

What contributes to COVID-19 online disinformation among Black Canadians: a qualitative study

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Abstract

Background: Black Canadians are disproportionately affected by the COVID-19 pandemic, and the literature suggests that online disinformation and misinformation contribute to higher rates of SARS-CoV-2 infection and vaccine hesitancy in Black communities in Canada. Through stakeholder interviews, we sought to describe the nature of COVID-19 online disinformation among Black Canadians and identify the factors contributing to this phenomenon.

Methods: We conducted purposive sampling followed by snowball sampling and completed in-depth qualitative interviews with Black stakeholders with insights into the nature and impact of COVID-19 online disinformation and misinformation in Black communities. We analyzed data using content analysis, drawing on analytical resources from intersectionality theory.

Results: The stakeholders (n = 30, 20 purposively sampled and 10 recruited by way of snowball sampling) reported sharing of COVID-19 online disinformation and misinformation in Black Canadian communities, involving 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 health care systems and distrust of governments contributed to COVID-19 disinformation and misinformation in Black communities.

Interpretation: Our findings suggest racism and underlying systemic discrimination against Black Canadians immensely catalyzed the spread of disinformation and misinformation in Black communities across Canada, which exacerbated the health inequities Black people experienced. As such, using collaborative interventions to understand challenges within the community to relay information about COVID-19 and vaccines could address vaccine hesitancy.

lack Canadians are disproportionately affected by the COVID-19 pandemic.¹ For example, as of September 2020, data tracking of COVID-19 cases in Toronto showed Black people accounted for 24% of positive cases despite constituting only 9.3% of the city's total population.² Black people and other racialized communities in Canada are also more likely to be admitted to hospital with COVID-19 than White and East Asian people.³ Further, evidence shows a universal vaccine hesitancy across countries and subgroups.⁴ Disinformation and misinformation about COVID-19 contributes to health disparities by posing a threat to the acceptance of the SARS-CoV-2 vaccine among Black Canadians.⁵-10

The susceptibility of Black Canadians to online COVID-19 disinformation, vaccine hesitancy, infections and hospital admissions may be attributed to several individual- and structural-level factors, including socioeconomic status, crowded living environments, cultural barriers, racial discrimination, poor access to health care and poor housing, that make it difficult for this population to adhere to public health directives. Similarly, anti-Black racism and structural inequities within

Canadian institutions expose Black people to socioeconomic vulnerabilities, which increase the burden of COVID-19 morbidity and death to this population, ^{12,13} thus increasing vaccine skepticism and hesitancy. On completing a scoping review of online disinformation among Black people, ¹⁴ we wanted to deepen our knowledge and situate the findings from our scoping review within the Canadian context. Despite the negative health behaviours promoted by disinformation, there is a paucity of qualitative studies examining online COVID-19 disinformation in Black communities in Canada. We aimed to describe the nature of online COVID-19 disinformation and misinformation among Black Canadians and identify the factors contributing to this phenomenon.

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Methods

We conducted a descriptive qualitative study.¹⁵ We purposively invited Black community leaders, Black-led organization executives, Black policy-makers, and Black health care providers to participate as advisory committee members for our study. We recruited 7 advisory committee members including Black community leaders, Black medical doctors and executive leaders of Black organizations in Canada. The research team developed an interview guide (Appendix 1, available at www.cmajopen.ca/content/11/3/E389/suppl/ DC1) with input from an advisory committee. One of the authors (J.K.), a female postdoctoral fellow and a Black researcher, developed a database of Black organizations in Canada, from which we purposively recruited participants who were Black community leaders, Black-led organization leaders and Black service providers. We also used snowballing to recruit additional participants as we had difficulty finding participants for our study.

Study setting

With the pandemic restrictions and the diverse location of our participants, J.K. conducted all interviews by way of Zoom or telephone, as per the participant's choice. The interviews were completed from Feb. 9 to Apr. 9, 2022, during the Omicron wave of the pandemic. Participants were given the option to interview in either English or French. Interviews lasted about 1 hour and were audio-recorded and transcribed verbatim.

