FULL REPORT

MAP Centre for Urban Health Solutions

The Ku-gaa-gii Pimitizi-win Study:

Exploring the impact of the COVID-19 pandemic on people experiencing homelessness in Toronto, Canada

Contents

Executive Summary

The *Ku-gaa-gii pimitizi-win* study spoke with people experiencing homelessness to understand their experiences during the COVID-19 pandemic. We wanted to understand what influenced their decision about getting (or not getting) a COVID-19 vaccine, and what participants thought would make it easier for more people to get vaccinated. With this information, we are creating strategies to help more people who are experiencing homelessness feel confident about COVID-19 vaccination.

About this Report

This report presents key findings from the *Ku-gaa-gii pimitizi-win* study and makes recommendations from the study that we developed with community partners, service providers, and the CEG of people with lived expertise of homelessness at MAP Centre for Urban Health Solutions. The views expressed in this report may not reflect the express views of funding agencies, MAP, St. Michael's Hospital, Unity Health Toronto, the University of Toronto, or any other organization with which the study authors or project team members are affiliated.

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Land Acknowledgement

We would like to acknowledge the sacred land on which MAP Centre for Urban Health Solutions and Unity Health Toronto operate. It has been a site of human activity for 15,000 years. The land is the traditional territories of the Mississauga of the New Credit First Nation, Anishnawbe, Wendat, Huron, and Haudenosaunee Peoples.

The territory was the subject of the Dish With One Spoon Wampum Belt Covenant, an agreement between the Iroquois Confederacy and Confederacy of the Ojibwe and allied nations to peaceably share and care for the resources around the Great Lakes. We would also like to pay our respects to all our ancestors and present Elders. We are grateful to work in the community, on this territory. We are mindful of the broken covenants and the need to strive to make right with all our relations.

Terminology

We use the term *people experiencing homelessness* throughout this report. We acknowledge that many people identify in different ways that are all equally valid.

To guide this work, a spirit name was given in ceremony by Elder Dylan Courchene from Anishnawbe Health Toronto. *Ku-gaa-gii pimitizi-win*, which translates in English to life is always/forever moving, reflects and honours the movement of homeless individuals across the land, the spirit and growth of the land we are on, and the force that connects us all into the future.

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CIHR IRSC
Canadian Institutes of Health Research
Instituts de recherche en santé du Canada

Waakebiness Institute for Indigenous Health

CAEH

Women's National Housing & Homelessness Network

The aim of this report

There are multiple goals of this report. First, we want to highlight the experiences of study participants. People shared their stories with us, and we are committed to share their voices with a broader audience. Second, we aim to provide information to policy makers so they can improve their responses to the ongoing homelessness crisis while COVID-19 continues to circulate, affecting people's lives. We also provide this information so healthcare providers can better understand what worked in the past, which could inform future strategies when sharing COVID-19-related information, improving COVID-19 vaccine confidence, and developing public health campaigns more broadly. Lastly, we hope this report can be used as a resource by community providers, advocates, and anyone else fighting to improve the lives of people experiencing homelessness.

What did we examine?

In March 2020 the World Health Organization declared COVID-19 to be a pandemic. In response, countries worldwide implemented various public health measures to curb transmission of the SARS-COV-2 virus (COVID-19), to prevent COVID-19- related serious illness and death. Alongside physical distancing and masking, vaccination has been supported as the best protection against serious illness from COVID-19 infection.

Rates of vaccination against COVID-19 for people experiencing homelessness in other places have been lower than the general population. Here, we report on results of the *Ku-gaa-gii pimitizi-win* study (formerly the COVENANT study), which looks at what shaped vaccine-related decision making among people experiencing homelessness in Toronto, Canada. We wanted to:

- understand how the lives of people experiencing homelessness have been impacted by the COVID-19 pandemic and government responses to it;
- understand how people experiencing homelessness perceive the COVID-19 vaccine, reasons they give for confidence in and/or hesitancy about the COVID-19 vaccine;
- identify the individual, community and structural factors that enable or hinder vaccination for people experiencing homelessness, and explore strategies participants suggest for overcoming obstacles to vaccination;
- and learn how different contextual factors influence and shape views, attitudes and beliefs towards vaccination in general and the COVID-19 vaccine in particular.

To answer these questions, from November 2021 – January 2022 we interviewed 42 individuals experiencing homelessness. We aimed to recruit a diverse group of people experiencing homelessness to represent the diverse experiences people of different races/ethnicities and genders have had during the pandemic, and hear from both those who have been and have not been vaccinated.

What were the key findings?

Participants spoke of **limited trust in the government but a trust in science**, of feeling pressure to get the vaccine and then stigmatized if they chose not to get vaccinated. They spoke about their own agency and how this was a driving force in vaccine uptake decisions, and that supporting people to enact their agency was an important consideration.

Participants expressed the **need for a broader, holistic approach to pandemic responses**, ones that included better nutrition in shelters, access to housing and ending encampment evictions. It was hard for participants to understand how the government was concerned about their health and well-being when these other pieces that are key social determinants of health were not a part of the pandemic response. The focus on vaccines, without attention to these broader issues, was concerning and contradictory for some.

Some participants who were not yet vaccinated at the time of their interview felt confident in the safety and effectiveness of the vaccine, but were **concerned about the side effects of the vaccine**. This finding suggests that having a clinician or someone with access to their medical records with whom they would be able to discuss their personal health concerns and potential vaccine reactions could support some people in their decision to get vaccinated.

Lower rates of vaccination seemed to be due to **lack of clarity about the effectiveness of the vaccine** in protecting against current strains of the SARS-CoV-2 virus. Many participants were not convinced of the effectiveness and safety of the vaccine, and were confused by the high rates of transmission in the general population despite high levels of vaccination.

There is a **gendered** aspect to how people experienced the COVID-19 pandemic. Some women we spoke with discussed the challenges of being a single parent and how these challenges were exacerbated during the pandemic. Exiting homelessness without resources to pay for the high rents in Toronto is near impossible for most people. For women who have experienced domestic violence, this can be compounded if they had not saved any money, had to leave all their belongings to escape a dangerous situation, and other factors.

Although we asked participants about whether they felt **racism shaped their experiences during the pandemic**, and if influence from their ethnic/religious community shaped their views of the COVID-19 vaccine, neither were discussed as a significant factor by the majority of racialized participants.

What are the recommendations moving forward?

Strategies to support vaccine decision making and improve COVID-19 vaccine uptake among people experiencing homelessness are best identified by people experiencing homelessness. The recommendations we outline here are reflections of what people told us, combined with and supported by what the literature suggests.

1. **INFORMATION FROM A TRUSTED SOURCE.** Our results are clear that people who are hesitant about the COVID-19 vaccine need more trusted sources of information. Information about COVID-19 and the vaccine would be best provided by medical professionals and trained peers. These include individuals who are not directly connected to any level of government, as trust in the three levels of government remains low. Information should be delivered in multiple forms, and focused on scientific facts: on television and through various social media platforms; in-person at question and answer sessions, especially prior to the vaccine being offered; in pamphlets with enough information that people who want to learn more details about the vaccine have the opportunity; through advertisements on the public transit system; and other options for dissemination.

2. **TRAIN PEERS TO PROVIDE INFORMATION AND DELIVER VACCINES.** Training peers to provide both information and administer the vaccine, also referred to as lay vaccinators, is an important avenue for exploration. While research has shown that some peer-led education interventions on COVID-19 vaccination can support an increase in COVID-19 vaccination in other contexts,[1,2] there is little research that discusses using peer or lay vaccinators. In Canada, Ontario amended the Regulated Health Professions Act to allow anyone to give a COVID-19 vaccine as long as they were supervised by a physician, nurse or pharmacist. Following this regulatory change, one program at the University of Toronto trained graduate students to administer the COVID-19 vaccine.[3] Additionally, the Inner City Health Associates, a non-profit homeless health organization in Toronto, is now training Community Health Workers with lived experience of homelessness as vaccinators. Other jurisdictions in Canada and internationally should explore this as an option for other lay peoples, as it could increase acceptability of the vaccine and relieve the specialized healthcare workforce in future pandemics and vaccination efforts.

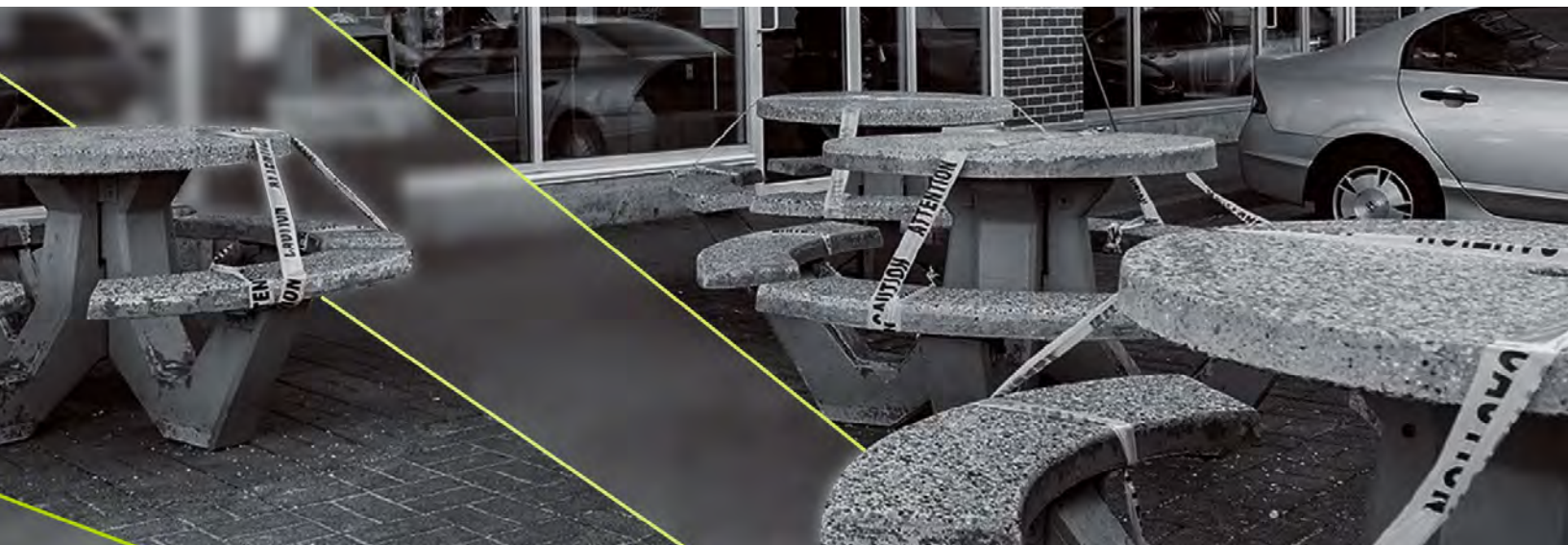
3. **ENABLE ACCESS TO PERSONALIZED INFORMATION ABOUT VACCINE SIDE EFFECTS.** Many people experiencing homelessness do not have a family physician, someone who knows their unique health status. It is important that these individuals have the ability to ask a family physician about how the vaccine may interact with any underlying health conditions they have, of the potential risk to their health if they contract COVID-19, and any other questions they have about COVID-19 or the COVID-19 vaccine and their health. Without the ability to ask personal questions of this nature prior to vaccination and enough time to process the information, people may not be able to make an informed decision about the vaccine, one that respects their agency and prioritizes feelings of empowerment. Connecting people to a family doctor or another clinician who is able to read their medical charts would help ease their concerns and empower them with the information needed to make an educated decision.

