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# Exploring COVID-19 vaccine uptake, confidence and hesitancy among people experiencing homelessness in Toronto, Canada: protocol for the *Ku-gaa-gii pimitizi-win* qualitative study

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## ABSTRACT

**Introduction** People experiencing homelessness are at high risk for COVID-19 and poor outcomes if infected. Vaccination offers protection against serious illness, and people experiencing homelessness have been prioritised in the vaccine roll-out in Toronto, Canada. Yet, current COVID-19 vaccination rates among people experiencing homelessness are lower than the general population. This study aims to characterise reasons for COVID-19 vaccine uptake and hesitancy among people experiencing homelessness, to identify strategies to overcome hesitancy and provide public health decision-makers with information to improve vaccine confidence and uptake in this priority population.

**Methods and analysis** The *Ku-gaa-gii pimitizi-win* qualitative study (formerly the COVENANT study) will recruit up to 40 participants in Toronto who are identified as experiencing homelessness at the time of recruitment. Semistructured interviews with participants will explore general experiences during the COVID-19 pandemic (eg, loss of housing, social connectedness), perceptions of the COVID-19 vaccine, factors shaping vaccine uptake and strategies for supporting enablers, addressing challenges and building vaccine confidence.

**Ethics and dissemination** Approval for this study was granted by Unity Health Toronto Research Ethics Board. Findings will be communicated to groups organising vaccination efforts in shelters, community groups and the City of Toronto to construct more targeted interventions that address reasons for vaccine hesitancy among people experiencing homelessness. Key outputs will include a community report, academic publications, presentations at conferences and a Town Hall that will bring together people with lived expertise of homelessness, shelter staff, leading scholars, community experts and public health partners.

## STRENGTHS AND LIMITATIONS OF THIS STUDY

⇒ One of the first qualitative studies to explore reasons for COVID-19 vaccine confidence, uptake and hesitancy among people experiencing homelessness in Canada.
⇒ The recruitment strategy leverages an existing cohort study, enabling us to include participants with different gender and ethno/racial identities, and different vaccination statuses at time of recruitment.
⇒ Hiring peer researchers with lived experience of homelessness onto the research team can create rapport with participants, generates more in-depth and nuanced data that are appropriately contextualised and helps to ensure study results support community-identified strategies to improve vaccination efforts.
⇒ This study asks participants themselves to identify strategies to improve vaccine uptake among people experiencing homelessness, ensuring strategies reflect participant knowledge and expertise.
⇒ Participants were sampled from people experiencing homelessness staying in congregate settings (eg, shelters) and therefore excludes individuals living on the street or staying temporarily with friends or family.

## INTRODUCTION

The COVID-19 pandemic has exacerbated and entrenched health inequities for people experiencing homelessness. Rates of acute and chronic physical and mental health conditions are higher among homeless populations,[1 2] and many of these conditions are known to be risk factors for poor outcomes among individuals with COVID-19.[3–6] Those who live in congregate settings are at higher risk for contracting COVID-19 because of shared living spaces, crowding, difficulty achieving physical distancing and, in shelters, high population turnover.[7–9] A UK study modelled transmission among people experiencing homelessness and found it to be higher than transmission in the broader community.[10] This finding was echoed by

Kiran and colleagues in Toronto, Canada, who found positive COVID-19 test results in 14% of 504 tests conducted at shelters under outbreak status and 2% of 469 surveillance tests, rates that were the same as or higher than the general population during the same time period.[11] Both study findings suggest that outbreaks in congregate settings such as shelters are likely to remain a substantial public health concern.

Vaccination is promoted as one of the best means of protection against serious illness from COVID-19. Given increased risk for infection, people experiencing homelessness have been prioritised for the vaccine roll-out in many countries, including Canada. While information to date on COVID-19 vaccine uptake among people experiencing homelessness is sparse, current literature suggests low uptake when compared with the general population. A US study reports veterans experiencing homelessness were 18.5% less likely to choose vaccination against COVID-19 compared with the general population.[12] In Ontario, Canada, administrative health data showed that COVID-19 vaccine uptake among recently homeless healthcare users was 25% lower than among Ontarians overall—61% had received one dose and 47% had two doses.[13] In Toronto, Ontario's largest city and where this current study takes place, 76% of those 12 and older staying in the shelter system have received a first dose of the COVID-19 vaccine, 65% a second dose and 13% a third dose, despite wide COVID-19 vaccine availability.[14] This is markedly lower than the general population 12 and older, where 91% have received a first dose, 88% their second dose and 56% a third dose.[15]