Data collection

We conducted in-depth individual interviews with Black stakeholders with insights into experiences of Black communities during the pandemic. During the interview, we asked participants to discuss what they know about online disinformation among Black people in Canada and the effect of online COVID-19-related disinformation for Black Canadians, and to provide us with their perspective on evidencebased practices to address online COVID-19-related disinformation among Black Canadians. We collected data on sex from all participants and did not restrict demographic questions on sex to binary conceptualizations (Appendix 2, available at www.cmajopen.ca/content/11/3/E389/suppl/DC1). We disaggregated demographic data by age, or sex, place of origin, location in Canada, religion, vaccination status and role within the Black community. We also recognize that Black communities are a heterogeneous group. Thus, we strived for representation from African immigrants, Caribbean immigrants, members of historic Black communities in Canada and Black people from the United States. One author (J.K.) wrote field notes after each interview.

Data analysis

The data collection and analysis processes were iterative. We conducted an inductive content analysis, ¹⁵ drawing on analytical resources from intersectionality theory. ¹⁶ Intersectionality spotlights how the diverse elements of people's unique social

identities could overlap to influence their experiences. ¹⁶ During the analysis, we considered issues related to age, sex, race, embedded inequalities and intersecting influences. Three authors (J.K., D.A.A. and A.O.A.) independently read 3 transcripts to familiarize themselves with the data and develop a coding framework. The advisory committee and the principal investigator (B.S.) reviewed the draft coding framework and provided input. Using NVivo 12 software, J.K. read all transcripts and applied the coding framework to complete the data coding and analysis. Preliminary results were shared with the advisory team members for their feedback to ensure the quality of data. Research team members observed reflexivity throughout the research process by maintaining subjective awareness of their multiple privileges, intentions and assumptions.

Ethics approval

The University of Alberta Ethics Board approved our study (Pro00114392).

Results

We reached data saturation after interviewing 30 participants (20 purposively sampled and 10 recruited by way of snowball sampling), which included 16 males and 14 females. Our participants were 15 Black stakeholders from Alberta, 10 from Ontario, 2 from Nova Scotia, and 1 each from British Columbia, Manitoba and Saskatchewan. All participants chose to be interviewed in English. Details on the sociodemographic characteristics of participants are provided in Table 1. In reporting our results, where fewer than 5 participant views are presented, we have used the term some, and where more than 5 participants are presented, we have used the term most. We have made it clear for single participants' views (a representative example of a view from 1 participant).

Main themes

We identified 2 main themes: the nature of online COVID-19 disinformation and the facilitators of COVID-19 disinformation. Participant quotes supporting analysis of data are shown in Table 2.

Nature of online COVID-19 disinformation and misinformation

According to participants, online COVID-19 disinformation and misinformation was widespread in Black communities and typically included misconceptions of COVID-19 as a fallacy and SARS-CoV-2 vaccines as ineffective drugs with microchips. Some participants (<5 participants) indicated the belief that COVID-19 was a hoax at the beginning of the pandemic led to a slower acceptance of recommended public health interventions and delays in seeking health care (P024, female, 58 yr). Lack of knowledge on vaccine development led to misinformation about vaccine safety, given its fast development, as expressed by most participants (P008, male, 50 yr). Others believed a person could acquire COVID-19 by getting vaccinated and that the vaccines were not essential, given that vaccinated people were still susceptible to the



/ariable	No. (%) n = 30	
Age, yr		
25–34	5 (17)	
35–44	10 (33)	
45–54	10 (33)	
≥ 55	5 (17)	
Sex		
Male	16 (53)	
Female	14 (47)	
Place of origin		
West Africa	11 (37)	
East Africa	10 (33)	
North America	5 (17)	
South Africa	2 (7)	
North Africa	1 (3)	
Europe	1 (3)	
ocation		
Alberta	15 (50)	
Ontario	10 (33)	
Nova Scotia	2 (7)	
British Columbia	1 (3)	
Manitoba	1 (3)	
Saskatchewan	1 (3)	
Religion		
Christian	27 (90)	
Muslim	2 (7)	
Other	1 (3)	
/accination status		
Fully vaccinated*	30 (100)	
Not vaccinated	0	
Role		
Service provider	19 (63)	
Community leader	11 (37)	

SARS-CoV-2 infection (P024, female, 58 yr). Another participant explained that inconsistent information about vaccine dosages raised concerns about the efficacy of the vaccines within the community (P010, female, 40 yr).

