















Acknowledgments

A complete list of the Pandemic Vaccine "Hesitancy" Project Team including principal and co-applicants, collaborators, assistants, funders, designers, and sponsors

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References

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2 EXECUTIVE SUMMARY

Our **scoping reviews on vaccine hesitancy** focused on East Asian, Black, Eastern European, South Asian, Latinx, and Middle Eastern and North African (MENA) ethnoracial communities.

These communities were chosen for the following reasons: experience with previous pandemics, share of the Greater Toronto Area (GTA) population, history of systemic and racialized neglect by public health institutions, position in Canada's economy, pre-migration factors, and an absence of research.

Due to a paucity of scholarly sources, we surveyed news articles, commentaries, and first-person accounts because they provided detailed and timely metropolitan context and intimate experience for understanding vaccine hesitancy and COVID-19 policies.

Our reviews concluded that the reasons for vaccine hesitancy among these six ethnoracial communities were: (a) racism; (b) access barriers; (c) mistrust; and (d) misinformation.

We also conducted a **scoping review on evidence-based health communication strategies** that identified the most effective strategies as: (a) community-centered messages based on two-way communication; (b) sensitive to public mistrust exhibited by disadvantaged communities and the barriers they face; and (c) mindful of the pros and cons of social media.

Measurably effective health promotion strategies surveyed in our **program scan** included: inclusive and culturally sensitive language; digital and non-digital outreach; continuous participatory engagement that empowers decision-making; democratic language; and the use of infographics, comics, drama, games, and free events, amongst others.

All three scoping reviews as well as the program scan formed the basis of a June 23, 2023 Community Dialogue and Collective Action Forum titled, Pandemic Vaccine Access & "Hesitancy" in Racialized and Diasporic Communities in Canada: Where Do We Go From Here? This Forum invited 40 stakeholders from the six ethnoracial communities to discuss our scoping review conclusions and co-develop future actions to facilitate equity in pandemic recovery and readiness, including a proposed action that explores pandemic recovery through the experiences of marginalized communities in two GTA locales.

Overall, we drew key conclusions and made several **recommendations**. The pandemic highlighted the racism that still exists on a societal and systemic level, particularly against Black and Asian communities in the context of COVID-19. A part of these communities' pandemic recovery may involve addressing this and how to move forward, knowing that this could all happen again.

As a result, we recommend the collection of GTA-focused race-based statistics with regards to access barriers, susceptibility to misinformation, and infection rates which allows researchers to accurately locate the causes and conditions of vaccine hesitancy.

Concurrent with this endeavour is engaging with anti-racism organizations to develop a fundable, collaborative, and pragmatic project that explores pandemic recovery from the experiences of racialized peoples in underserved GTA neighbourhoods.

In this vein, recognizing that diverse communities are repositories of important knowledge and resources that can enhance health communication is crucial and requires trust-building communicative tools that bridge divides between marginalized communities and public health priorities.

Finally, we must recognize that community outreach is labour; it is a laborious, taxing, and often understaffed job that can lead to consultation and intervention fatigue.



3 Vaccine Hesitancy

We situate vaccine hesitancy in a demographically diverse metropolitan area, Toronto, Ontario, Canada, and focus on six unique ethnoracial communities and their responses to Toronto's COVID-19 vaccine rollout. The aim of our scoping reviews is to identify the primary reasons for COVID-19 vaccine hesitancy amongst the East Asian, Black, Eastern European, South Asian, Latinx, and Middle Eastern and North African (MENA) diaspora in Toronto.

MISTRUST

The lack of certainty or confidence in people, information, professionals, and/or institutions caused by individual, group, and generational experiences of neglect and oppression and/or the doubts created by misinformation.

ACCESS BARRIERS

Barriers that inconvenience, discourage, or simply restrict people from accessing important health information, resources, and services, often reinforced by one or more of racism, classism, sexism, homophobia, transphobia, and ageism.

3
VACCINE HESITANCY
Terminology

RACISM

"Racism is a system of beliefs (racial prejudices), practices (racial discrimination), and policies based on individuals' presumed race, which operates to advantage those with historical power in most Western nations including White people in the USA and Canada."1

MISINFORMATION

Inaccurate or false information communicated as fact that misguides people on particular issues.