Vaccine hesitancy is believed to play a role in the low COVID-19 vaccine uptake rates among certain populations, such as ethnic minorities,[16 17] but further studies on the drivers of COVID-19 vaccine confidence and hesitancy are needed to address barriers to COVID-19 vaccine uptake for people experiencing homelessness. Vaccine hesitancy refers to delay in acceptance or refusal of vaccination despite availability of vaccination services.[18] Vaccine hesitancy is complex and context specific, varying across time, place and specific vaccines.[18]

There are few published studies that have explored reasons for COVID-19 vaccine uptake and vaccine hesitancy among people experiencing homelessness, and those published report mixed results. Of studies reporting higher vaccine hesitancy, a study in France with homeless shelter residents reported 40.9% were unwilling to get vaccinated, interpreted as vaccine hesitancy by the authors.[19] Factors associated with COVID-19 vaccine hesitancy included female sex, living with a partner, French citizenship/legal residence and low health literacy. In the USA, a study of 90 people experiencing homelessness found 48% hesitancy when participants were asked about both actual and hypothetical COVID-19 vaccination.[20] In the UK, Rogers and colleagues found 28.1% of homeless shelter residents were vaccine reluctant, with higher COVID-19 reluctance reported among Black participants.[21]

Other studies have noted COVID-19 vaccine confidence among people experiencing homelessness. Among a mixed group of elder people experiencing homelessness and people experiencing homelessness at a COVID-19 mobile testing site, a qualitative study in the USA found a general mix of willingness and hesitancy towards COVID-19 vaccination.[22] While willingness was fuelled by a desire to return to normal life and civic responsibility, hesitancy was linked to a desire for vaccine trial data, worries of vaccine ingredients and mistrust of government institutions.[22] In Canada, Abramovich and colleagues explored views towards the COVID-19 vaccine held by youth experiencing homelessness who identified as Two-spirit, Lesbian, Gay, Bisexual, Transgender, Queer or Questioning, or additional sexual orientations and gender identities (2SLGBTQ+) .[23] Their mixed-methods study found that 75% of participants felt the vaccine could stop the spread of COVID-19, 58% felt safe receiving the vaccine and 64% either were vaccinated or planned to be vaccinated. Reasons for vaccine hesitancy included mistrust in the healthcare system, lack of targeted vaccine-related public health information, concerns of vaccine safety and side effects and accessibility issues. These initial studies present concerns for ongoing vaccine confidence and uptake among people experiencing homelessness. Yet, they predominantly quantify the factors associated with limited vaccine uptake and the major elements of hesitancy, with less focus paid to unpacking the connection between homelessness and vaccine hesitancy, nor do they attend to specific strategies to improve vaccine uptake. Further research is needed to elucidate the mechanisms that explain why people experiencing homelessness might hold aversions to vaccination or vaccination programmes, and reveal approaches suited to delivering a different outcome.

To understand COVID-19 infection rates among people experiencing homelessness in Toronto, the *Ku-gaa-gii pimitizi-win* cohort study (formerly the COVENANT study) aims to determine the incidence and prevalence of COVID-19 infection and uptake of COVID-19 vaccination among people experiencing homelessness living in congregate settings during a 12-month follow-up. To expand on and complement the *Ku-gaa-gii pimitizi-win* cohort study, we developed a qualitative study to provide in-depth understanding about COVID-19 vaccine uptake and hesitancy among people experiencing homelessness in Toronto, Canada.

Over 2 years into the pandemic, vaccination is still an important protection. Current public health guidelines recommend three doses of a COVID-19 vaccine for stronger protection against severe illness, with some populations recommended to take a fourth booster dose.[24] Vaccination is particularly important given how easily transmissible the new variants are, that many societal public health measures are being rescinded and, in Ontario, many congregate settings are moving back towards full capacity after having instated reduced capacity to enable physical distancing.

Thus, the goal of this study is to characterise reasons for COVID-19 vaccine uptake and hesitancy among people experiencing homelessness, to understand how homelessness and vaccine hesitancy might be intertwined and coproduced, to identify strategies to overcome hesitancy and to provide public health decision-makers with information to improve vaccine confidence and uptake in this priority population. These are critical to improving current vaccination programmes to protect against COVID-19, informing new approaches to improving vaccination rates among this priority population and informing responses to future public health crises.[25 26]

### Specific aims and research questions

The specific aims of this qualitative study are to: (1) identify the individual, community and structural drivers of COVID-19 vaccine uptake and hesitancy among people experiencing homelessness; (2) invite people experiencing homelessness to propose solutions and strategies to reduce impediments to vaccination; and (3) develop strategies to build enablers to vaccine confidence and uptake.