Some participants suggested that Black community members believed the SARS-CoV-2 vaccine contained microchips that Bill Gates and other Western leaders could use to track people who were vaccinated (P025, male, 34 yr), thus compromising their privacy and increasing their vulnerability to racial profiling. Hence, the SARS-CoV-2 workplace vaccination requirements and proof of vaccination to enter

public places such as restaurants, further increased this suspicion and skepticism among the Black population as explicated by most participants (P029, female, 57 yr). These misconceptions contributed to vaccine hesitancy in Black communities and increased the risks of infection.

A few mentioned that social media interactions among Black people were dominated by a lack of knowledge about the vaccines, which raised concerns about vaccine shedding, adverse effects on reproductive health, and infertility caused by the vaccines (P020, male, 40 yr). Other participants cited controversies surrounding previous mandatory vaccine programs in some African countries, linking vaccines with anti-fertility agents (P025, male, 34 yr). Moreover, some participants believed the vaccines were a scam to depopulate Black communities (P021, female, 40 yr).

Facilitators of online COVID-19 disinformation and misinformation

Miscommunication

Participants identified a lack of credible information sources, distribution of unverified information and overwhelming conflicting information as facilitators of the spread of online COVID-19 disinformation and misinformation in Black communities. Most participants were concerned that credible information about COVID-19 was not readily available to Black communities, causing anxieties and panic within Black communities and pushing people to rely on social media, friends and family for information (P003, male, 32 yr). They indicated that credible information about the disease from governments and health authorities was not accessible to most Black community members. Most participants expressed that Black communities prefer face-to-face communication, but much of the credible information from these sources was distributed by way of electronic and print media, such as television and newspaper outlets (P009, male, 54 vr). This made credible information less accessible, especially to Black people who worked frontline jobs or multiple jobs and lacked time to access these sources (P017, male, 43 yr). Some participants asserted that Black people with limited digital literacy faced barriers to accessing credible information, causing them to depend on COVID-19 information relayed by others, which increased their risk of exposure to disinformation and misinformation (P025, male, 34 yr).

Black communities also faced many conflicting messages from multiple sources, including social media, governments, health authorities, health care practitioners, expert opinions and international organizations such as the World Health Organization. Some participants indicated that the conflicting messages from these sources degraded the credibility of information from public health agencies (P004, male, 44 yr). This made Black communities susceptible to online COVID-19 disinformation and misinformation, including inaccurate messages that downplayed the seriousness of the pandemic and the efficacy of SARS-CoV-2 vaccines.



Research

Although most participants predominantly consisted of immigrants who use social media to maintain transnational ties with family or friends residing in their home countries, an overwhelming abundance of unverified COVID-19

information circulated within the networks of Black communities regardless of their country of origin. With the lockdowns, social media platforms such as Facebook and WhatsApp offered more accessible ways to interact and share

Table 2 (part 1 of 2): Themes		
Theme	Participant quotations	
Nature of online CO\	VID-19 disinformation and misinformation	
	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, female, 58 yr)	
	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 the future. (P008, male, 50 yr)	
	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, female, 58 yr)	
	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, female, 40 yr)	
	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, male, 34 yr)	
	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, female, 57 yr)	
	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, male, 40 yr)	
	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, male, 34 yr)	
	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, female, 40 yr)	
Facilitators of onlin	ne COVID-19 disinformation and misinformation	
Miscommunication	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, male, 32 yr)	
	Another thing about the information was that it didn't consider how members of our communities get information. So, we like 1-on-1 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, male, 54 yr)	
	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, male, 43 yr)	
	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, male, 34 yr	
	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, male, 44 yr)	
	Because everybody gets information from social media on various site sources 1 community member has some information shared on 1 platform, and it's disseminated without verifying the source. (P020, male, 40 yr)	