3 VACCINE HESITANCY

COVID-19 Vaccination

BENEFITS

Prevents hospitalizations and deaths.

Decreases the severity and extent of Long COVID.

Relieves pressure on the healthcare system.

Reduces transmission for some variants.



SUCCESSES



COVID-19 vaccines have saved nearly 20 million lives globally in their first year of existence.²

A 2022 report by the Public Health Agency of Canada (PHAC) stated that without COVID-19 measures including vaccination, 800,000 people in Canada would have died from COVID-19.3

UPTAKE

As of January 1, 2024, 83.7% of the total Canadian population have at least one dose.⁴

Yet only 15% are vaccinated per recommendations.⁵



OBSTACLES



Governments across the Global North have cut back COVID-19 relief efforts and terminated data collection.

Disinformation continues to make inroads.

Recommendation to regularly boost since protection wanes after several months

Constantly mutating variants.

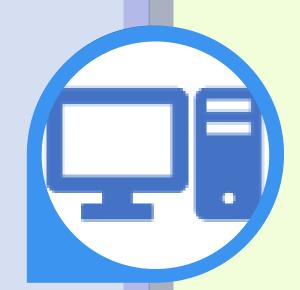
VACCINE HESITANCY ACCESS BARRIERS

LANGUAGE



Difficulty communicating COVID-19 information where there is an English/ethnic language divide.

TECHNOLOGY



Social media privileges tech literate English speakers on major platforms; excluded many from credible public health information.

EMPLOYMENT



Black & South Asian essential workers & the Latinx undocumented were high risk for COVID-19 due to no paid sick days, crowded work/living spaces & privacy concerns.

INCONVENIENCE AND OVERSIGHT (CLINICS AND PHARMACIES)



Taylor-Massey, a racialized neighbourhood with low vaccine uptake, was ignored by vaccine programs while pharmacy oversight disadvantaged many Black communities.

IMMIGRATION



Undocumented migrant workers endured language, tech barriers, & fear of deportation if they disclosed their medical information.

MISINFORMATION

Informal health communication is privileged, exclusionary & may push people towards misinformation (e.g., in some East Asian communities, WeChat became a vector of misinformation).

Historical mistrust of public health, access barriers & systemic racism may create misinformation susceptibility (e.g., Black communities expressed DNA surveillance conspiracies via WhatsApp & urban radio).

Among Eastern Europeans, some ethnic media outlets criticized Canadian health authorities & statistics. Misinformation vulnerability may be an legacy of Soviet propaganda or a pre-migration fear of immunization.

There is a lack of information on the impact of misinformation on Latinx Canadians. Most fears of the vaccine were related to religious beliefs.

More research on MENA communities and vaccine misinformation is needed.

South Asian communities experienced some misinformationinduced religious tension (e.g., the conspiracy that the vaccine contains pork gelatin). vaccine Hesitancy

MISTRUST





1

RELIGIOUS

Muslim South Asian and MENA communities expressed lack of trust in Pfizer and Moderna vaccines based on the false belief that they held non-halal ingredients and thus violated Ramadan fasting restrictions.



3

VACCINE SAFETY

Black Torontonians had questions about vaccine safety articulated in various town halls and social media initiatives such as the Black Mother Collective (BMC).



5

PRE-MIGRATION EXPERIENCES

Eastern European vaccine hesitancy is informed by experiences under communist and/or fascist rule or economic exploitation in Canada.



2

PRIVACY

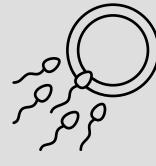
Many essential workers are amongst the 3.2 million people living in Canada who are not Canadian citizens and risk deportation, family separation, and their livelihood if required to show a health card to get a vaccine.⁶





HISTORICAL INJUSTICE

Black vaccine hesitancy is based on a history of systemic racism and unethical medical experimentation such as the Tuskegee Syphilis Experiment (image above).





SIDE EFFECTS

Arab women exhibited vaccine mistrust around questions of fertility with some Arab communities wary of the relative newness of COVID-19 vaccines.



7

WHO IS TRUSTED?