4. **BRING VACCINES TO PEOPLE.** Access to the vaccine is one of the main challenges with people choosing to get vaccinated, and therefore reducing any access barriers is a priority for increasing vaccination rates. In Toronto, the vaccine rollout for people experiencing homelessness primarily occurred in the City's emergency shelters, and were said to be done in a way that elicited a great deal of respect. This made it incredibly easy for individuals to access the vaccine. In addition, vaccine clinics could continue to go to places where people congregate, and where they are already accessing other much-needed services: shelters, parks, drop-in centres, and other known places. Outreach to encampments across the city is essential. Bundling services at spaces like drop-ins would be another way to improve access. Many of these approaches were used in Toronto and could be taken up by other jurisdictions.

5. **PROVIDE INCENTIVES.** While building trust and improving information sharing is essential to supporting people in their vaccine decision-making, providing incentives is equally as important. For people experiencing homelessness, many of whom struggle to make an income, these extra incentives contribute to providing a very small amount of money that can support their daily needs. The importance of this should not be overlooked nor diminished.

6. **USE A HOLISTIC, WHOLE-PERSON APPROACH.** Ensuring that vaccination efforts are person-centred is key. People must be seen and treated holistically, and understood and supported within the context in which they live. For people experiencing homelessness, this means that while efforts to increase vaccination rates are under way, simultaneous efforts must be undertaken to house people, to ensure they are in safe spaces with reduced risk of COVID-19 transmission, that they have access to health-sustaining food, that any other health conditions are being addressed proactively by the healthcare system, that encampment evictions cease, and other approaches to ensuring the holistic needs of people experiencing homelessness are being addressed.

7. **INCORPORATE A GENDERED LENS TO PANDEMIC RESPONSES.** People who identified as women and gender non-conforming in this study had unique experiences during the pandemic. Women who were single mothers, escaping domestic violence situations, and struggling to find employment because of their gender discussed challenges that made it incredibly challenging to cope with the stressors of the pandemic. It is imperative that future pandemic responses ensure women and gender non-conforming individuals have safe spaces to stay and that things such as child care, increased emergency response financial support for single parent-headed households, or support going out to get groceries are considered, for example.



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Background

In March 2020, the World Health Organization declared COVID-19 to be a pandemic. In response, countries worldwide implemented public health measures to curb transmission of the SARS-COV-2 virus (COVID-19), to prevent COVID-19-related serious illness and death. Such measures included physical distancing, masking and vaccination. Vaccination, in particular, has been promoted as one of the best protections against serious illness from COVID-19 and, more recently, against Long COVID.[4,5]

Although people experiencing homelessness face higher risk for poor outcomes if infected with COVID-19,[6-9] in part a result of higher rates of existing acute and chronic health conditions,[10,11] rates of vaccination against COVID-19 have been lower than the general population in Canada. In Ontario, from December 2020 – September 2021 COVID-19 vaccine uptake among recently homeless healthcare users was 25% lower than among Ontarians overall – 61% had received one dose (86.6% in the general population) and 47% had two doses (81.6% in the general population).[12] In Toronto, Ontario's largest city and where this current study takes place, the *Ku-gaa-gii pimitizi-win* cohort study reports higher vaccination rates among people experiencing homelessness at 61 emergency shelters and one encampment site in Toronto, with 80.4% having received at least one dose, and 63.6% having received a second dose.[13]

Just a few months later in January 2022, City of Toronto data reported lower rates, showing that 76% of those ages 12 and older staying in the shelter system had received a first dose of the COVID-19 vaccine, 65% a second dose.[14] All of these reports indicate lower vaccination rates than the general population ages 12 and older: as of September 2021, 83.99% had one dose and 76% had two doses.[15] The difference in rates between the general population and people experiencing homelessness is not as vast as might be expected or is seen in other jurisdictions.[16-18] This is in part due to the extensive vaccination outreach in Toronto that included vaccine clinic pop-ups inside emergency shelters. However, rates remain lower among people experiencing homelessness and it is important that we better understand why.

Therefore, in order to better understand attitudes towards the COVID-19 vaccine, what has driven vaccine uptake and hesitancy, and what the lives of people experiencing homelessness in Toronto were like during this period of time during the COVID-19 pandemic, our study was guided by these research questions:

1. How have the lives of people experiencing homelessness been impacted by the COVID-19 pandemic and multi-level government responses to it?
2. How do people experiencing homelessness perceive the COVID-19 vaccine, and what reasons make individuals confident and/or hesitant of the COVID-19 vaccine?
3. What are the individual, community, and structural enablers and barriers to vaccination for people experiencing homelessness?

Homelessness in Toronto

According to City of Toronto shelter use data, over 9, 46719 individuals face homelessness on any given night,[1] with over 235,000 people in Canada experiencing homelessness each year – both numbers are likely drastic undercounts.[20,21] The situation is worsening with rising inflation, cost of living and supply of housing relative to population growth. According to the Canadian Observatory of Homelessness (COH), the Canadian definition of homelessness describes the situation of an individual, family or community without stable, safe, permanent, appropriate housing, or the immediate prospect means and ability to acquire it.[22]

1. Recent reports suggest this number is more than 10, 800 (Gibson, V. Why the homelessness crisis could get worse. The Toronto Star. April 20, 2023.)

Homelessness can be described by 3 main situations:

- **ABSOLUTELY HOMELESS** – living on the streets or in areas not meant for human habitation.
- **PROVISIONALLY ACCOMMODATED** – housing that is temporary or lacks security of tenure.
- **EMERGENCY HOUSED** – overnight shelters for people who are homeless or shelters dedicated to those impacted by family violence.

Homelessness is the result of systemic or societal barriers, a lack of affordable and appropriate housing, individual/household financial, mental, cognitive, behavioural or physical challenges, and/or racism and discrimination. Homelessness is often neither a choice nor an individual failure – it is an economic and social policy failure, it is a societal failure, it is a human rights failure.

Indigenous Definitions of Homelessness

Indigenous people make up only 2.5% of the population in Toronto, but 38% of the outdoor homeless population and 16% of the overall homeless population.[21] Definitions of homelessness are often rooted in Western colonialist values. For Indigenous people experiencing homelessness, these definitions are insufficient to describe the connection of First Nations, Métis, and Inuit to the earth.[23]

According to Jesse Thistle, "Indigenous homelessness is a human condition that describes First Nations, Métis and Inuit individuals, families or communities lacking stable, permanent, appropriate housing, or the immediate prospect, means or ability to acquire such housing. Unlike the common colonialist definition of homelessness, Indigenous homelessness is not defined as lacking a structure of habitation; rather, it is more fully described and understood through a composite lens of Indigenous worldviews.

These include: individuals, families and communities isolated from their relationships to land, water, place, family, kin, each other, animals, cultures, languages and identities. Importantly, Indigenous people experiencing these kinds of homelessness cannot culturally, spiritually, emotionally or physically reconnect with their Indigeneity or lost relationships (Aboriginal Standing Committee on Housing and Homelessness, 2012).[23]

The COVID-19 Pandemic, Vaccination and Homelessness

People experiencing homelessness have been inequitably affected by the COVID-19 pandemic and responsive public health measures, in a number of ways. The Ontario provincial government, like many others, closed access to indoor spaces including community centres, libraries, indoor drop-in spaces, public washrooms, and other places that people experiencing homelessness rely on.

Encampments existed prior to but grew in size during the pandemic. In March 2020, the City of Toronto placed a temporary halt on encampment clearings, which meant that people could remain camped in public parks.[24] Although the City attempted to connect encampment residents to housing services through the Streets to Homes initiative and partner agencies, outreach services were unable to meet the need. Ongoing community-based outreach services were reportedly well-received by encampment residents. These services met residents' basic needs (food, shelter, water, etc.), but also created feelings of community, safety and established trusting relationships that were valued.[25] For these reasons, in addition to other factors such as not feeling safe in the shelters, people remained living in encampments. Starting in July 2021, the City of Toronto began forceful eviction of residents at large encampment sites in Toronto, displacing individuals into individual shelters, forcing people to scatter to secluded spots such as ravines and out onto the streets.[26]

The **pandemic response** in Ontario, Canada included mandatory masking indoors and indoor/outdoor capacity limits to ensure physical distancing when accessing public spaces, as well as vaccine passport requirements to access some spaces, such as restaurants, and food courts.[27] Adhering to the province's physical distancing mandates, the Shelter Support Housing Administration (SSHA), a branch of the City of Toronto that manages a number of housing and homelessness programs, reduced shelter capacity by 50% by moving people into 25 shelter hotels and one isolation site in rented hotels geographically spaced out across the Greater Toronto Area.[28] These sites sheltered 3,200 individuals each night and supported people's ability to physically distance in spaces with lower occupancy levels.[28]

In the fall of 2021, Canada was within the fourth wave of the COVID-19 pandemic, which was predominantly led by the Delta variant,[29] followed by the Omicron variant beginning in December 2021.[30] Public health measures, such as physical distancing and masking, were difficult to adhere to within shelter spaces and other high-congregate areas, putting residents at higher risk of COVID-19 infection.[31]

Vaccination has also been a priority COVID-19 response. The City of Toronto included people experiencing homelessness in Phase 1 of the COVID-19 vaccine rollout, which began for this group in February 2021. Vaccination efforts included outreach services alongside mobile vaccination clinics situated within community centers, pharmacies, and shelters. Throughout the pandemic, the City has worked alongside multiple health providers (for example, Inner City Health Associates, Unity Health Toronto, University Health Network, Toronto Public Health, and Anishnawbe Health Toronto, among others) to provide healthcare and administer vaccines within shelters.