Table 2 (part 2 of 2): Themes		
Theme	Participant quotations 2	
Cultural and religious factors	You know, while a lot of us living here, we have directly interfaced with what is happening back home So that linl between here and back home has also played a key factor in people's perception, okay? Because the informatio 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, male, 54 yr)	
	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, male, 54 y	
	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, female, 53 yr)	
	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 som of the sources are not verified sources, but, you know, the community consumes a lot of the information that is gotte through social media. (P001, female, 36 yr)	
	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, male, 50 yr)	
are systems medical he system	So, there is a lot of broken trust between the ACB [African Caribbean Black] communities and the mainstream medical health care 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 th health care that we see. (P001, female, 36 yr)	
	We could also talk about the mental health, you know, looking at the trauma, you know, including medical PTSDs [posttraumatic stress disorders] for those who have experienced medical racism, directly or indirectly within the health care system. (P001, female, 36 yr)	
	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, female, 44–54 yr)	
	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, female, 58 yr)	
	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, male, 48 yr)	
istrust of overnments	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, female, 44–54 yr [participant provided an age range])	
	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, male, 28 yr).	
heroes, et cetera. And so they would be going to work early morning on the bus, be additional buses so that they could physically distance, and the official response from weren't going to send more buses This is fertile ground not only for distrust an fertile ground for, um those health inequities you know, when you parse these	Folks were told to physically distance, but there were some folks who had to go to work and, you know, were being called heroes, et cetera. 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 als fertile ground for, um those health inequities you know, when you parse these things out 1 by 1, 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, male, 32 yr)	
	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 health care during the COVID-19 period So that can help them to accept misinformation if the health care system is not doing what they are supposed to do, to support their needs during a critical time of COVID-19. (P008, male, 50 yr)	





information about the pandemic. Therefore, some participants explicated that social media became a source of information fatigue through which COVID-19 disinformation and misinformation spread (P020, male, 40 yr).

Cultural and religious factors

Most participants explained how Black Canadians are highly attached to their countries of origin. Thus, rumours originating in their land of birth spread quickly in the diaspora community because of those strong ties (P009, male, 54 yr). Such culture-based disinformation included beliefs suggesting religious faith and natural health remedies were more effective than vaccines in combatting the spread of the SARS-CoV-2 infection. One participant illuminated that because most Black people are religious, they were readily susceptible to this kind of disinformation and misinformation, and even more so if such rumours were spread by religious leaders (P009, male, 54 yr). Although all participants reported being vaccinated, they observed that some Black community members opposed SARS-CoV-2 vaccines. In particular, some Black people viewed these vaccines and their developers as anti-Christ agents; misrepresentation of the scriptures created fear and contributed to refusal and a delayed acceptance of SARS-CoV-2 vaccines in Black communities (P009, male, 54 yr).

Some participants eluded that consistent with traditional African worldviews, Black people were inclined to believe misinformation about herbal supplements being an effective preventive remedy or treatment for SARS-CoV-2 infection (P030, female, 53 yr). These participants explained that these beliefs mainly spread through social media (P001, female, 36 yr), bringing about a false sense of security that exposed more community members to the disease and discouraging their use of approved care supports (P008, male, 50 yr).

Distrust of health care systems

Some participants referenced the history of medical racism and continuous exploitation of Black people in the medical system as a factor that diminished trust in governments and health organizations. Participants referenced past injustices, such as the Tuskegee experiment (1932–1972), in which US Public Health allowed African-American men with syphilis to go untreated as a way of chronicling the progression of the disease (P001, female, 36 yr). Participants acknowledged the cumulative trauma to Black communities caused by racism in health systems that have continuously failed them (P001, female, 36 yr). These histories increased Black people's skepticism about COVID-19 and its vaccines, rendering them vulnerable to alternative truths about the disease (P019, female, 44–54 yr [participant provided an age range]).