We will achieve these aims by answering the following research questions: (1) How do people experiencing homelessness perceive the COVID-19 vaccine? What reasons do they give for confidence in and/or hesitancy of the COVID-19 vaccine? (2) What are the individual, community and structural enablers and barriers to vaccination for people experiencing homelessness? What steps do participants identify to reducing impediments to vaccination? (3) How do different contextual factors influence and shape views, attitudes and beliefs towards vaccination in general and the COVID-19 vaccine in particular?

## METHODS AND ANALYSIS

### Setting and context

This study takes place in Toronto, a city on Treaty 13 territory in Ontario, Canada. More than 235 000 Canadians experience homelessness every year,[27] and in Toronto, Canada's largest city, approximately 7347 people experience homelessness on any given night.[28] People experiencing homelessness were identified as a priority population for the vaccine roll-out in Toronto, and vaccination in shelters began in March 2021.[29] Vaccination clinics have been coordinated by Shelter Support and Housing Administration (SSHA), a division at the City of Toronto that manages housing and homelessness services, and run by multiple community-based health providers such as Inner City Health Associates, Unity Health Toronto, Toronto Public Health and Anishnawbe Health Toronto.

*Ku-gaa-gii pimitizi-win*, which translates in English to *life is always/forever moving*, is a spirit name given in ceremony by Elder Dylan Courchene from Anishnawbe Health Toronto. This name 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 to the future.

### Theoretical and methodological approach

This qualitative study will be informed by the ecosocial theory of health and health behaviour, focused on explaining social inequalities in health by tracking the social production of disease distribution,[30 31] and an intersectional approach to research.[32] Qualitative inquiries are the 'best methods for capturing social responses to the pandemic', including reasons for people's behaviours and attitudes or beliefs around health and illness.[33] Using the ecosocial theory as a guiding framework will help identify the role of social structures or social environments in shaping participants' vaccination decisions, and ultimately shaping their risk of severe illness from COVID-19 if infected.[30] This approach will enable analytical insight into how social experiences can become embodied, contextualising vaccine decision-making within multiple levels of influence (interpersonal, community, national, etc).[30 34] Intersectionality[32] refers to the 'multiple, interdependent and mutually constitutive' relationships between social identities (eg, race, class, gender) and/or structural inequities (eg, underemployment, homelessness), creating synergistic experiences of oppression and opportunity.[35 36] The concept of intersectionality is an important and useful analytical frame for this study given the intersecting social identities of the homeless population in Toronto, experiences which could shape and influence peoples' perception of the vaccine (see participant details below). Combined, these theoretical lenses align with the grounding of this study, that homelessness is the result of intersecting economic and political failures and individual-level factors.[37] Such an approach will allow us to unpack the multilevel factors that produce both homelessness and vaccine hesitancy to better understand how the two are intertwined, and identify strategies to disentangle them.

### Sampling and participant recruitment

This study will recruit up to 40 participants in Toronto who are identified as experiencing homelessness at the time of recruitment, selected from among individuals who have participated in the *Ku-gaa-gii pimitizi-win* cohort study, described elsewhere.[38] In general, qualitative research does not stipulate a specific number of participants required for a study. Given the diverse opinions towards the COVID-19 vaccine that we anticipate, we hypothesise 40 will be an adequate number to provide rich insights into the research questions,[39] allow for approximately equal representation of vaccinated and not vaccinated with similar demographic characteristics and adequately represent the diverse views and experiences of participants.

### Participant sampling

We will use maximum variation sampling to help ensure a diverse sample based on demographic characteristics

Table 1 Stratified sample frame with target numbers to guide recruitment of potential participants

| | Male | Female | Non-binary, Two-Spirit, other identity | Total |
|---|---|---|---|---|
| Vaccinated* (n=20) | | | | |
| White | 2 | 2 | 3 | 7 |
| Non-White | 3 | 3 | 3 | 9 |
| Indigenous | 2 | 2 | 0† | 4 |
| Total | 7 | 8 | 6 | 20 |
| Not vaccinated (n=20) | | | | |
| White | 3 | 2 | 1‡ | 6 |
| Non-White | 3 | 3 | 1‡ | 7 |
| Indigenous | 3 | 3 | 1‡ | 7 |
| Total | 9 | 8 | 3 | 20 |