Despite extensive efforts, and vaccination rates for doses 1 and 2 among people experiencing homeless being quite high relative to other jurisdictions, they remain below rates for the general population.

There are many reasons why COVID-19 vaccination rates for people experiencing homelessness might be lower. One reason is vaccine hesitancy, or "*a delay in acceptance or refusal of vaccination despite the availability of vaccination services, and is complex and context-specific, varying across time, space, and specific vaccines*".[32] Attitudes towards vaccines exist on a spectrum, suggesting people do not fit neatly into pro- and anti-vaccine camps.[32] Qualitative research published in 2022 suggests the most common reasons given for getting vaccinated were to protect individuals and their loved ones, under the recommendation of outreach staff or health care personnel, and that it was their civic responsibility.[33,34] Common reasons for vaccine hesitancy included hearing about negative vaccination experiences from people who were vaccinated, waiting for more information about vaccine side effects, not seeing the need for vaccination (for example, if they were already infected with COVID-19), inconvenient locations or times to get the vaccine, and distrust in government institutions due to skepticism or racism, particularly for Black and racialized people experiencing homelessness.[34-37]

Methods

Approach

The *Ku-gaa-gii pimitizi-win* study is a critical qualitative study, meaning that it examines how power shapes our social and political world.[38] The aim of critical qualitative research is to change current socio-political structures, and work with people to advocate for equitable conditions.[39] Using qualitative methods, such as conducting interviews with people, we gained a deeper and broader understanding of a specific social phenomenon, such as low vaccination rates among people experiencing homelessness.

We recognize that although the research process categorizes people's experiences into codes and themes, we can also lose some of the nuance that makes every single individual's story unique. Many peoples' stories remain hidden during interviews as people may not feel comfortable sharing everything. There are also many people who we were not able to interview, people with different views and stories that remain untold in this research study. We acknowledge that our study is partial, incomplete, and doesn't represent the experiences and lives of every person who experiences homelessness.

The *Ku-gaa-gii pimitizi-win* **cohort** study (formerly known as the COVENANT study) aims to determine the occurrence of COVID-19 infection and uptake of the COVID-19 vaccine among people experiencing homelessness living in congregate settings during a 12-month follow-up of over 700 participants in Toronto, Canada. To complement the cohort study, this qualitative study was designed to provide an in-depth understanding of experiences during the pandemic and COVID-19 vaccine uptake and hesitancy among people experiencing homelessness.

Positionality

The team consists of people with a diversity of backgrounds and experiences, occupying a multitude of social locations and identities (e.g. race, ethnicity, gender, education, etc.). We continuously discuss, challenge and balance each other's views. While some members on the research team have lived experience of homelessness, a majority of team members do not. Researchers with lived experiences of homelessness on the team help to ensure that the knowledge that comes with experiencing homelessness is incorporated into each step of the study's process.

Study participants and recruitment

Participants were recruited between November 2021 and January 2022 from 61 physical distancing hotels and youth shelter programs (ages 16-24). We identified potential participants from among the participants in the cohort study. In order to represent the diverse experiences of those within the shelter system, we tried to recruit equally across the intersections of race, gender, and vaccination status (vaccinated or not-vaccinated at baseline of the cohort study). Although we intended to recruit participants from encampment sites, this was not possible because most of the larger sites were cleared by law enforcement at the time of study recruitment.

We aimed to recruit even numbers of participants at the intersections of gender (woman, man, and gender non-conforming/transgender), race (white, racialized, and Indigenous) and vaccination status at the time of the cohort baseline survey (vaccinated with at least one dose and not vaccinated). Study participants mostly self-identified men (54%), 60% were vaccinated, roughly half identified as white, with 25% identifying as Indigenous and 30% identifying as racialized.

Recruitment involved three methods:

- Potential participants were contacted by phone or email to ask if they were interested in participating.
- A qualitative study team member joined the *Ku-gaa-gii pimitizi-win* cohort study team on-site and invited participants to be interviewed that day or scheduled an interview for another day.
- The *Ku-gaa-gii pimitizi-win* study team distributed study contact cards to provide more information about the study or how to participate.

Ethics approval was obtained from Unity Health Toronto. Semi-structured in depth interviews were conducted with 42 participants, after having completed a consenting process. The interview guide was divided into five major sections, listed below. Each section had key questions with follow-up questions (a full interview guide is available in Appendix A).

1. Experiences during the COVID-19 pandemic.
2. Opinions toward the COVID-19 vaccine.
3. Enablers and barriers to vaccine uptake.
4. Strategies to improve vaccine uptake.
5. Sources of support, feeling safe and cared for.

Data Generation

Interviews were conducted in-person or virtually via telephone or video call (e.g. Zoom). Interviews generally lasted 1 hour and participants were given a $40 CAD honorarium to compensate them for their time participating. Although it was originally intended that all interviews would be conducted in-person, virtual interviews were offered to participants if they were worried of COVID-19 infection risk, travel distance, to accommodate childcare needs, or other competing priorities. Alongside an audio transcript, field notes of observational data during the interview related to bodily, facial, and non-verbal interactions were recorded.

Data Analysis

First, audio recordings were transcribed, with all identifying information removed from the transcript. Analysis followed a thematic analysis approach,[40] where important pieces of text were grouped into codes based on similarity to other pieces of text. These codes were then grouped into themes using the research questions as a guide for how to focus the analysis. The field notes of observations during the interview were used to provide context. Results were reviewed by the CEG at MAP Centre for Urban Heath Solutions.

Our analysis was guided by an intersectional approach. Intersectionality suggests that there are complex relationships between social identities and structural inequalities, and these intersections create experiences of oppression and opportunity.[41,42] Therefore, we examined the ways in which multiple social identities (e.g. sex, gender, race and ethnicity) shaped the experiences of participants during the COVID-19 pandemic and their perceptions towards the COVID-19 vaccine.

In accordance with the First Nations Principles of OCAP (Ownership, Control, Access and Possession), possession and ownership of data from Indigenous participants is held by Anishnawbe Health Toronto, while data analysis of interviews held with Indigenous participants was led by Ku-gaa-gii pimitizi-win team members based in the Waakebiness Institute for Indigenous Health at the University of Toronto.

Results

Forty-two individuals participated in the interviews. One interview was deemed to hold no relevant information as the participant provided yes/no answers and therefore was pulled from the dataset. Analysis of the 10 Indigenous participants' data was conducted by a research team led by Dr. Suzanne Stewart at the Waakebiness Institute for Indigenous Health, University of Toronto. Therefore, data from 31 participants are included in the results presented in this report.

Interview questions explored participant's life during and experiences of the pandemic, thoughts and opinions towards the COVID-19 vaccine, and strategies to improve vaccination rates among people experiencing homelessness in Toronto. Results are divided into four global themes and map onto the interview guide:

Participant Legend

Participant ID, Vaccination status_Gender_Race

VACCINATION STATUS		RACE	
V = vaccinated	NV = not vaccinated	W = white	R = racialized

GENDER	
F = in this report we refer to woman/women	M = in this report we refer to man/men

- the impact of the pandemic on daily life
- the effect of government and institutional responses to the COVID-19 pandemic
- factors influencing vaccine uptake
- strategies and future approaches to pandemics

The impact of the pandemic on daily life

Participants expressed challenges getting their daily needs met, especially their ability to access social services and ongoing housing instability, and their changing feelings and experiences of safety. These dynamics were also gendered, with participants identifying as women expressing unique barriers to financial security, housing and challenges taking care of their families.

Access to Healthcare, Food, Public Spaces

For participants in this study, access to healthcare was limited or disrupted. In Ontario, many doctor's offices moved their services online, doing initial consultations either via video or phone call followed up by an in-person visit if it was deemed necessary. For some participants, this meant that accessing care was challenged. They either didn't have access to the technology needed or simply didn't enjoy the online experience:

> *I had to switch my GP because my GP only was doing prescription renewals over the telephone. Everything else was closed. Just about most of the doctors in the city you could maybe do a telephone consultation and that was about it.* (**ID_0498,** V_M_W)*.*

The pandemic also impacted participants' access to food, public spaces, and other social services. Some people had to now access services, such as food banks, that they had not previously needed to rely on, and that resources were limited:

> *I didn't have to use a food bank or anything like that until recently but when I was in Toronto and I called in for certain food banks all of them were saying well we're not getting in anything right now because of COVID. I can't get no food, I can barely get shelter, I can't get no assistance* (**ID_0095,** NV_F_W)*.*

For others, when they had to leave shelters in the daytime for cleaning, they used to go spend time in coffee shops, libraries, etc. Now that those places were closed, there was nowhere for people to go:

> *[T]hey have a policy that every day for at least four hours everybody has to leave so they can clean the place up. Here we are right in the middle of it. You can't go to a coffee shop, you can't go to a library, you can't go to a shopping mall but the only thing in the neighbourhood that's open is the liquor store. [Laugh]* (**ID_0498,** V_M_W)*.*

Precarious Housing, Losing Home

Unsurprisingly, housing was one of the main issues that participants discussed. When describing changes in housing status throughout the pandemic, participants recounted immense housing instability and inadequate housing. Some lost their housing and were forced into the shelter system for the first time.