Systemic racism has consistently posed challenges to the health of Black people and exacerbated the health disparities they face. Participants highlighted how exposure to racism and discrimination has left the community feeling disregarded, reinforcing mistrust of health care organizations and diminishing efforts at increasing vaccine acceptance (P024, female, 58 yr). Participants suggested that many Black people would rather believe the information obtained from social media

than messages communicated by health care professionals. This attitude served to undermine public health responses to the pandemic. Participants also indicated that inequitable distribution of the vaccines and testing kits reinforced the distrust Black people had with health care systems. Specifically, despite reporting a higher number of SARS-CoV-2 infections and deaths, Black communities were not prioritized when test kits were distributed; yet, they were being increasingly asked to get vaccinated (P018, male, 48 yr). Thus, addressing racism represented a more pressing need for Black communities besides adherence to public health interventions.

Distrust of governments

Participants described disinformation and misinformation within the Black community that occurred because of experiences of discrimination and differential treatment based on race and skin colour. Racism has perpetuated distrust of governments owing to the lack of commitment to addressing inequities faced by Black Canadians, especially in the areas of education, employment, housing, policing, child care and health care (P019, female, 44-54 yr). According to participants, Black people's perceptions of government influenced how they responded to public health interventions addressing the pandemic (P014, male, 28 yr). For instance, 1 participant explained that more Black Canadians, compared with other ethnoracial groups, worked in front-line jobs and used public transportation, where a lack of opportunities for physical distancing increased their risk of SARS-CoV-2 infection (P003, male, 32 yr). Thus, the Black communities' belief that governments are indifferent to their plight increased their skepticism of COVID-19 interventions, including vaccines. Some participants expressed that governments should address anti-Black racism within institutions and should work on building trust with Black communities (P003, male, 32 yr; P008, male, 50 yr).

Interpretation

Social media, especially instant messaging platforms such as Facebook and WhatsApp, became a conduit through which COVID-19 disinformation and misinformation spread in Black communities. This form of information exchange also carried the dangers of disinformation and misinformation, affirming the risks of SARS-CoV-2 infections and poor health outcomes among Black Canadians. Most participants suggested racism and underlying systemic discrimination against Black Canadians promoted distrust of the government or health institutions and immensely catalyzed the spread of disinformation and misinformation in Black communities across Canada. Although our participants were all fully vaccinated, they noted that some members of their communities were vaccine-hesitant owing to distrust of vaccine manufacturers, health care systems and governments. They indicated that this hesitancy results from current and historical experiences of racist medical procedures. Most participants referred to the Tuskegee experiments when discussing health disparities and racism in health care in the Canadian context. It is apparent



that the Black community in Canada strongly relates to the Tuskegee experiments and the health care system's history with Black communities in Canada, thus affecting how they respond to the SARS-CoV-2 vaccine. Some participants indicated that communication by health care authorities and the government during the beginning of the pandemic was not culturally appropriate to some Black people owing to conflicting messages and language barriers (besides their own experiences, participants were asked to provide rich information about the impacts of COVID-19 in their communities), prompting an overreliance on their community members over social media. Further, firm beliefs in cultural practices such as religious faith and natural health remedies contributed to disinformation and misinformation within Black communities.

Our findings are similar to other published studies, indicating an upsurge in online disinformation and misinformation, exacerbated health inequities experienced by Black communities and undermined public health interventions to curb the spread and effect of COVID-19.11 Research funded by the Rita Allen Foundation found that anti-vaccine groups weaponized Black people's historical encounters with health care systems to coerce Black communities into rejecting the SARS-CoV-2 vaccines.¹⁷ Our results indicated that some Black people were hesitant to receive vaccinations owing to their religious beliefs, although previously reported findings showed some religious leaders were noted for encouraging their congregations to get vaccinated. There is also evidence showing language barriers during the COVID-19 pandemic resulted in decreased adherence to public health directives and recommendations. 19,20 Other studies have reported issues relating to biases and lack of culturally appropriate care for Black people in Canada and the United States.^{21,22}