South Asian and Black communities tend to trust health experts and faith leaders from their communities **VACCINE HESITANCY**

RACISM

AND COVID-19 VACCINE HESITANCY



EAST ASIAN

SEEN AS "RESPONSIBLE" FOR COVID-19
ENDURE INCREASED PHYSICAL & GENDERED RACIAL HARASSMENT & VIOLENCE
(E.G., ASIAN WOMEN REPORT 60% OF ALL ANTI-ASIAN RACISM)⁷
IMPACTS EAST ASIAN VACCINE & SERVICE PROVIDERS
ANTI-ASIAN THREATS WORK TO DISCOURAGE MASKING
NORMALIZES "YELLOW PERIL" & "CHINESE DISEASE" DISCOURSES



EASTERN EUROPEAN

EASTERN EUROPEANS ARE SITUATED BETWEEN DISCRIMINATION & WHITENESS NOT SUBJECT TO RACISM IN SAME WAY AS VISIBLE MINORITIES RACIST HARASSMENT OF POLISH PEOPLE IN THE UK, BUT NOTHING SIMILAR IN CANADA



LATINX

PRECARIOUS JOB/IMMIGRATION STATUS & REAL RISK OF GETTING FIRED OR DEPORTED

LATINX UNEMPLOYMENT & MORTALITY RATE WAS HIGHER THAN THE CANADIAN AVERAGE⁸

RACISM

AND COVID-19 VACCINE HESITANCY



BLACK

RACISM PERPETUATED ACCESS BARRIERS & MISTRUST IN MEDICAL INSTITUTIONS
HIGH RISK NEIGHBOURHOODS WERE UNDERSERVED
PANDEMIC MORTALITY RATE FOR BLACK & RACIALIZED PEOPLES WERE OVER 2X
THAT OF NON-RACIALIZED⁹

BLACK PEOPLE MADE UP 21% OF REPORTED COVID-19 CASES BUT WERE ONLY 9% OF THE GTA POPULATION¹⁰

RELATIVES OVERSEAS UNABLE TO GET VACCINES BECAUSE OF THEIR CONCENTRATION IN THE GLOBAL NORTH



SOUTH ASIAN

LESS REPORTED CASES OF PANDEMIC-RELATED DISCRIMINATION COMPARED TO OTHER RACIALIZED GROUPS

MANY ESSENTIAL WORKERS WORK, LIVE, AND TRAVEL IN CROWDED SPACES (E.G., FACTORIES, PUBLIC TRANSIT, ETC.)

THIS FUELS RACIST BELIEF THAT MANY SOUTH ASIANS IGNORE COVID-19 PROTOCOLS



MIDDLE EASTERN AND NORTH AFRICAN (MENA)

DO NOT WORK IN RACIALIZED ESSENTIAL SERVICES TO SAME EXTENT AS OTHER GROUPS

GAP IN THE LITERATURE, DESPITE EVIDENCE OF ANTI-ARAB/ANTI-PALESTINIAN RACISM IN CANADA

US CENSUSES COUNT MENA AMERICANS AS "WHITE" WHICH IMPACTS THE BROADER LITERATURE

Community Resilience



Friends of Chinatown (FOCT)

Worked with neighbourhood clinics to organize outreach, contact volunteers, and advertise Asian-centered pop-up vaccine clinics.

The Black Scientists' Task Force

Conducted 20 Town Halls from February to June 2021 that uncovered the extent and rationale for vaccine hesitancy and proposed solutions.





Copernicus Family Council

Mary Oko, former Chair of the Copernicus Family Council, worked to vaccinate Ukrainian, Lithuanian, and Polish LTC elders in Roncesvalles and Etobicoke.

The Canadian Arab Institute

Produced a study titled, "Experiences of Racialized Communities During COVID-19: Reflections and a Way Forward"