> *At the beginning of 2021 I was [Pause] illegally evicted … I kind of lost everything that I had ever owned for the last 23 years of my life and [Pause] that kind of shook me… it [COVID-19 pandemic] really affected my life more than I was expecting it to. I thought I was just going to lose my job. Instead, I lost everything* (**ID_1510,** V_NB_W)*.*

Importantly, housing and community were discussed as distinct concepts. Some participants explained how losing their housing dislodged them from their community. They lost their community of family and friends, their connection to neighbours, their neighbourhood, their home – it wasn't just about shelter. One participant, who was staying in a shelter hotel after being reno-victed (evicted by landlords citing they would be doing renovations) from their long-term home, said that the shelter hotel was nice, "*But it's not home… I'm not going to have another place for 22 years at my age. So [Pause] I do have memories there,*" (**ID_3227,** V_M_W).

Housing was also an important piece of feeling safe and protected from COVID-19 transmission during the pandemic. Being able to control one's living space, environment, risk of exposure, and other aspects of one's life, is often decreased when homeless. For those who had greater worry of getting infected with COVID-19, finding safe, stable housing was difficult. Control of one's living space was described as a key challenge in controlling their risk of COVID-19 infection. As this participant explains, this lack of control was connected to feeling unsafe regarding COVID-19 infection:

> *It's difficult cause I have my own room but I share living space you know for a lot of things and it's just a lot of people who are still unvaccinated so [Pause] that kind of freaks me out but in terms of other things like not COVID; I do feel safe here. It's just a matter of like I can't fully control my living space you know.* (**ID_3425,** V_F_W)

Shelter Hotels and Encampments: Having Personal Space

To help shelters implement public health guidelines to reduce COVID-19 transmission, the City of Toronto leased a number of vacant hotels to act as temporary emergency accommodation. These shelter hotels were an unexpected benefit that participants spoke of: "*I was struggling. I was homeless and [Pause] it a little bit helped actually, getting in a hotel and then having my own personal spot so [Pause] this part has been a little bit good*" (**ID_1730,** NV_M_R). Some described the benefit of having their own room, how this afforded them privacy, a feeling of safety, and autonomy. However, the temporary nature of hotel leases meant participants couldn't plan their lives as they didn't know when they would be kicked out of the shelter hotels:

> *I've been there [at shelter] since [Pause] well it's almost a year and a half now thank heavens… but we don't know if it's going to be extended … Yeah, I have no idea what the reality is going to be once this particular [Pause] place is shut down so [Pause] it seems, everything is supposed to be changing and you can't make plans like you did before* (**ID_0066,** NV_F_W)*.*

For participants who were newly homeless, some of the shelter spaces were better than they had been anticipating, relieving some of the stress they experienced when becoming newly homeless. As one woman explained:

> *I was really worried when I had to go to a shelter that it was going to be awful and gross and dirty. I was really paranoid of that cause I've never been homeless. I've always lived in a home and been well cared for you know what I mean my whole life so I was really, really nervous about it but it has not been [Pause] near what I thought it was going to be.* (**ID_1353,** V_F_W)

Lastly, some participants were living in encampments prior to when they were interviewed in the shelter system, and experienced the encampment evictions that occurred in the summer of 2021. Though we know there were mixed experiences in the encampments, participants in our study spoke of the positive experiences they had staying in the encampments, how they had their own space and had their needs met. They also witnessed and experienced, first hand, the violent evictions that took place and displaced them: "*So, I was in City Park. I was living in a tent. I didn't have a problem doing that. I was waking up every day, I was able to have a shower and go clean myself at a friend's house. They decided to raid the parks … they surrounded everybody and then they gated it all off which is not the way to go*" (**ID_0821,** V_M_R).

Financial Stresses

Financial uncertainty was a stressor for many participants. Many stated that the federal government's Canadian Economic Relief Program (CERB) that provided additional temporary financial support was seen as a way they could get back up on their feet and save some money to get their own housing. Others stressed that they still were struggling. Many already had challenges with securing employment and some had lost their jobs during the pandemic. This was particularly challenging for unvaccinated participants, who discussed their challenges finding employment because of their vaccine status: "*When I was looking for a job a lot of them were saying like oh, well we can hire you as a temp but if you want to be hired on full-time you have to be vaccinated. I'm like what's the point? I'm still in the building if I'm there as a temp unvaccinated*" (**ID_0095,** NV_F_W).

Gendered experiences

Some participants who self-identified as women spoke of challenges that were unique to their gendered experiences. Some experienced difficulties finding employment (especially for women who worked in fields that are typically male-dominated), taking care of their children on their own during lockdowns, and finding housing with very few resources accessible to them. A new mother who was solo parenting and newly homeless explained:

> *When the pandemic started I thought it was the end of the world… [I]t was like if you stepped out of your apartment you were going to die like that's how it, they made it sound like really serious. Nobody knows what was going on and I couldn't take my young baby out. He didn't receive any of his shots so I couldn't go to the supermarket.* (**ID_2189,** V_F_R)

Housing instability was a uniquely gendered experience for some participants. Some were living on their own as single mothers; others had to leave their homes because of domestic violence. They struggled to find affordable housing during the pandemic as rents had drastically increased.

I lost my home because of a domestic abuse situation and that got me into the shelter system. There's no excuse for the amount of money we have to pay for apartments. So COVID has made it more difficult to look for places cause you can't really go [and look]. It's hard to [Pause] get resources to help you to look (**ID_0161,** V_F_W).

Effect of government and institutional responses to the COVID-19 pandemic

Attitudes and reactions to public health mandates and rules

Participants had mixed thoughts and opinions about the multi-level government and other non-governmental institutional responses to the pandemic. Contrary to public stereotypes, many participants, both vaccinated and unvaccinated, had positive attitudes towards most public health guidance generally, such as physical distancing and masking, and said that they took these guidelines seriously.

> *I was just really [Pause] trying [Pause] being careful you know … Even if I am going out and I see the subway or the buses are jam packed I wait for the next one. I was always aware about the restrictions and what I need to do you know to, to be safe, yeah.* (**ID_1294,** V_F_R)

> *[Pause] I try. I try to keep myself safe as much as I can. I do not interact with nobody like I'm in my room most of the time. I try to keep myself safe. I have my mask on anytime to move around the building I have my mask on, I sanitize so, yeah, I try.* (**ID_1535,** NV_F_R)

However, participants who were both vaccinated and unvaccinated, and even those abiding by public health regulations reported confusion around the mandates. Although participants acknowledge that "*everyone knew this is something new to us, we don't know nothing about … we all trusted what we were hearing in the beginning,*" (**ID_0495**, NV_M_W), *some felt that, over the course of the first year of the pandemic, the guidelines didn't always make sense and government messaging was ineffective, inconsistent, and confusing: "[T]he government was all over the place and some of the crap that they were slinging it, when you, like the one that always puzzled me is how is it safe to go into the liquor store and buy a bottle of wine or beer but I can't buy a new pair of jeans or a couple of t-shirts?*" (**ID_0498,** V_M_W).

For participants who were not vaccinated, the vaccine passport, which came into effect September 22, 2021, was said to have created division and judgement, where they felt blamed and punished for the pandemic. Before the mandates came into effect participants noted that public health messaging was that "*we are all in this together*" *and that we needed to follow public health guidelines to* "*take care of one another*".

> *This virus isn't the enemy. It seems like the vaccine is... when COVID came out everyone – we were all in this together. That was the message. Everybody was doing social distancing. Everyone sacrificed; put their masks on, did all this sacrificing and then the vaccines come out and if you don't get vaccinated you're a bad person. Now the vaccine doesn't even work against omicron and they still want restrictions on us. What do you want like what do these people want?* (**ID_0495,** NV_M_W)

A few participants suggested that the impact of the public reaction to the vaccine mandates was causing more harm to individuals than the pandemic itself: "*the emotional trauma that people are suffering right now because of all the stigma, condemnation, denigration, demonization that they're experiencing is causing more harm than the coronavirus itself*" (**ID_3274,** NV_M_W).

Forces shaping vaccine uptake, confidence and hesitancy

When asked about COVID-19 vaccine decision-making, participants indicated that the key drivers were: access to the vaccine, attitudes towards and perceptions of the COVID-19 vaccine, a focus on one's agency in decision-making, and participant's perception of the risk to their health if they were to get infected with COVID-19. Importantly, interviews took place after the vaccine passport had come into effect in Ontario, and some participants who had not been vaccinated at the baseline survey for the cohort study were, at this time point, vaccinated with at least one dose of the vaccine.

Access to vaccine

The participants in this study had all been offered the COVID-19 vaccine at least once, but usually multiple times. This was because we recruited individuals staying in the City's emergency shelter system and there were extensive outreach efforts that took place in shelters across the Greater Toronto Area. Vaccine clinics visited shelters to offer first and second doses of the COVID-19 vaccine. Having the vaccine clinics within the shelter was said to have significantly increased access to the vaccine and, for some, was the reason they chose to be vaccinated.

> *They came to us, they gave us Moderna which was great, so one of the known quality shots. We were treated with an incredible amount of respect ... when you're in an environment where you're so disrespected and you, you know*

> *there's just nothing you can do about it but just try to take it and you come in here or the way they came in and there's respect. It's just that alone is just like oh, my gosh it reminds you, you're a human being you know and you deserve this. So, yeah, it was done very well, yeah.* (**ID_0161,** V_F_W)

As highlighted here, some participants noted that this experience was humanizing. The respect they were given was contrasted to other experiences during the COVID-19 pandemic and lockdowns, where many expressed that their needs were not being met or they experienced increased stigma. Having these moments of being treated with respect were important and noteworthy to participants.

Some participants had concerns about the vaccine, but having the vaccination clinic in the shelter itself, and having directed outreach where staff went to their bedroom door, was the reason they did decide to get vaccinated.

> *We didn't do it and then [Pause] they came to our door and they said are you going to come down and do it? And then I said okay, let's just do it; right, but we weren't sure cause it was the, the vaccine was [Pause] done up so quickly; right. Is it actually going to work or make us sick, eventually, like in a year or something? … [T]hey knocked at the door and they said [Pause] here, your vaccines, you're ready for vaccines so we just said [Pause] we just didn't talk and we just did it.* (**ID_0845,** V_M_W)

Access to the COVID-19 vaccine expanded beyond the shelter system. Some participants were offered the vaccine at multiple locations in the community, including at the hospital (if they were there for another appointment), or the pharmacy they frequented. One participant, who was not vaccinated, mentioned that they did not feel pressure nor stigma for choosing not to get the vaccine when offered at their pharmacy.