Our study shows the need to engage community-based health care clinics to promote SARS-CoV-2 vaccine uptake and eliminate language and cultural barriers to vaccine access. For instance, such a model in California indicated that communityengaged approaches rooted in principles of authentic partnership that include trust-building, power-sharing and co-learning are crucial for addressing public health crises, such as the COVID-19 pandemic.²¹ This approach identified barriers to vaccine uptake that were then addressed by providing culturally appropriate care.8 There is also a need to use an antiracist and anti-oppressive framework to guide health agencies in addressing inequalities within the health care system and understand how social and economic conditions, structural racism and systemic discrimination can engender qualitydriven trust.²³ Practices that stress continuity and communication result in a higher level of confidence in physicians, which is paramount in promoting the use of preventive services.²⁴

Further, religion plays a notable role in the Black communities, rendering the religious institutions essential resources for health care interventions within the Black communities.^{25–27}

Limitations

Our inability to recruit participants from the Caribbean and some provinces (e.g., Quebec) with large Black populations is a limitation of our study. Further, overreliance on snowball sampling led to a largely homogenous sample in which most participants identified as Christian and cisgender. The participants were all vaccinated, a limitation since their accounts cannot fully represent those in the Black community who are vaccine-hesitant. We acknowledge that older adults are more at risk from COVID-19; however, the analysis of our results was dependent on the perspectives of the participants interviewed. We used purposive sampling and snowball techniques to recruit Black community leaders, Black-led organization leaders and Black service providers, resulting in a younger working age population. Future research should target older adults by recruiting through community-based organizations, senior adult living or long-term care homes.

Conclusion

Underlying systemic racism and related inequities in Canada created mistrust for public health authorities and contributed to Black people's preparedness for alternative truths about COVID-19. Therefore, there is a greater need to build trust and adopt collaborative approaches to addressing community concerns; for example, having genuine, respectful discussions of other topical issues affecting Black people, such as employment discrimination, medical racism and anti-racist workplace practices and policies. As such, we recommend supporting and steadily funding existing Black community organizations to develop culturally accessible health education material, including health information flyers and infographics. Funding community-based health centres may help disseminate and increase the uptake of health information and curb the spread of disinformation.

References

- 1. Impact of COVID-19: Black Canadians perspectives. Toronto: Innovative Research Group; 2020 Sept 2. Available: https://innovativeresearch.ca/ wp-content/uploads/2020/09/ACCEC01-Release-Deck.pdf (accessed 2022
- COVID-19: ethno-racial identity & income. Toronto: City of Toronto. Available: https://www.toronto.ca/home/covid-19/covid-19-pandemic-data/ covid-19-ethno-racial-group-income-infection-data/ (accessed 2022 Oct. 4).
- Ahmed R, Jamal O, Ishak W, et al. 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. Lin C, Tu P, Beitsch LM. Confidence and receptivity for COVID-19 vac-
- cines: a rapid systematic review. Vaccines (Basel) 2020;9:16.
- Allen UD. Reducing the impact of COVID-19 on Black communities in Canada: building confidence and decreasing vaccine hesitancy. Ottawa: Royal Society of Canada; 2021. Available: https://rsc-src.ca/en/voices/reducing-impact -covid-19-black-communities-in-canada-building-confidence-and-decreasing (accessed 2022 Aug. 30).
- Bowman G. Nationwide COVID mandate protests fueled by online misinformation: expert. CityNews [Vancouver] 2022 Feb. 19. Available: https:// vancouver.citynews.ca/2022/02/19/covid-mandate-convoys-misinformation/ (accessed 2022 Aug. 30).
- Farooq F, Rathore FA. COVID-19 vaccination and the challenge of infodemic and disinformation. J Korean Med Sci 2021;36:e78.
- Eissa A, Lofters A, Akor N, et al. Increasing SARS-CoV-2 vaccination rates among Black people in Canada. CMAJ 2021;193:E1220-1.
- Broniatowski DA, Jamison AM, Qi S, et al. Weaponized health communication: Twitter bots and Russian trolls amplify the vaccine debate. Am J Public Health 2018:108:1378-84.
- 10. Pierri F, Perry BL, DeVerna MR, et al. Online misinformation is linked to early COVID-19 vaccination hesitancy and refusal. Sci Rep 2022;12:5966.
- Ala A, Wilder J, Jonassaint NL, et al. COVID-19 and the uncovering of health care disparities in the United States, United Kingdom and Canada: call to action. Hepatol Commun 2021;5:1791-800.
- Mensah J, Williams CJ. Socio-structural injustice, racism, and the COVID-19 pandemic: a precarious entanglement among Black immigrants in Canada. Stud Soc Justice 2022;16:123-42.