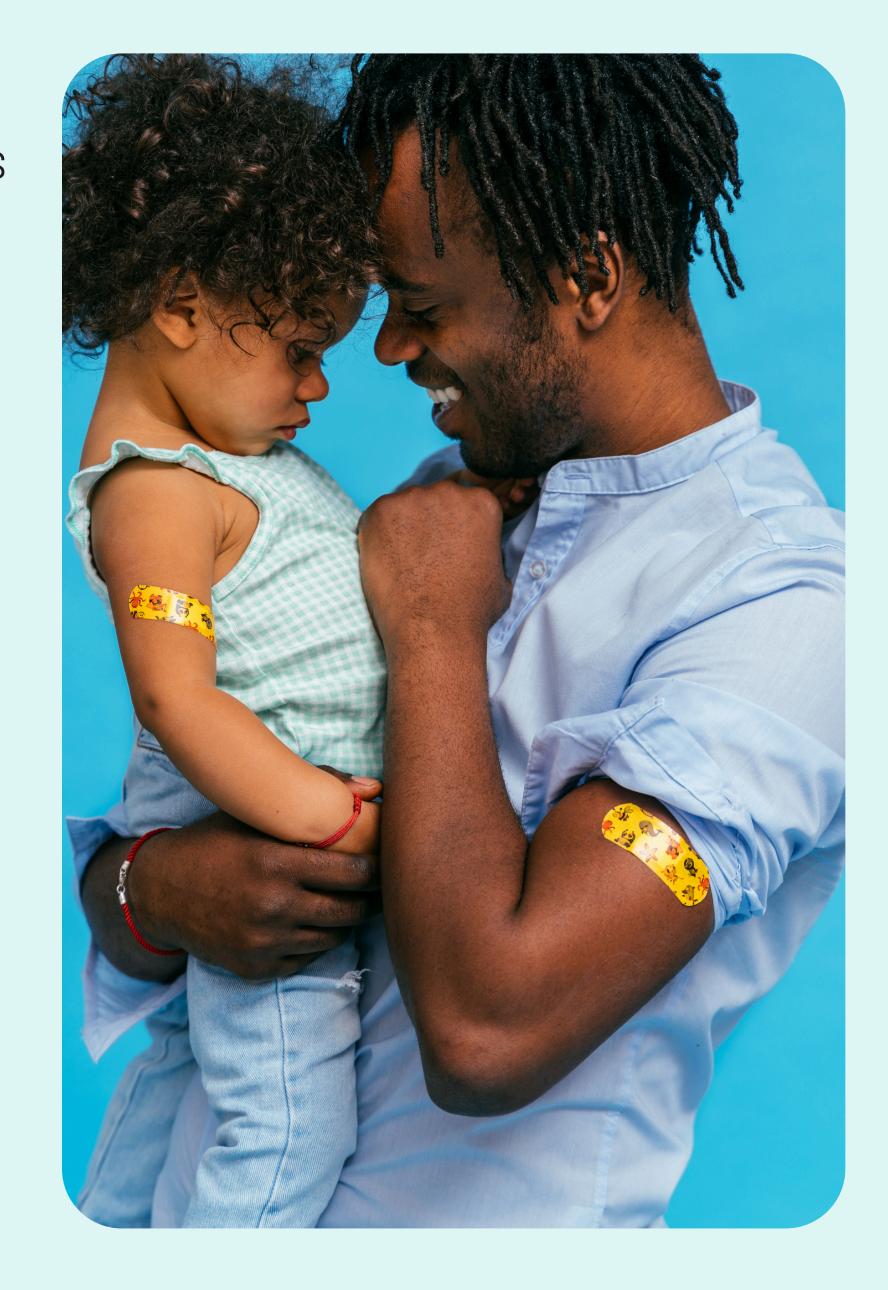
South Asian Health Network

Mobilized South Asian MDs as community "vaccine navigators".

Vaccine hesitancy is the result of policy choices situated within a history of state indifference towards racialized communities.

COVID-19 vaccine access was compromised because of:

- a lack of paid sick days
- a vaccine program that undervalued essential workers, those experiencing poverty, and ethnically diverse neighbourhoods
- language barriers made worse by the scarcity of vaccine info in ethnic languages



We must collect race-based statistics on structural barriers, infection rates, and misinformation to accurately identify the reasons and conditions for vaccine mistrust.

EVIDENCE-BASED HEALTH COMMUNICATION



Based on emerging evidence of access barriers and inequities experienced by systematically disadvantaged communities, we asked...

Which evidence-based health communication strategies are effective in engaging the common and specific needs of diverse communities during a pandemic or community crisis?

We highlight key aspects of these approaches that attend to the health needs specific to the contexts in which diverse communities live:

Uses of Social Media

Advantages Disadvantages

Managed Trust

Institutional Mistrust in Disadvantaged Communities
Public Mistrust and Messaging

Community-Centred Approaches

Two-Way Communication
Tailored Messaging

Addressing Barriers

Structural, Institutional, and Cultural Interventions

Evidence-Based Health Communication

Social Media Advantages

- Permits discussion of taboo topics which helps overcome shame & stigma.
- Different platforms reach different audiences (e.g., Facebook & older populations).
- Promotes trust & health literacy among racialized youth.