> *Yeah, at the pharmacy …they said would you like to get a shot and I said nope and they said okay. They're very easygoing. They don't judge people you know they serve Methadone there and you know like they don't look at anybody any different you know.* (**ID_0010,** NV_M_W)

This suggests that the pharmacy may be experienced as a low-barrier space, and therefore an effective place to offer future vaccinations for this population.

VACCINATION CAMPAIGNS AND CLINICS: Campaigns that promoted vaccination had mixed reviews from participants. For some, information on vaccine clinic locations in community settings was described be easy to interpret and readily available: "*I was in a TTC bus when I heard [over the speaker] that the second shot at Shepherd West I just went there to get the second shot since I already missed the one at the [shelter] hotel*" (**ID_3833,** V_M_R).

Others suggested campaigns were less successful for those who were undecided if they would be vaccinated or not. One participant explained that there weren't enough informational resources to support someone in deciding to get vaccinated.

> *Before they came to give the first dose they gave out posters basically or pieces of paper to state the information about the vaccine itself but [Pause] it didn't have a lot of information; not enough to convince somebody to take the vaccine … in terms of like a campaign to convince somebody to take the vaccine I haven't seen any of that.* (**ID_2189,** V_F_R)

Some participants suggested that the information that they had access to about the vaccines was unclear. Communication and education efforts about the vaccines were confusing and the rationale given for the changing dosage recommendations was unclear to some participants.

> *Can someone really explain to me in detail why am I getting the third dose … the first one I was sure you know it's, I'm protecting myself and the government is trying to protect me from contracting coronavirus. That was okay and then boom the second one came in. I got no explanation why I was getting the second dose; right, and I'm still dealing with this confusion and the third one comes up. Hello? So, before we even take in the third one, the fourth one will be, or maybe the tenth. Who knows?* (**ID_1535,** NV_F_R).

EXPERIENCE BEING VACCINATED: We asked participants who were vaccinated with at least one dose about their experience getting vaccinated. One's experience with vaccination for dose one could have an impact on decision-making on getting subsequent doses. Many participants mentioned that they felt "*it was rushed; in and out*" (**ID_0821,** V_M_W) when they got their vaccine, and as such were unable to ask any questions they may have had.

> *No, they just had people come and do the shot. [T]hey don't go around asking questions of us or if we have questions for them. They don't do any of that stuff. No, they don't do it. They just come here, they empty their bag, you know get their equipment out, everyone lines up to go get their vaccine and they give them the jab and that's it.* (**ID_0495,** NV_M_W)

This was specifically hard for participants who had worries about and/or who experienced side effects from the vaccine but who had no opportunity to ask a medical professional about these concerns.

> *I really had very many concerns and I needed a doctor to explain to me any side effects, so that when it happens I'm not in shock … Nobody did that.* (**ID_1535,** NV_F_R)

Others reported having a more supportive experience getting vaccinated. Some said that, "*It was a better experience than I expected*" (**ID_2572,** V_M_W) *and that their experience was, "good, comfortable*" (**ID_3269,** V_M_W)*. The same participant discussed how important it was to have a space that was "quiet and peaceful and a very nice doctor.*" These participants' experiences clearly highlight that the full environment of the vaccination clinic (including location, energetic level of the space, patience and kindness of the vaccine administer, etc.) is important for creating a positive experience during vaccination.

Some vaccine clinic providers visited shelters in advance of the vaccination clinic, to speak with residents and answer any questions they had without the pressure to vaccinate on the spot. For participants staying at shelters where this happened, this was a helpful strategy to support them in making an informed decision. As participant (**ID_2572,** V_M_W) explains:

> *I didn't really have any [questions] because I read all the information that they had provided before they showed up. [T]hey had people there handing out the information as well as [Pause] being willing to sit down and talk with people.*

VACCINE CONFIDENCE: Many participants had strong confidence in the safety and effectiveness of the COVID-19 vaccine. They described the excitement they had when the vaccine was made available to them: "*As soon as they said it was safe and as soon as they said you get it on your health card for nothing, I was like at the door knocking at the door*" *[Laugh]* (**ID_0498**, V_M_W)*. Additionally, for those who had been vaccinated against COVID-19, there was a level of trust in the scientists who developed the vaccines and in those who were supporting them to get vaccinated (e.g. the government): "I just saw it [the COVID-19 vaccine] as take it as given … So, you know I just follow the medical advice*" (**ID_3068,** V_M_R).

Some participants were more concerned about the impact of COVID-19 on their health than the COVID-19 vaccine, and therefore understood the vaccine to provide a degree of protection against serious illness.

> *Originally … I was a little nervous [Pause] because of the fact that I felt like [Pause] are they rushing this vaccine, you know, like are the trials like long enough, but I had to weigh my [Pause] options. Do I want to risk getting COVID and not being able to fight it off and I already have like respiratory issues or should I risk the vaccine and to me [Pause] I just felt like I want to get the vaccine. [W]hen it came out and I could get it, I felt like it was Christmas Day because I was [Laugh] so excited [Laugh] and I was so worried through all of COVID so I was very happy to get it.* (**ID_3425,** V_F_W)

Participants also spoke about vaccination as a normative behavior, and didn't see vaccination against COVID-19 as an exception to their usual trust of vaccines. They discussed COVID-19 as a "*normal vaccine*" (**ID_3761,** NV_M_Other) and likened it to previous vaccination efforts.

> *You look at these like polio or small pox and that how many people died and suffered and were mangled up with this and then just a little shot [Pause] eradicated it. It went extinct… If we can do the same thing with the COVID, with a little shot, why not?* (**ID_0498,** V_M_W)

This idea that vaccination was a normative behavior, a behavior most of us have participated in, was really strong for some participants. It was an indicator of intention to get vaccinated with future doses.

> *I have my three shots. It's possible down the road '24, year '25 might need another shot. When the talk came about the booster I said okay [Pause] I just knew I was going to go get it. [Pause] Like no second thoughts I was getting it.* (**ID_3227,** V_M_W)

VACCINE HESITANCY: There were multiple reasons why participants refused or delayed in vaccine uptake despite widespread availability. Some participants didn't think there was enough research to support conclusions about the effectiveness of the vaccine or were worried about its safety. They expressed uncertainty because the vaccine was new and there was limited information to support their decision-making; they struggled to trust that, "*the vaccine is safe. I cannot say it's safe and effective … I have those fears within me*" (**ID_1535,** NV_F_R).

Others suggested that, in their opinion, there was not a strong case for getting vaccinated. Some participants reported thinking that COVID-19 would become endemic and they be infected eventually, and develop immunity through exposure. Still others wanted to wait for the vaccine to be further developed, at which point they would consider getting vaccinated.

> *So, they're going to like probably take it back to the drawing board and maybe add this, take out this, add, you know like perk it up so [Pause] maybe I will get a better vaccine if I wait* (**ID_3448,** NV_F_R)

Some participants who were not vaccinated felt that other public health guidelines, such as masking, were sufficient to protect them from contracting COVID-19: "*I would still stay away from it and just avoid contact and only go out when it's very necessary so I would stay isolated so I wouldn't really get the vaccine still*" (**ID_1730,** NV_M_NW).

As another participant explains, they would prefer to keep following these other public health guidelines rather than risk suffering from adverse side effects of the vaccine: "*I got really good quality masks. I haven't been sick in over two years. I must be doing something right you know so I'll continue down that avenue rather than risk some adverse effects from the vaccine*" (**ID_0066,** NV_F_W).

Lastly, there were a few participants who, at the time of their interview, were not vaccinated but who felt that the vaccine was safe and effective. Their concern was about the potential side effects that they could experience from the COVID-19 vaccine.

> *I think the vaccine is a good idea, it's actually a good idea. I think people should get the vaccine. I think it's safe, I think it's effective. I know when you get the vaccine you have side effects so I don't, I'm just kind of thinking like [Pause] I'm probably going to get the vaccine but I'm going to wait.* (**ID_3448,** NV_F_R)

If people were better informed about the risks of COVID-19 infection and the risks of the COVID-19 side effects, it might help support them in making a decisions around vaccination. The lack of clear information fed into vaccine hesitancy and was a barrier to vaccination for many.

TRUST IN SCIENCE, LESS SO IN GOVERNMENT: Many participants, both those who were vaccinated and not vaccinated, expressed a lack of trust in the different levels of government, while stating they held trust in scientists. They spoke of these two groups as distinct and unconnected. Some reasoned that the scientists were knowledge makers and keepers, driven by an interest to protect the population while governments were driven by self-interest and financial incentives.

> *I trust the science. They're the guys that are looking into this and they really know. Governments is politics and I feel like their own self-interest in a lot of times get in the way of what needs to be done.* (**ID_0161,** V_F_W)

> *Cause the governments don't know anything about the vaccine. They're not the ones sitting behind the desk doing research. They're just, I don't know. I don't know what they're doing. [Laugh]* (**ID_0095,** NV_F_W)

For some, their worry about the government's actions superseded worries they had about COVID-19. Witnessing and experiencing different government actions, specifically around the COVID-19 passports, led them to further distrust government institutions.

> *I'm more fearful of just losing more rights as a Canadian citizen. I'm more fearful of the government than I am of this virus. This is not the Canada I grew up in… I mean this is totally, this has totally ruined my trust in government… There's no way I'd trust the government again. [I]t doesn't even matter what political party it is anymore now either. They're all the same as far as I'm concerned.* (**ID_0495,** NV_M_W)

This may provide a significant challenge for governments looking to increase vaccine uptake among this population. If there is a lack of trust, then individuals who are not vaccinated and already hold little trust for the government may be reluctant to accept vaccines that are delivered by agencies, individuals, etc. they see to be government-connected.