Research

- Dryden O, Nnorom O. Time to dismantle systemic anti-Black racism in medicine in Canada. CMAJ 2021;193:E55-7.
- Kemei J, Alaazi DA, Tulli M, et al. A scoping review of COVID-19 online mis/disinformation in Black communities. J Glob Health 2022;12:05026.
- Sandelowski M. Whatever happened to qualitative description? Res Nurs Health 2000;23:334-40.
- 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;1989:8. Available: https://chicagounbound.uchicago.edu/uclf/vol1989/iss1/8/ (accessed 2022 May 16).
 Dodson K, Mason J, Smith R. COVID-19 vaccine misinformation and narra-
- Dodson K, Mason J, Smith R. COVID-19 vaccine misinformation and narratives surrounding Black communities on social media. First Draft 2021 Oct. 13.
 Available: https://firstdraftnews.org/long-form-article/covid-19-vaccine-misinformation-black-communities/ (accessed 2022 May 26).
- Crary D, Smith P. Many faith leaders wary of religious exemptions for vaccine. CTV News 2022 Feb. 12. Available: https://www.ctvnews.ca/health/coronavirus/many-faith-leaders-wary-of-religious-exemptions-for-vaccine-1.5779007 (accessed 2022 May 16).
- Ćraig S, Daurio M, Kaufman D, et al. The unequal effects of COVID-19 on multilingual immigrant communities. RSC COVID-19 series, Publication no. 98. Ottawa: Royal Society of Canada; 2021. Available: https://rsc-src.ca/en/voices/ unequal-effects-covid-19-multilingual-immigrant-communities (accessed 2022 Apr. 20).
- Huncar A. Lost in translation: newcomers need COVID-19 information in their own languages, advocates say. CBC News Edmonton 2020 Mar. 31, updated 2020 Apr. 1. Available: https://www.cbc.ca/news/canada/edmonton/edmonton-language-barriers-covid-19-low-income-housing-1.5517122 (accessed 2022 May 16).
- AuYoung M, Rodriguez Espinosa P, Chen W-T, et al.; STOP COVID-19 C.
 A. Communications Working Group. A. Communications Working Group. Addressing racial/ethnic inequities in vaccine hesitancy and uptake: lessons learned from the California alliance against COVID-19. *J Behav Med* 2022 Jan. 22 [Epub ahead of print]. doi: 10.1007/s10865-022-00284-8.
- Salami B, Denga B, Taylor R, et al. Access to mental health for Black youths in Alberta. Health Promot Chronic Dis Prev Can 2021;41:245-53.
- 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;24:2776-80.
- O'Malley AS, Sheppard VB, Schwartz M, et al. The role of trust in use of preventive services among low-income African-American women. *Prev Med* 2004;38:777-85.

- Bruce MA, Bowie JV, Barge H, et al. Religious coping and quality of life among Black and White men with prostate cancer. *Cancer Control* 2020;27. doi: 10.1177/1073274820936288.
- 26. Greyling C, Maulit JA, Parry S, et al. Lessons from the faith-driven response to the West Africa Ebola epidemic. *Rev Faith Int Aff* 2016;14:118-23.
- Obi-Ani NA, Anikwenze C, Isiani MC, et al. Social media and the COVID-19 pandemic: observations from Nigeria. Cogent Arts Humanit 2020;7:1799483.

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