Social Media Disadvantages

- Disseminates misinformation & disinformation.
- Many people (e.g, elderly, poor, rural, etc.) have low exposure to social media-based health communication.

Institutional Mistrust in Disadvantaged Communities

- Disadvantaged communities unfairly stigmatized as vaccine hesitant.
- Ignores generational mistrust in institutions that failed to meet their health needs.



Public Mistrust and Messaging

 Most trusted information sources are healthcare providers, those who experienced illnesses & family & friends.



Evidence-Based Health Communication

Two-Way Communication

 Build community-led engagement early in a crisis via participatory spaces that centres systematically marginalized voices (e.g., town halls).

Tailored Communication

 Tailor content to a community's cultural practices by centering stereotype-free messages disseminated by systematically marginalized community members themselves.



Structural, Institutional, and Cultural **Barriers**

 Misalignment with needs and sociocultural practices of diverse populations - age, education level, financial resources, sociocultural norms, etc (e.g., some Mexican American families see masks and distancing as rude).

Interventions

 Interventions: free home testing kits, fact-based information, workplace vaccinations, etc.



5 PROGRAM SCAN

We identified 30 demonstrably effective health communication and promotion strategies from 2012-2022 that address pandemic and community crises amongst diverse communities. Below are the major theme, subthemes, and associated strategies.

MAJOR THEME: COMMUNITY ENGAGEMENT

Subthemes

Social Inclusion

(Equity & Stigma)

Participatory Approaches

(Social, Visual, & Interactive Media & Co-Creation)

SOCIAL INCLUSION: EQUITY

- inclusive & culturally sensitive language
- dialogue, free events, & non-digital outreach (phone networks, face-to-face meetings, etc.)
- consistent versus haphazard engagement
- educate & include the public to empower them to make decisions





SOCIAL INCLUSION: STIGMA

- distinction between external & internal stigma
- create change agents who alleviate stigma (poverty or health-related)
- recognition of the health effects of colonization & intergenerational trauma

5 PROGRAM SCAN

SOCIAL, VISUAL, AND INTERACTIVE MEDIA

- Instagram
- infographics
- collaborative communications
- comics and fotonovelas
- community drama & games





CO-CREATION

- brings together multiple stakeholders to create evidence-based content
- avoids military metaphors
- trust-building over enforcement & victim-blaming
- uses local validators to share health info with friends, families, etc.

CONCLUSION

Building trust lowers suspicion & increases engagement but we must be mindful of community engagement stressors (e.g., excessive volunteering, duties, & "consultation fatigue").

6 RECOMMENDATIONS

On June 23, 2023, we held a forum titled, "Pandemic Vaccine Access and 'Hesitancy' in Racialized and Diasporic Communities in Canada: Where Do We Go From Here?".

This forum brought together 50 community stakeholders from different sectors (e.g., faith-based, settlement, health, advocacy, social care, research, media, etc.) with experience, knowledge, and a commitment to equity and social justice.

These community stakeholders partook in two sessions to brainstorm, co-prioritize, and co-innovate follow-up actions to promote inclusive and equity-based pandemic recovery and preparedness.

Below are our review recommendations and proposed forum initiatives.

- 1. Compile GTA-centered race-based statistics re: access barriers, infection, and misinformation to help identify the reasons for vaccine mistrust and the historical and sociological conditions that support them.
- 2. Acknowledge that diverse communities hold preexisting knowledge and resources that can benefit public health communication.
- 3. Cultivate trust with tools that improve the knowledge base of health communication strategies through ongoing two-way communication.
- 4. Recognize that community outreach is labour; it's an understaffed job as demanding, stressful and time-consuming as any other and that often results in consultation and intervention fatigue.
- 5. Promote access to health by mobilizing interdependent local/ethno-specific community partnerships.
- 6. Dialogue with anti-racism groups to shape a fundable co-creative and realistic project that explores pandemic recovery from the viewpoint of racialized peoples in a specific GTA neighbourhood.

7

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