Agency and vaccination

The concept of agency, or one's capacity to realize their potential with the power and resources they need, came up for both those who had been vaccinated and those who chose not to get the COVID-19 vaccine. Both groups saw the choice about vaccination as a decision that they should be empowered to make. They spoke about the external pressures they felt to get vaccinated, but ultimately prioritized their own choices when deciding whether to either get vaccinated or not.

EXTERNAL PRESSURE TO VACCINATE: Participants in both the vaccinated and not vaccinated groups expressed feeling a lot of pressure to get the COVID-19 vaccine. For some, this pressure was structural, coming in the form of the government vaccine passport mandates which required individuals to have proof of receiving the completed primary series (dose 1 and 2) for access to indoor spaces (also described above, in attitudes and reactions to public health mandates and rules*).*

> *It was until Doug Ford said that [Pause] we couldn't go out to eat anymore that made me decide you know what I like to go out to eat, I like eating, I'm going to go get my vaccine so yeah, that's pretty much it.* (**ID_3866,** NV_F_R)

For others, the external pressure they felt was from peers, family, roommates or other individuals. It was described as hostile, expressed through being stigmatized and labelled as an "*anti-vax or science denier*" (**ID_3274,** NV_M_W).

Sources of external pressure, including the vaccine passports, weren't always framed in a negative way. Some participants didn't necessarily express resentment towards the vaccine mandates. They were clear that the mandates were the reason they got vaccinated, but discussed it as a way they would get access to services only available to those with the primary series: "*I think that's another reason why I felt like getting the vaccine was a really important thing for me, because at the end of the day I wouldn't be able to go do the stuff I like*" (**ID_1510,** V_NB_W).

AGENCY TO CHOOSE: Many people experiencing homelessness made a clear choice to get vaccinated and found this action empowering. Many participants who had been vaccinated were clear that making this decision was an active choice, one that was made on their own accord: "*I didn't take the vaccine because someone pushed me to take the vaccine. I took the vaccine, I willingly took the vaccine*" (**ID_3839,** V_M_R).

Another participant explained how their experience getting vaccinated reaffirmed that vaccination was their choice. The patience and respectfulness that they were shown by the vaccine clinic staff eased their fears and helped them make an informed choice that they felt good about. They also discussed how the respect given to them by vaccine clinic staff felt humanizing.

> *[T]he way they did it, they were very kind and they were considerate; if we weren't ready for the prick they said okay, we'll talk another five, ten minutes and when you feel comfortable you know we'll give you the vaccination. They weren't rushing which felt really nice. It didn't feel like it was mandatory, it felt like that you had that nice choice of whether or not you still wanted to get it and [Pause] they treated us like people."* (**ID_1510,** V_NB_W)

For many participants who were not vaccinated at the time of recruitment, which occurred around the time that the vaccine mandates were implemented, the vaccine mandate was seen to infringe on their bodily autonomy.

> *... The whole pushing it onto people for work and stuff and to travel... At first, it was a choice and now you feel like you have to, so it just feels like it's got an agenda that's being pushed you know.* (**ID_3933,** NV_F_R)

Deciding on whether to be vaccinated or not was described as a right that participants had, and one that the government should not infringe upon. Ultimately, many people felt that vaccination needed to be an individual decision that people made based on their own health concerns. Many unvaccinated people supported vaccination for people who were at higher risk of severe illness if they contracted COVID-19. They felt that they were not in that high-risk group, and that their bodies/immune systems were well-positioned to fight COVID-19.

Strategies and future approaches to vaccinations

Developing strategies to improve COVID-19 vaccination, and future vaccine uptake is best done in co-creation with the individuals that public health is trying to support to be vaccinated. Therefore, we asked participants about strategies they think would support people to accept the COVID-19 vaccine, and improvements to other government pandemic responses.

Strategies to support people in vaccination confidence and uptake

EDUCATION AND INFORMATION SHARING: When asked, the majority of participants suggested that improving the clarity, consistency and quality of information about the COVID-19 vaccine would help to dispel some common misconceptions about the vaccine and ease fears. One person explained that the approach taken to pushing the vaccines scared many people and didn't help ease fears.

> *I feel like if we educate people properly and tell them, not force them, but explain to them there's a reason we're doing this; not just hey, you got to get the COVID vaccine cause you got to get it … [As] much money as you spend on ads it's not going to really change peoples' opinion. We need facts and … a lot of the commercials were more like trying to scare people into getting the vaccine instead of educating them, which you need to educate people who are afraid because they're afraid for a reason.* (**ID_1510,** V_NB_W)

Some felt that they should be given any and all information, not just the information that the government felt was most helpful. For instance, one participant explained that they were not sure of how the vaccine worked: "*It's not in your bloodstream so what's happening? What's happening in your arm like does it dissolve into your muscles? I don't understand… I have no information on this … I don't know what's in the vaccine. I don't know how they make it*" *and what would be helpful is to, "give people more information, maybe give more information, give people everything*" (**ID_3761,** NV_M_Other). These comments by participants suggests that the type of information and format in which it was delivered may not have been most appropriate and information campaigns could be greatly improved by providing clear information on how the vaccine worked to protect against COVID-19 infection and help prevent serious illness.

Ultimately, education and improved information sharing was only useful insofar as people could trust the source. Many participants felt that the government needed to first establish and build trust with the public.

> *You got to have trust with the public. Right now, I'm not saying so much that it's Public Health but certain individuals and these figures that you see on TV day in and day out like they got to be more upfront. They got to be more honest with the public. And when you're not honest with the public yeah, we lose trust and we find other alternatives for our health, you know. You got to be upfront and honest especially with something like this. This isn't just some run of the mill like cold or anything like the people were dying.* (**ID_0495,** NV_M_W)

Information shared from a trusted source was one reason why a few participants who were initially fearful of the COVID-19 vaccine decided to get vaccinated, and this was suggested as an important approach in the future. For instance, one participant explained how the counsellor at their shelter hotel was helpful with their decision to get vaccinated.

> *I decided to take it [Pause] because [Pause] I noticed a lot of people are taking it and even my counsellor and then I was still in the hotel. My counsellor called me and she said, she advised me to take the vaccine and I explained to her all I've read on the Internet and then she gave me a lot of reason why I have to take it and why I have to disregard most of the information I see, I read on the Internet so [Pause] I took the bold step.* (**ID_3833,** V_M_R)

Others suggested they, "*would have been much, much happier to get it [information] out of the mouths of a doctor or a nurse*" (**ID_0498,** V_M_W). One participant, who had not yet been vaccinated, was clear that information from a source not connected directly to the government was more trustworthy.

> *[Pause] I feel like it [information] definitely wouldn't come from anyone like Trudeau or anything a higher person like that. It would most likely come from like a lower end doctor who actually took the time to do like [Pause] proper research and testing.* (**ID_0095,** NV_F_W)

It was suggested that one way of sharing vaccine information in a more targeted and helpful way for people living in the shelters was for vaccine administrators to spend time there in advance of clinic days, providing information and answering questions that residents had and explaining the process and steps of the vaccine series.

> *[S[ensitize the people. Have a day or two days and call the people down there … and then educate them … such that when people come on that day they're not just being jabbed and walking away … let people get comfortable with you know with everything that's going to happen such that when the day comes no one is scared, no one is skeptical.* (**ID_1535,** NV_F_R)

PEER SUPPORT: Participants discussed the role and importance of peers and one's social network for supporting vaccination. While no one specified how their peers supported their vaccination decision, they discussed their own attempts to educate and inform their peers about COVID-19 and the COVID-19 vaccine.

> *I've gotten the vaccine for myself but I've also helped talk other people into it. I've explained to them how I felt, how it made me feel, the side effects I got and I explained to them that at the same time, I asked them what will you think will happen when everything opens? Do you think you'll be able to walk into a restaurant, sit down without the vaccines and they said yes and I said no.* (**ID_1510,** V_NB_W)

> *We have a gentleman here that suffered the effects of polio and when we're talking to some of the anti-vaxxers we're like, 'Well what about small pox and polio?' and they're like, 'We don't know what that is,' and I'm like, 'Exactly'".* (**ID_3336,** V_M_W)

One participant also suggested that on top of providing stories of their own experiences and answering questions, training peers to deliver vaccines would be an effective and efficient way of supporting people to get vaccinated.

> *[I]f someone trains me to give a needle; I think that would be the easier distribution, quicker… You teach me how to do it or whatever and give me the paperwork and then I talk to my friends to see if, 'Did you get it or not*

> *and do you want it?' and then I just give it to them right in my living room or whatever. [E]ven keep a couple in my knapsack or I'd run into someone in the street and start talking to them about it and I'd say well as a matter of fact I've got a vaccine right here do you want it?* (**ID_0845,** V_M_W)

PERSONALIZED APPROACH: A suggestion for better supporting people experiencing homelessness in their vaccination decision was to develop a more tailored, personalized approach. People wanted access to information about how the vaccine could potentially affect them based on their health, and, as mentioned above, they wanted this from someone they knew and trusted. For some who had not yet received the vaccine, they were open to taking it if they were told to by a service provider: "*[I]f like my naturopathic doctor said, 'Hey, listen your immune system is a little weak, you might need the vaccine' then okay, let's do it. Cause I'm not against vaccines. The fact that they're forcing this is a little ridiculous to me*" (**ID_0095,** NV_F_W).

One participant, who was a peer worker, reflected on their use of a personalized approach when talking to people, and suggested this was the best way to address peoples' unique concerns and support them in their decision to get vaccinated.

> *I've found that corporate speech doesn't work too much so if you try to get one blanket statement and aim it at everyone it's not going to happen. [Y] ou'd have to tailor it to each group that you're trying to focus on. That's what I did. None of my talks with anyone were the same. Some had issues about you know medical agencies that were giving the vaccines, others had issues about the ingredients in the vaccines so you kind of have to tailor it to each person and each person is you know.* (**ID_3336,** V_M_W)

STICKS, CARROTS, AND BREAKING BARRIERS: Some participants were less optimistic that these broader strategies would work to support vaccination. A few participants suggested that the only way to get more people vaccinated was through enforcement and mandates: "*I think it should be mandatory you know this is my opinion, that's the only way we can survive in this pandemic*" (**ID_3615,** V_M_R). *Others disagreed with this, suggesting that people should have agency and that if they were in charge, they, "would let you decide if you would want to get the vaccine or not*" (**ID_3761,** NV_M_Other).

