bill Gates or, you know? Maybe the Western leaders ...and for you to get around this, you have to get a chip, and like this chip, they would be able to monitor your activities... and that kind of raised some kind of fears among the community members. Yeah. (P025).</p> <hr/> <p>Well, it has really created a lot of mixed reaction... Canada, it's supposed to be multicultural, and it's supposed to be a country that has a choice, you make your own choice. But during COVID, I don't think people were given that choice...they were kind of forced to take the vaccine, and they have been left with doubt... They think the vaccine is intended to control the population, in the Black community. (P029)</p> <hr/> <p>Uh, well, for females, there was like okay, there was a fear of if you caught the – if you caught the virus, you know, it could affect your fertility. (P020)</p> <hr/> <p>Well, for starters, I think people, from my understanding, with the Africans... there was a time back then when at the point when polio was kind of rampant... so they have a fear that like some people who took the medication or the vaccinations were not able to have kids... and they think that the vaccines made them infertile, and it was a way of the West controlling them. (P025)</p> <hr/> <p>Okay, so the misconceptions that I can think we find in our Black communities are first of all, that like it is something that was created by White people so that they can get rid of us Black people. (P021)</p>
<p><b>Facilitators of COVID-19 online dis/misinformation</b></p> <p>Miscommunication</p>	<p>The absence of timely, ongoing, trusted and connected sources of information where people can go and just really understand the fullness of the, you know, the virus or the vaccines, or what's happening in the community, in the absence of those kinds of thing, folks are – folks fill that void either with disinformation, assumptions, or, you know, general perceptions that – general perceptions or misconceptions that gets spread into the community. (P003)</p> <hr/> <p>Another thing about the information was that it didn't consider how members of our communities get information. So, we like one-on-one... so just targeting information in the media, I think it did not – it didn't reach members of our community. And again, we are very curious – I mean, we like to ask questions, okay? So, if you just put information out there without the means of engaging and feedback of that information, that will not help us. (P009)</p> <hr/> <p>Yeah, for those that have a challenge to access Internet sources, yes, we can say that there is a gap. Because it is difficult to access information, for those that are struggling to survive, and that are working for 16 hours. (P017)</p> <hr/> <p>But also, at the same time, we can't really blame our community members, because a lot of the people that came here maybe came as refugees and never had the opportunity to go to school, and this is something new to them, and they have no idea of what, you know, peer – peer review is, what kind of information might be coming from a peer-reviewed source, which information's reliable or not. They lack that, you know, that guidance. (P025)</p> <hr/> <p>And like I said, they – the – yes, the government is talking, but sometime today they will say A, tomorrow they will say B. After, they will say C. So, it's like they don't know themselves, where they are going... Now I think people get used with that. They don't even listen to them. So, myself, I stopped listening. (P004)</p> <hr/> <p>Because everybody gets information from social media on various site sources... one community member has some information shared on one platform, and it's disseminated without verifying the source. (P020)</p>



1 Cultural and religious 2 factors	You know, while a lot of us living here, we have directly interfaced with what is happening back home...So that link between here and back home was also played a key factor in people's perception, okay?...Because the information flows not just online alone...Because when they get something back home, they forward it to those of us who are here. And so that was also a means of misinformation, but also an opportunity for education that people didn't recognize here. (P009).
3 4 5 6 7	Because even a lot of the misconceptions and the misinformation were fueled by some religious leaders who felt that the vaccine had something to do with spirituality and the anti-Christ and so many other things they practice...And there's some churches that even told their members not to take, and some of their members did not, you know. (P009)
8 9	A lot of us, or people of African and Caribbean or Black descent, believe in your body acquiring natural immunity, plus using natural protective, I guess, interventions, concoctions, whether it was [Laughs] the famous ginger, lemon and whatever that was going around. (P030)
10 11 12	I've also interacted with community members who had mentioned to me that they have herbs that could protect you from COVID-19, and as such do not need to wear masks, or take any prevention other than those teas... And some of the sources are not verified sources, but, you know, the community consumes a lot of the information that is gotten through social media. (P001)
13	Yeah, then some people also were thinking that with herbs you can kill the virus, that you don't need to take any vaccination. (P008)
14 Distrust of health care 15 systems	So, there is a lot of broken trust between the ACB [African Caribbean Black] communities and the mainstream medical healthcare because of the medical history between the ACB communities and the system, the health system... We could talk about the Tuskegee experiments...And similarly, to look at other Black experiences in the healthcare that we see. (P001)
16 17 18	We could also talk about the mental health, you know, looking at the trauma, you know, including medical PTSDs [post traumatic stress disorders] for those who have experienced medical racism, directly or indirectly within the healthcare system. (P001)
19 20	They just don't trust. Anything that they don't have control over, which is not much that Black people have control over it, they don't trust it. They don't trust the systems to me, because in their minds the systems always fail Black people, right? (P019)
21 22 23 24	They feel disenfranchised, or they don't think they are part of the whole world, so to say. They feel that, you know, there's nothing, you know, in the system for them. They also go back to lack of trust of the system, and also the medical community, and I've heard even one of our own saying that, "You know, we don't trust you guys. We don't trust you doctors because you just, you know, you are just a part of the whole conspiracy." And then the historical perspective is very, very strong... they prefer to get their information online or they also have specific areas where they get their information from. (P024).
25 26 27	But once that was done, and when it came to testing, distribution of testing kits, again, we were forgotten, you know? [Laughter] You know, so it was quite incomplete, because you see, when it came to vaccines, yes, we were remembered, right, and those communities were used to disseminate the information that vaccines are available. And then when it came to testing kits, that would have helped people to kind of keep them safe and – right? (P018).
28 Distrust of governments	I know it sounds really hard and it sounds bizarre, but at the core of it I think is anti-Black racism. I think when you are a population that's the most hated population, when you're a population that faces the most disenfranchisement, when you're a population that has, next to the Indigenous, the highest number of people in child – in the number of Black kids in childcare, when you have the highest number of Black men incarcerated, I think it's all that. So Black people just don't trust. (P019).
29 30 31 32 33 34	I think very specifically, as it relates to the vaccine and as it relates to COVID-19, I think there is a proliferation of disinformation within that community that stems from challenges related to distrust of the state, rightful distrust of the state, right? But I think that it's kind of morphed into conspiracy theories that are unhelpful...But nevertheless, they've kind of taken hold as an expression of that distrust, but I think that in the context of COVID-19, those can be really damaging and concerning (P014).
35 36 37 38 39	Folks were told to physically distance, but there were some folks who had to go to work and, you know, were being called heroes, etcetera. And so they would be going to work early morning on the bus, but the buses were full. Folks asked for additional buses so that they could physically distance, and the official response from the government was that they weren't going to send more buses...This is fertile ground, not only for distrust and misinformation for some folks. It's also fertile ground for, um... those health inequities ... you know, when you parse these things out one by one, disinformation or, you know, vaccination and mandates, we're often not getting an understanding of how things coalesce or collocate to create the context in which people like think and act. (P003)
40 41 42 43	Like for instance, we found out that during the COVID-19 spread, yeah, there have been significant experiences of discrimination among the Black people in – in – that's across the country. So that there was significant negative experiences in attempting to receive healthcare during the COVID-19 period...So that can help them to accept misinformation if the healthcare system is not doing what they are supposed to do, to support their needs during a critical time of COVID-19. (P008).



1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47

Confidential