*Vaccinated with at least one dose.
†This category of participant demographic does not exist in the COVENANT cohort participant sample.
‡Within the COVENANT cohort participant sample, there was only one individual who fit within this category.
COVENANT, COVID-19 Cohort Study of People Experiencing Homelessness in Toronto.

including gender and race/ethnicity, as well as vaccination status (vaccinated with at least one dose, not vaccinated). The *Ku-gaa-gii pimitizi-win* cohort study conducted an initial baseline survey from June 2021 to September 2021 that collected contact information, recorded sociodemographic characteristics and asked participants whether they had been vaccinated. For the *Ku-gaa-gii pimitizi-win* qualitative study, we have created a stratified frame from which to sample participants based on self-identified gender, self-identified race/ethnicity and self-reported vaccination status (vaccinated with at least one dose and not vaccinated) (see table 1).

Sampling participants based on gender, race/ethnicity and vaccination status will allow us to understand differences in vaccine confidence, uptake and hesitancy among these populations and/or similarities that cut across these variations.[40] Of the total people experiencing homelessness in Toronto, 63% identify as men, 34% as women and just over 3% as non-binary, transgender and Two-spirit.[28] Indigenous, Black and other racialised individuals are over-represented in Canada's homeless populations.[41 42] In Toronto, almost two-thirds (60%) of people experiencing homelessness identify as racialised (52% in the general population), with 31% identifying as Black (9% in general population). Furthermore, 15% identify as Indigenous (1%–2% in the general population).[28 43] Although Canada does not currently report race-based COVID-19 vaccination data, COVID-19 vaccination rates in the USA are lower among racialised communities.[44] Racialised groups have historical and contemporary experiences of oppression by medical communities and therefore justifiable mistrust of healthcare systems.[26 45 46] Therefore, the *Ku-gaa-gii pimitizi-win* qualitative study will build on prior research with insight into reasons for vaccine uptake and hesitancy among Indigenous, Black and other racialised communities. The unique concerns and healthcare needs of these groups of people experiencing homelessness are under-researched and this study will address this knowledge gap as it relates to the COVID-19 vaccine for people experiencing homelessness in Toronto.

## Participant recruitment and consent

Recruitment is being supported by the *Ku-gaa-gii pimitizi-win* cohort research team with assistance from shelter staff at 61 physical distancing hotels and shelter programmes for youth (aged 16–24 years), adults and families experiencing homelessness in Toronto. Recruitment for the *Ku-gaa-gii pimitizi-win* qualitative study began in November 2021 and will continue on a rolling basis until all participant sampling categories are filled and/or thematic saturation is reached.

Multiple methods for participant recruitment are being employed simultaneously. First, individuals who fit within our sampling frame are contacted via telephone or email and invited to participate in the *Ku-gaa-gii pimitizi-win* qualitative study. As all potential participants for the qualitative study are sampled from the *Ku-gaa-gii pimitizi-win* cohort study, contact information has already been collected by the*Ku-gaa-gii pimitizi-win* cohort research team. Second, a qualitative research team member joins the *Ku-gaa-gii pimitizi-win* cohort research team at their interview sites and invites participants who fit the sampling frame to participate in the qualitative study that day or to schedule an interview on another day. Third, if we are unable to join the cohort study at interview sites, the *Ku-gaa-gii pimitizi-win* cohort research team passes a study contact card on to any participants who fit the sampling frame, inviting them to contact us for more information or interest in participating. Individuals indicating interest to participate are consented into the study (online supplemental file 1, consent form). Participants can withdraw from the study at any point during the interview and up until 2weeks after the interview, at which point the data will be deidentified and analysis will have begun on their transcript.

## Data generation

Semistructured interviews with participants explore general experiences during the COVID-19 pandemic (eg, loss of housing, social connectedness), perceptions of the COVID-19 vaccine, enablers and challenges to vaccine uptake and strategies for supporting enablers and addressing challenges (see online supplemental file 2, interview guide). Two peer research assistants (PRA) with lived experience of homelessness have been hired onto the research team. In peer research, members of a target population are involved in the research process,[47] as research without lived experience may lack knowledge of the realities they are studying.[48] The emergence of peer research in recent decades recognises that knowledge rooted in experience is often devalued in dominant research and academic knowledge production, despite the wisdom, advice and learning that comes from specific

experiential standpoints.[49 50] In this study, the PRAs help bring to the fore 'hidden knowledges',[50] contributing to developing the interview guide, conducting interviews with participants, coanalysing the data and supporting the coordination of multiple knowledge translation activities. Their critical role in this research helps to contextualise, communicate and apply research findings.[48]