> *Still, others were supportive of financial incentives, suggesting that they, "should pay you a lot more than they're paying,"* (**ID_3761**, NV_M_Other). *One participant had taken the first two doses because of the vaccine passports, but suggested he would not get another dose. When asked if there was anything that would support him to get another dose, he responded that, "The only thing that would change it is housing. That's it. If you were to say to me if you take this third shot, we will give you an apartment for whatever*

> *they, the, whatever it is that you pay a month on ODSP; $120.00, $180.00 per month you know what I mean"* (**ID_0821,** V_M_W).

Lastly, a few participants who had been vaccinated already suggested that barriers to vaccination needed to be removed. Early on when vaccines were available but clinics were not yet operating in the shelter hotels, people were accessing the vaccine in community settings. They suggested that they had been able to navigate transportation, distance, etc. barriers, but they were already keen to get the vaccine. For those less convinced, any barrier could present a markedly more significant deterrent to vaccination. This result is pertinent to any future vaccination efforts.

Improvements to overall pandemic responses

Ultimately, participants spoke of the need for pandemic responses to be more holistic. The felt that governments needed to take into account the multiple ways that people were being impacted by the pandemic itself, as well as by the governments' responses to the pandemic. For instance, participants were critical about the funds spent on vaccine procurement and how quickly the governments mobilized, and yet many of their needs to support their health were still unmet: "*You know when I see the money that's [Pause] being given for [Pause] vaccinations [Pause] well can I have that money for my food? [Laugh]*" (**ID_0066,** NV_F_W).

In addition, some participants felt like the different levels of government should have focused more on housing people and not just vaccination.

> *Yeah, with all the money they spent on these, these COVID shots they should have spent on getting their homeless off the street. I think that the shots were just a big waste of time in my opinion... [they should have focused] on housing and getting people off of the streets as opposed to giving me the shots to be honest with you"* (**ID_0821,** V_M_W).

People felt that if the government was worried about their well-being, they would have addressed housing more intentionally. In a similar vein, others suggested that the City should have stopped evicting people from encampments, especially as there were not many places that they could offer to people to move to.

> *The police are trying to run these people out of their tents. They're not even trying to find them a different place. That's the main problem for people who are unhoused is not all, sometimes you know they choose to be like this but that doesn't matter you know nomads existed hundreds of years ago what's the problem with the nomad today? But [Pause] there is a lot of problems with the City of Toronto trying to force people out of places and [Pause] it's not, like these, some of these tent cities have been there for years.* (**ID_1510,** V_NB_W)

Overall, participants felt that the vaccine should have been one piece of the overarching pandemic response but it became the sole focus of governments. As one example, a participant noted.

> *We shouldn't accept the vaccine as the be-all-end-all. It's supposed to be the beginning because 'right now we don't have enough hospitals and medical places and equipment to deal with this so we're doing this to make sure you're okay right now and that you're alive long enough and then we will work forward you know to do that,' and that's what they should have told the people* (**ID_3103,** NV_M_R).

Image provided by Eduardo Lima, modified by Hub Solutions.

CONCLUSIONS AND RECOMMENDATIONS

In Toronto, Canada, where over 9, 467 people live unhoused each night,[19] vaccination rates against COVID-19 for people experiencing homelessness are lower than the general population.

This study set out to better understand what factors were driving vaccine hesitancy and/or vaccine confidence, and how peoples' experiences during the pandemic as someone experiencing homelessness were potentially shaping their attitudes towards the COVID-19 vaccine. Thus, we focused on the broader context of the ways in which the COVID-19 pandemic has impacted people's lives.

Our results speak to a complex story whereby multiple and intersecting experiences and influences shaped peoples' thoughts about the vaccine and their experiences during the COVID-19 pandemic. Efforts to curb the spread of COVID-19 infection had the unintended consequence of both further marginalizing and alienating many people experiencing homelessness, alongside providing interim sheltering options and income support (e.g. the Canadian Emergency Response Benefit) that were seen to be helpful.

Key Points

Participants spoke of **limited trust in the government but a trust in science**, of feeling pressure to get the COVID-19 vaccine and then stigmatized if they chose not to get vaccinated. This was frustrating as most participants, both vaccinated and not vaccinated, expressed that they were serious about protecting themselves and others from COVID-19. They spoke about their own agency and how this was a driving force in vaccine uptake decisions, and that supporting people to enact their agency was an important consideration. This finding complicates against a common narrative that unvaccinated individuals have a deep mistrust the medical system.

Participants expressed the **need for a broader, holistic approach to pandemic responses**, ones that included better nutrition in shelters, access to housing and ending encampment evictions. It was hard for participants to understand how the government was concerned about their health and well-being when these other pieces that are key social determinants of health were not a part of the pandemic response. The focus on vaccines, without attention to these broader issues, was concerning and contradictory for some. The focus on vaccines, without attention to these broader issues, was concerning and contradictory for some.

Some participants who were not yet vaccinated at the time of their interview felt confident in the safety and effectiveness of the vaccine, but were **concerned about the side effects of the vaccine**. This finding suggests that having a clinician or someone with access to their medical records with whom they would be able to discuss their personal health concerns and potential vaccine reactions would possibly support people in their decision to get vaccinated.

Lower rates of vaccination seemed to be due to **lack of clarity about the effectiveness of the vaccine** in protecting against current strains of the SARS-CoV-2 virus. Many participants were not convinced of the effectiveness and safety of the vaccine, and were confused by the high rates of transmission despite vaccination.

There is a **gendered** aspect to how people experienced the COVID-19 pandemic. Some women we spoke with discussed the challenges of being a single parent and how these challenges were exacerbated during the pandemic. Exiting homelessness without resources to pay for the high rents in Toronto is near impossible for most people. For women who have experienced domestic violence, this can be compounded if they have not saved any money, had to leave all their belongings to escape a dangerous situation, and other factors.

Although we asked participants about whether they felt **racism shaped their experiences during the pandemic**, and if influence from their ethnic/religious community shaped their views of the COVID-19 vaccine, neither were discussed as a significant factor by the majority of racialized participants.

Recommendations and Strategies

Strategies to better care for people during a pandemic, support vaccine decision making and improve COVID-19 vaccine uptake among people experiencing homelessness are best identified by people experiencing homelessness. The recommendations we outline here are reflections of what people told us, combined with and supported by what the literature suggests.

Supporting people experiencing homelessness during pandemics:

USE A HOLISTIC, WHOLE-PERSON APPROACH. Ensuring that vaccination efforts are person-centred is key. People must be seen and treated holistically, and understood and supported within the context in which they live. For people experiencing homelessness, this means that while efforts to increase vaccination rates are under way, simultaneous efforts must be undertaken to:

- house people;
- guarantee that people are temporarily or provisionally housed in safe spaces with reduced risk of COVID-19 transmission;
- ensure people have access to health-sustaining food;
- address other health conditions proactively by the healthcare system;
- during pandemic lockdowns, ensure that people experiencing homelessness have access to indoor space during the day, in case their shelter spaces require them to leave;
- provide improved access to mental health supports;
- and, cease encampment evictions.

COVID-19 vaccine:

PROVIDE INFORMATION FROM A TRUSTED SOURCE. Our results are clear that people who are hesitant about the COVID-19 vaccine need more trusted sources of information. Information about COVID-19 and the vaccine would be best provided by medical professionals and trained peers. These include individuals who are not directly connected to any level of government, as trust in the three levels of government remains low. Information should be delivered in multiple forms, and focused on scientific facts: on television and through various social media platforms; in-person at Q and A sessions, especially prior to the vaccine being offered; in pamphlets with enough information that people who want to learn more details about the vaccine have the opportunity; advertisements on the public transit system; and other options for dissemination.

TRAIN PEERS TO PROVIDE INFORMATION AND DELIVER VACCINES. Training peers to provide both information and administer the vaccine, also referred to as lay vaccinators, is an important avenue for exploration. While research has shown that some peer-led education interventions on COVID-19 vaccination can support an increase in COVID-19 vaccination in other contexts,[1,2] there is little research that discusses using peer or lay vaccinators. In Canada, Ontario amended the Regulated Health Professions Act to allow anyone to give a COVID-19 vaccine as long as they were supervised by a physician, nurse or pharmacist. Following this regulatory change, one program at the University of Toronto trained graduate students to administer the COVID-19 vaccine.[3] Additionally, the Inner City Health Associates, a non-profit homeless health organization in Toronto, is now training Community Health Workers with lived experience of homelessness as vaccinators. Other jurisdictions in Canada and internationally should explore this as an option for other lay peoples, as it could increase acceptability of the vaccine and relieve the specialized healthcare workforce in future pandemics and vaccination efforts.

ENABLE ACCESS TO PERSONALIZED INFORMATION ABOUT VACCINE SIDE EFFECTS. Many people experiencing homelessness do not have a family physician, someone who knows their unique health status. It is important that these individuals have the ability to ask a family physician about how the vaccine may interact with any underlying health conditions they have, of the potential risk to their health if they contract COVID-19, and any other questions they have about COVID-19 or the COVID-19 vaccine and their health. Without the ability to ask personal questions of this nature days prior to vaccination, people may not be able to make an informed decision about the vaccine, one that respects their agency and prioritizes feelings of empowerment. Connecting people to a family doctor or another clinician who is able to read their medical charts would help ease their concerns and empower them with the information needed to make and educated decision.

BRING VACCINES TO PEOPLE. Access to the vaccine is one of the main challenges with people choosing to get vaccinated, and therefore reducing any access barriers is a priority for increasing vaccination rates. In Toronto, the vaccine rollout for people experiencing homelessness primarily occurred in the City's emergency shelters, and were said to be done in a way that elicited a great deal of respect. This made it incredibly easy for individuals to get the vaccine. Vaccine clinics should go to places where people congregate, and where they are already accessing other much-needed services: shelters, parks, drop-in centres, and other known places. Outreach to encampments across the city is essential. Bundling services at spaces like drop-ins would be another way to improve access.

CONSIDERATION OF THE FULL VACCINE CLINIC CONTEXT. It is important that vaccine program organizers consider multiple aspects of the vaccine clinic context and how this might shape peoples' experiences and future inclinations towards vaccination. Having the vaccination clinic set up in an inviting, safe, clean space, with kind and patient staff can create a positive experience during vaccination. Such experiences may support people in their decision to receive future vaccinations.

PROVIDE INCENTIVES. While building trust and improving information sharing is essential to supporting people in their vaccine decision-making, providing incentives is equally as important. For people experiencing homelessness, many of whom struggle to make an income, these extra incentives contribute to providing a very small amount of money that can support their daily needs. The importance of this should not be overlooked nor diminished.

INCORPORATE A GENDERED LENS TO PANDEMIC RESPONSES. People who identified as women and as gender non-conforming in this study had unique experiences during the pandemic. Women who were single mothers, escaping domestic violence situations, and struggling to find employment because of their gender faced additional life stresses and challenges staying safe during the earlier days of the COVID-19 pandemic. Exiting homelessness without resources to pay for the high rents in Toronto is near impossible for most people. Future pandemic planning and pandemic responses must include specific resources for women and gender-diverse peoples such as gender-inclusive and safe spaces and additional resources to support single mothers caring for children. Vaccine information and outreach also needs to consider how women and gender diverse people may have unique concerns about the vaccine or potential side effects. For example, developing child-care resources for single mothers who may hesitate to get the vaccine in case potential side effects or complications make it challenging to care for their families.

Strengths, limitations and lessons learned

This study has a number of strengths. We sampled from a group of over 700 individuals who had already participated in the *Ku-gaa-gii pimitizi-win* cohort study, and therefore we were able to invite specific groups of people to participate based on a number of socio-demographics. This allowed us to recruit a more even distribution of participants who were vaccinated and not vaccinated, who identified as a man or woman, and who identified as racialized, white or Indigenous than we likely would have with random or snowball sampling. We also heard a number of stories from people who had been living in encampments, who were recently newly homeless, who had been homeless for a long time, people living in shelter hotels and the regular emergency shelters. These allowed us to better understand how the full spectrum of peoples' unique experiences shaped their thoughts and opinions about the COVID-19 vaccine in different ways, while also seeing commonalities across all the stories.

There are also important limitations. First, we were only able to recruit one individual who identified as gender non-conforming, transgender, and/or Two-Spirit. We are therefore missing the experiences of individuals who may be navigating and experiencing the pandemic in specific ways that were not captured here. Second, although we acknowledge the impact of structural racism and interpersonal racism on health, participants did not clearly discuss how experiences of racism shaped their thoughts and opinions about the COVID-19 vaccine. Therefore, we were unable to fully understand if or how experiences of racism shaped vaccine hesitancy and/or vaccine uptake. Lastly, this data was collected a specific point in time and the results are bound to that time period, earlier in the pandemic. The context has changed and vaccination levels for all populations are lowering with each additional dose offered. Despite this, there are important lessons to be learned for future pandemic planning.

There are a number of lessons we learned from conducting this study. Context matters, as does the positionality of the research team. For instance, the team is employed by a Catholic hospital, and therefore it is possible that some participants did not feel comfortable being open with the research team during the interviews. Additionally, the majority of team members do not have lived experiences of homelessness. While it is not possible to erase these contexts and resulting power dynamics, there are ways to try and address their impact on participants and the research more broadly. For example, the research team intentionally incorporated researchers with lived expertise of homelessness to ensure that the knowledge that comes with experiencing homelessness was incorporated into each step of the study's process.

Lastly, the role of Indigenous partners in relation to Indigenous participants and their stories is important. How those stories are heard, how they are interpreted, and how they are written about needs to be led by Indigenous researchers. To that end, the report for Indigenous participants is separate from this document, and can be found on the MAP website once published.

Ultimately, we recognize that although the research process summarizes and connects people's stories in order to develop themes and common experiences, it can therefore lose some of the nuance that make every individual's story unique. Many stories remain hidden during interviews, as people may not be comfortable to share some of their stories, and we were unable to interview everyone. This report shares a glimpse at some experiences, some stories, and isn't the full picture. We worked hard to do these stories justice. We hope we have achieved this.

Image provided by Eduardo Lima, modified by Hub Solutions.

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hub solutions

Hub Solutions is a social enterprise embedded within the Canadian Observatory on Homelessness (COH). Income generated from Hub Solutions fee-for-service work is reinvested into the COH to support research, innovation, policy recommendations and knowledge mobilization.

APPENDICES

Appendix A

Vaccine Uptake and Hesitancy Among People Experiencing Homelessness in Toronto, Canada

Thank you so much for taking the time to participate in this interview. The purpose of this interview is to understand the impact COVID-19 has had on your life, your thoughts about the vaccine, and any other ways you are staying safe during the pandemic.
[Have both interviewers introduce themselves, who they are, where they come from, etc.]

You can stop the interview at any time, take a break, stop entirely, ask that the recording stop, or skip any questions you do not want to answer. Also, as a reminder, the reason the interview is being recorded is because direct quotes from the interview might be used in future publications and conferences, however no identifying information will be included, meaning no one will be able to tell that it is you. Do you have any questions before we begin? [Answer any questions they have]

I am going to turn the recorder on now.

Section I: Experiences during the COVID-19 pandemic

1. **As a start, we are curious about how has life been during the pandemic? How has your life changed because of the pandemic?**

   FOLLOW-UP:

   a. Has your housing or shelter changed during the pandemic?

      Prompt:

      i. Have you moved around to different housing, shelters or encampments? (Probe: Why did you change housing or shelter locations? OR what influenced your decision to change locations?)

   b. Since the pandemic began, has your ability to access services changed?

      Prompts:

      i. Can you provide some examples of how your access to services has changed?

      ii. How about other services that you were accessing before COVID? (Probe: libraries, drop-in spaces, food bank, harm reduction, etc.)

2. **We know that people have had different experiences during the pandemic. Some communities have been hit harder than others, some communities have experienced better or worse responses and support from the government.** How have issues of race have influenced your experiences of the COVID-19 pandemic? And how about issues of gender?

3. **We also know that different forms of discrimination can play a very important role in someone's experiences, and this may have increased for some during the pandemic.** Have you experienced forms of discrimination that have impacted your experience during the pandemic? How so or in what ways?

    a. Has racism influenced your experiences during the COVID-19 pandemic? Has sexism influenced your experiences of the COVID-19 pandemic? Any other experiences of discrimination?

4. **Have you felt safe during this pandemic? Can you tell me a bit more about that?**

    PROBES:

    a. During the pandemic, who have you considered to be a part of your support system?
    b. Where do you stay right now? Do you feel safe there?
    c. Do you have a good support system, in general? Do you hangout with people who support you, make you feel good? Who are the people you feel tied to?
    d. Are there certain places you go to that feel safe and supportive? (e.g. certain drop-in centres).

Section II: Opinions towards the COVID-19 vaccine

These next questions are focused on understanding your experiences with vaccination and opinions about the COVID-19 vaccine.

5. **Do you get routine vaccines? (If need example: The tetanus shot? The flu shot?)**

    a. If no: Can you help me understand why?
    b. If yes: Where would you normally go to get these vaccines? Why do you go to this place?

6. **I am interested in hearing about your thoughts or feelings about the COVID-19 vaccine?**

    PROMPTS:

    a. Do you feel like this vaccine is a good idea, that it is safe?
    b. Do you feel like this vaccine is effective?
    c. That it will keep yourself and others around you safe?
    d. What have you thought about the side effects of the vaccine? Did this impact your decision to get the vaccine, or when to get it?
    e. Have your thoughts about the vaccine changed since the pandemic started?
    f. Do you have a vaccine preference?
    g. (IF express concerns) Can you explain a bit more about those concerns? Do others you know share these concerns?

7. **I am interested in hearing where you get your information about COVID-19 and the vaccine? Who do you talk to in order to get information?**

   PROMPTS:
   a. Are there people you trust who gave you information?
   b. Where do you think most people in your social circle are getting their information about COVID and the vaccine?
   c. How do you keep up-to-date with all the changing information/updates?

8. **Can you tell me about some of the COVID-19 vaccine information campaigns you have seen (like posters and TV ads)? Do you think vaccination campaigns have been useful or helpful for you?**

   a. What did you like or find useful about the campaigns? Anything you didn't like or found useless?

Section III: Enablers and barriers to uptake

9. **Have you been offered a vaccine? If so, did you get vaccinated? [If vaccinated] I am curious to hear why you decided to get vaccinated? [If unvaccinated] I am curious to hear why have decided not to get vaccinated?**

   PROBES:
   a. If COVID sticks around, will you get vaccinated in the future?
   b. If you have only dose 1, will you get the second dose? Why or why not?

10. **Where did you get vaccinated OR where were you offered a vaccine (e.g. mobile vaccination clinic at encampments, vaccination clinic at shelters, went to a drop-in clinic, pharmacy, etc.)? What was the experience like?**

11. **Are your friends, family, community choosing to get vaccinated? What are their reasons (for getting or NOT getting the vaccine)? How do you feel about that?**

    PROBE: How do others in your social groups and community feel about the vaccine? What do people say about the vaccine?

    FOLLOW-UPS:
    a. Do their decisions about getting the COVID-19 vaccine influence what you think (or thought) about getting vaccinated?

Section IV: Strategies to improve vaccine uptake

Next, I am going to ask you questions about how vaccination strategies can be changed or improved.

12. I am curious to hear what you think needs to change to improve people's experiences surrounding COVID-19 vaccination?

a. If vaccinated: If you were in charge of getting people vaccinated, what would you do to help get more people vaccinated?

Prompts:

i. What challenges could be addressed so people can more easily get access to the vaccine, or convince/support people to get vaccinated?

ii. How do you think COVID-19 vaccines should be delivered in the future?

b. If vaccinated: Are there things you would change about your experience getting the vaccine? Are there some things that could have been better? What aspects did you like about your experience when getting the vaccine?

Prompts:

i. Staff, location, physical space, safety considerations, time of day.

13. If NOT vaccinated: Is there anything that you think would support you or change your mind about getting vaccinated? If you did think the vaccine was a good idea, how do you think public health could get more people vaccinated?

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