Two researchers conduct each interview—one of the PRAs and either the research coordinator (TT) or the study lead (JIRJ). Interviews are led by the PRA with additional follow-up questions asked by the second interviewer. Interviews can last up to 1.5 hours and participants are provided with a cash honorarium ($C40) for participating. Field notes are taken of 'observational information or data during the interview, and non-linguistic "data" such as bodily and facial expressions and non-verbal interactions'.[51]

Interviews are taking place both in person and virtually, on the telephone or video (eg, Zoom). Initially, all interviews were to be held in person, either in a private room at one of two different shelters in downtown Toronto, or in a private room at the shelter where participants are staying. For some participants, in-person interviews pose a barrier to participation for various reasons (eg, they have children they are looking after and can not travel, shelters are on COVID-19 outbreak status and we are unable to conduct interviews in their space, participants have mobility challenges and are unable to travel, or COVID-19 infection concerns). We offer individuals the option of conducting telephone or video interviews, and honoraria are sent via e-transfer.

### Data analysis

As is common in qualitative research, data analysis began with the first interview and is continuing on a rolling basis, as interviews are completed. Interviews will be transcribed, read to familiarise ourselves with the entire data set, notable excerpts coded and similar codes grouped into themes.[52] Field notes will be used as initial points of analysis and to contextualise interview data. Using the ecosocial theory as our theoretical lens, analysis will situate participant responses within intrapersonal/individual, interpersonal/network (eg, social networks), community/area (eg, organisations, geographic area), institutional and public policy levels, contextualising individual experiences within their broader environments.[53 54] Central to our analysis will be ecosocial theory's core constructs of embodiment (the biological manifestation of one's material and social context) and pathways of embodiment (how this occurs, for instance, through social trauma), as played out over the life course.[54] Attention will be paid to the critical role individual and structural accountability and agency play in shaping vaccine uptake and hesitancy and homelessness.[54] Analysis will also examine the ways in which sex, gender, race and other intersecting factors (eg, age, ethnicity, culture, religion, geography, education, disability, income and sexual orientation) shape the experiences of participants during the COVID-19 pandemic and their perceptions towards the COVID-19 vaccine.

The first five transcripts will be coded together by JIRJ, TT, and the two PRAs. The next stages of coding and thematic analysis are being conducted by JIRJ and TT independently. Initial codes and themes will then be reviewed together to address discrepancies in interpretation, and then reviewed with the PRAs. Results will be synthesised in collaboration with PRAs, then reviewed with the Community Expert Group (CEG) at MAP Centre for Urban Health Solutions as a form of member checking (see the Patient and public involvement section). Data source triangulation (eg, analysing field notes and interview data) and researcher triangulation will enhance reliability of the findings.

In line with the First Nations Principles of Ownership, Control, Access and Possession, data of Indigenous participants are possessed and owned by Anishnawbe Health Toronto and data analysis that is focused on Indigenous study participants will be led by Anishnawbe Health Toronto.

### Limitations

This study has important limitations. We are only recruiting individuals who participated in the *Ku-gaa-gii pimitizi-win* cohort study—a study that is recruiting participants from within the shelter system and encampments. As a result, our qualitative study will not include individuals living on the street at the time of recruitment, nor anyone else who may be experiencing homelessness but who is not staying in shelters, COVID-19 hotels or encampments. Furthermore, participant recruitment for the *Ku-gaa-gii pimitizi-win* qualitative study began 2.5 months after the completion of the baseline surveys for the *Ku-gaa-gii pimitizi-win* cohort. While the Survey Research Unit (SRU) team working on the *Ku-gaa-gii pimitizi-win* cohort study actively attempts to maintain contact with participants, there are many lost to follow-up and who were therefore unable to be reached to participate in this qualitative study. Some of the hardest to reach individuals may also experience intense social exclusion and isolation, and face high barriers to accessing healthcare, such as vaccination, and therefore represent important perspectives that will not necessarily be captured in this study.[55] Additionally, the study is rooted in and coordinated by a hospital-based research team and therefore we may miss individuals with a distrust of research, institutions and healthcare who may have refused to participate in the *Ku-gaa-gii pimitizi-win* cohort study. Lastly, this study is set in Toronto, a city on Treaty 13 territory, a single urban area which may limit its transferability to other cities or rural areas, where there may have been different approaches to the COVID-19 vaccine roll-out.

## ETHICS AND REGULATORY ASPECTS

### Ethics and dissemination

Approval for this study has been granted by Unity Health Toronto Research Ethics Board. Findings will be rapidly

communicated to groups organising vaccination efforts in shelters (Ontario Health Toronto Region, Toronto Public Health, Inner City Health Associates, Unity Health Toronto, etc), community groups (Anishnawbe Health Toronto), Toronto Shelter Network and SSHA (City of Toronto) to construct more targeted interventions and strategies that address reasons for vaccine hesitancy among people experiencing homelessness. Key outputs will include a community report, academic publications, presentations at conferences and a Town Hall that will bring together people with lived expertise of homelessness, shelter staff, leading scholars, community experts and public health partners to discuss study findings.

## Data protection and retention

Interviews are recorded using an audio recorder and uploaded to an encrypted USB. Once collected, the data are kept on the encrypted USB and securely sent and stored at St Michael's Hospital on a secure computer server, and deleted from the audio recorder. Audio recordings will be transcribed by a professional transcription service. Audio recordings of the interviews will be password protected and sent to the transcription company via the Unity Health secure online file transfer system—File Transfer. The transcriber will be directed to remove any identifying information (eg, names, specific places), and an authorised member of the research team will review all transcripts to check for outstanding identifying information, removing anything that could identify participants. No identifying information will be used in data analysis, publications and/or presentations. Individuals will be given a participant ID, and this will be stored with contact information on a master linking log, in a password-protected St Michael's Hospital computer. Once data analysis is complete, data will be deleted from the encrypted USB and only stored at St Michael's Hospital on a secure password-protected computer server in password-protected files. Data will be stored for 10 years after study completion and then destroyed.

## Patient and public involvement

The study concept, design and interview guides were all reviewed by the CEG at MAP Centre for Urban Health Solutions. The CEG is made up of a diverse group of individuals with lived experience of homelessness. The CEG will also provide guidance and input on study findings and knowledge translation and exchange. As a permanent part of the team at MAP, members are compensated for their time. The study also has important collaborators who reviewed the proposal. These include the City of Toronto (SSHA), the Canadian Alliance to End Homelessness, the Women's National Housing and Homelessness Network (WNHHN) and Anishnawbe Health Toronto. The WNHHN has convened a working group to focus on this study and has provided guidance on the interview guide and will provide guidance on data analysis. Anishnawbe Health Toronto has provided guidance on the research focus and questions, will collaborate on data analysis of the entire data set and lead analysis of the data generated with Indigenous participants.

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**Contributors** JIRJ conceived this study. JIRJ and RS led the study design with assistance from EG, ML, RN, NT, AO, CP, OS and SWH. JIRJ, RS, EG, JK and NT developed the interview guides. CP and OS helped with participant recruitment. JIRJ, TT, AD and FC are conducting ongoing data collection and analysis, with guidance from LR, TK, NT, AO and SWH. All authors contributed to refinement of the study protocol. JIRJ drafted the manuscript, and all authors reviewed, provided input and approved the final manuscript.

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**Competing interests** None declared.

**Patient and public involvement** Patients and/or the public were involved in the design, or conduct, or reporting, or dissemination plans of this research.

**Patient consent for publication** Not required.

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**Letter of Information and Consent to Participate in a Research Study**


## Title of Research Study:

A Qualitative Exploration of Vaccine Uptake and Hesitancy Among People Experiencing Homelessness

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Study personnel can be reached from Monday to Friday, 9:00 am – 5:00 pm.

**Funding**
This study is funded by the Canadian Institutes of Health Research (CIHR). The investigators have no conflicts of interest to disclose.

**Introduction**
You are being asked to consider taking part in a research study because you are currently experiencing homelessness. Before agreeing to take part in this research study, it is important that you read the information in this research consent form. It includes details we think you need to know in order to decide if you wish to take part in the study. If you have any questions after you read through this form, please ask the research team. You should not sign this form until you are sure you understand all the information on the form. Participation in this study is voluntary.

**Purpose of the Research**
The purpose of this study is to contextualize the experiences of those experiencing homelessness during the COVID-19 pandemic. Homelessness puts people at high risk of contracting COVID-19. As according to an Ontario study, people experiencing homelessness are 20 times more likely to be hospitalized with COVID-19, 10 times more likely to end up in intensive care. Vaccination is one effective approach to protecting communities and populations from infection of COVID-19 as well as other strategies individuals utilize to keep safe.

This study aims to better understand the individual, community and structural drivers of COVID-19 vaccine uptake and hesitancy of those experiencing homelessness and other strategies that people employ to protect themselves and their communities. This study invites people experiencing homelessness to offer their thoughts and experiences, in order to address vaccination hesitancies as well as informing and supporting community agencies that work to protect those experiencing homelessness during the COVID-19 pandemic.

This study will also help future crises responses, allowing public health decision-makers identify strategies to provide those experiencing homelessness when public crises occur.
This is a sub-study of the COVENANT cohort study that looks at the prevalence of COVID-19 amongst those experiencing homelessness for over a 12-month period; participants may be recruited to participate in the main study as well as this sub-study.

**Inclusion and Exclusion Criteria**

For this study, we will be recruiting 40 study participants (ages 18 and up) from shelters, hotel programs and homeless encampments in Toronto, all of whom identify as homeless at the time of recruitment. Some participants may be a part of the main COVENANT cohort study and some may not.
Individuals who are not able to provide consent will be excluded from this study.

**Description of the Research Activities**

**Interview:**

You are being asked to participate in an interview discussing your thoughts about the COVID-19 vaccine, any barriers to vaccination or strategies you think could help improve vaccination among people experiencing homelessness. We are also interested in other strategies you use to stay safe during this pandemic, strategies to protect yourself and/or your community members. Interviews may last between 45 minutes and 1.5 hours, and can be conducted in person or over the phone or over zoom (the audio will be recorded but not the video nor transcript).

**Potential Risks**

Some of the interview questions may seem personal and may make you feel uncomfortable or may upset you. If this happens, you do not need to answer any question that you do not wish to, and you can let the interviewer know if you would like to take a break or stop the interview.

If the interview is conducted over the phone or zoom, the consent form will be sent via email, there are important privacy considerations to be aware of. *There are common risks of using email to communicate:*

- Information travels electronically and is not secure in the way a phone call or regular mail would be.
- If someone sees these emails they may know that you are a participant in this study or see the health information included in the email.
- Emails may be read or saved by your internet or phone provider (i.e. Rogers, your workplace, “free internet” providers).
- Copies of an email may continue to exist, even after efforts to delete the email have been made.
- There is always a chance with any unencrypted email, however remote, that it could be intercepted or manipulated.
- Please note: YOU MUST NOT USE EMAIL FOR MEDICAL EMERGENCIES. If you require immediate help, call your clinic or care provider, or seek emergency services.



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**Potential Benefits**

There are no direct benefits for those who participate in this sub-study. However, this study has multiple indirect benefits. Information that we learn from you and others will help researchers identify ways that government responses to crises can improve to better support people experiencing homelessness. Specifically, the strategies we identify together to overcome barriers to vaccination, and other strategies you are using to stay safe during the pandemic, will be shared with groups working to improve responses to the COVID-19 pandemic and other health crises that may arise in the future.

**Protecting Your Health Information**

All persons involved in the study are committed to respecting your privacy. No persons other than select members of the research team will have access to your personal health information without your consent, unless required by law. Study personnel will make every effort to keep your personal health information private and confidential in accordance with all applicable privacy legislation, including the Personal Health Information Protection Act (PHIPA) of Ontario. Interviews will be recorded using a password protected audio recorder and uploaded to an encrypted USB. Once collected, the data will be kept on the encrypted USB and securely sent, stored, and kept at St. Michael's Hospital's on a secure computer server.

Interviews will be transcribed word for word (excluding any identifying information such as names, specific locations, or identifying details of stories). After data analysis is completed the data will be destroyed from the encrypted USB and kept only and securely on a St. Michael's Hospital secure computer server for five years after which it will be destroyed.

Despite these protections, there remains a risk of unintentional release of information. However, the Principal Investigator will protect your records and keep your information confidential to the greatest extent possible. The chance that your personal information will be unintentionally released is very small. Any information that reveals your identity will not be released without your consent, unless required by law.

**Publication of Study Results**

The results of this study may be presented at scientific conferences, shared at a town hall or published in scientific journals. You will never be personally identified in any publication, report, or presentation that may come from this study.

**Potential Costs and Reimbursement**

If you agree to participate in the study, you will receive $40 after the completion of the interview to compensate you for your time. If you complete this interview over the phone or zoom, you have the option of receiving an e-transfer of the honorarium. In order to do this, we will need your email address and consent to send you an e-transfer. You may also collect it in-person, or have a cheque mailed to you.

**Participation and Withdrawal**

Participation in this study is completely voluntary. Even if you choose to participate, you may change your mind and stop participating in the study at any time without giving a reason.
If you decide to withdraw from participation of the study during the interview, you will still receive an honorarium for your time. Additionally, you will be granted a two-week grace period of whether or not you would like to withdraw from the study. The grace period will be effective

immediately after the conclusion of the interview. After the grace period concludes, data will be de-identified and analysis will have begun.

Your decision to participate or not, or to withdraw from the study, will not impact the services you access from St. Michael's Hospital or any other service provider. If anything about the study changes that may impact your desire to participate, it will be communicated to you immediately.

**Research Ethics Board Contact**

If you have any questions regarding your rights as a research participant, you may contact the Unity Health Toronto Research Ethics Board Office at 416-864-6060 ext. 2557 during business hours (9:00am-5:00pm) Monday to Friday.

The study protocol and consent form have been reviewed by a committee called the Research Ethics Board. The Research Ethics Board is a group of scientists, medical staff, and individuals from other backgrounds (including law and ethics) as well as members from the community. The Board is established to review studies for their scientific and ethical merit. The Board pays special attention to the potential risks and benefits to the participant, as well as the potential benefit to society.

**Study Contacts**

If you have any questions about this study, contact Jesse Jenkinson, the study co-investigator, at St. Michael's Hospital at jesse.jenkinson@unityhealth.to or 647-785-6900. You may also contact Dr. Stephen Hwang, the Principal Investigator, at 416-864-5991.



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**Signature Pages: Documentation of Informed Consent**
A Qualitative Exploration of Vaccine Uptake and Hesitancy Among People Experiencing Homelessness

By signing this consent form, I acknowledge that:

- I have received a copy of this letter of information and consent form.
- This research study and the information to be collected from me have been explained to me, and my questions have been answered to my satisfaction.
- I know that I have the right not to participate and the right to withdraw from this study without affecting the services I receive at St. Michael's Hospital or any other service provider.
- The potential risks and benefits of participating in this research study have been explained to me.
- I have been told that I have not waived my legal rights nor released the investigator or involved institutions from their legal and professional responsibilities.
- I know that I may ask, now or in the future, any questions I have about this study.
- I have been told that information about me and my participation in this study will be kept confidential and that no personally identifying information will be disclosed without my permission unless required by law.
- I have been given sufficient time to read the information in this consent form.

I consent to participate in this study.

| Participant Name (Print) | Participant Signature | Date |
|---|---|---|

I have explained to the above-named participant the nature and purpose, the potential benefits, and possible risks of participation in this research study. All questions that have been raised about this study have been answered.

| Name of Person Obtaining Consent (Print) | Position/Title of Person Obtaining Consent (Print) | Signature of Person Obtaining Consent | Date |
|---|---|---|---|

**<u>Consent to share contact information to receive study results:</u>**

If you are interested in obtaining the results of the study, you can contact the Principal Investigator or Research Coordinator by phone or email. If you would like the study team to contact you, please provide email or phone number that the study team will use to contact you to share study results.

I consent to have the study team contact me by email or phone to share study results.
Initials: _____
Phone: _____
Email: _____



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If participant is not able to read independently for any reason:

**Declaration of Assistance – Witness to Consent Process**

Study Participant's Name (Print): _____

**ASSISTANCE DECLARATION AND SIGNATURE:**
I have provided assistance during the consent discussion between the potential participant and the person obtaining consent by (please check one):

- ☐ Acting as a witness to the consent discussion
- ☐ Assisting in delivery of consent discussion (reading/oral), including communication of questions and responses
- ☐ Other: _____

I attest that the information was accurately explained, and the participant has freely given consent to participate in the research study.

| Name of Person Assisting Consent (Print) | Signature of Person Assisting Consent | Date | Time |
|---|---|---|---|

**Relationship to Study Participant:** _____

**Contact Information of Person Assisting Consent:** _____



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*If participant has limited proficiency in English:*

**Declaration of Assistance – Interpreter**

Study Participant's Name (Print): _____

**INTERPRETER DECLARATION AND SIGNATURE:**
I am competent in the English language and in the preferred language of the potential participant: _____ (name of language)

I am not involved in the research study or related to the participant. I agree to keep confidential all personally identifying information of the participant. I have faithfully interpreted the consent discussion and provided a sight translation of the written informed consent form as directed by the research staff obtaining consent.

| _____ | _____ | _____ | _____ |
|---|---|---|---|
| Name of Interpreter (Print) | Signature of Interpreter | Date | Time |

**Contact Information of Interpreter:** _____



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**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:*
   *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.)? <u>What was the experience like</u>?**

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?**