

Original qualitative research

Anti-Black racism in the early years: the experiences of Black families and early childhood educators in Nova Scotia

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Abstract

Introduction: Anti-Black racism is a social determinant of health that has significantly impacted Black children and families. Limited research has examined anti-Black racism during the early years—a critical period of development. In this study, we sought to understand the manifestations of anti-Black racism in early childhood and explore its impact on Black children and families.

Methods: This qualitative research project was informed by critical race theory, Black Critical Theory and interpretive description. Early childhood educators (ECEs) and parents with Black children between the ages of 18 months and 5 years (n = 15) participated in virtual, semistructured interviews.

Results: Awareness of and protection against anti-Black racism was a constant in Black families' lives. Parents felt as though they had to remain hypervigilant and overprotective of their Black children, knowing they were liable to encounter racial violence. The early learning environment was a source of heightened stress for families, given the significant amount of time young children spend in child care. Black children were often “othered” in predominately White spaces and had been objectified by White ECE staff and children. Parents worked to instill a strong sense of self-confidence in their children to counteract the negative impacts of racial discrimination.

Conclusion: Results from this study suggest that children as young as 18 months are experiencing racial violence and adverse childhood experiences. Findings may contribute to antiracist policy development and a focus on more inclusive early childhood education for Black children and families.

Keywords: *anti-Black racism, early childhood education, child care, mental health, African Nova Scotian*

Introduction

Racism, particularly anti-Black racism, has been recognized as a critical driver of inequitable health and educational outcomes for racialized Canadians.¹⁻⁴ Anti-Black racism is a specific form of racism that targets people of African descent. It is deeply embedded within Canadian

institutions and policies and is directly connected to the legacy of European colonization, the trans-Atlantic slave trade and state-sanctioned segregation.⁵ The principles on which Western society was built position White people as dominant and superior to Black people, perpetuating inequity and reinforcing negative attitudes, prejudice and discrimination.⁶ Children of

Highlights

- The objective of this qualitative research study was to increase understanding of the impacts and manifestations of systemic and interpersonal anti-Black racism on African Nova Scotian children and their families.
- Children as young as 18 months had experienced anti-Black racism in the early child care setting, including verbal abuse, bullying and discriminatory treatment by early child care educators.
- Black children were often “othered” in predominately White spaces and some had been objectified by White ECE staff and children.
- Medical settings were also a space where violence and discrimination occurred, with Black mothers reporting that they had been accused of abuse by care providers, and that they and their children experienced maltreatment rooted in anti-Black racism in hospital settings.

African descent are significantly more likely to face violence and other adverse experiences due to the lasting ramifications of being enslaved and experiencing segregation and maltreatment.⁷⁻⁹ Young Black children are disproportionately exposed to racial violence, particularly across educational and medical systems.⁹⁻¹³ Several Canadian national bodies (e.g. Canadian Association of Child and Adolescent Psychiatry, Canadian Nurses Association)

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have labelled anti-Black racism as a significant public health crisis.¹⁴

This study examined the experiences of African Nova Scotian families, an African Canadian community with an extensive history of over 400 years, including much adversity and hardship. Nova Scotia (NS) is home to the largest indigenous Black population in Canada, with families arriving more than 400 years ago.¹⁵ The term “African Nova Scotian” (ANS) describes individuals who self-identify as descendants of Black Loyalists, Jamaican Maroons, Black refugees and Caribbean workers that settled in Cape Breton.^{15,16} They represent 44% of the racially visible population in NS and constitute 2.3% of the total provincial population.^{15,16}

The objective of this qualitative research study was to understand the impacts and manifestations of systemic and interpersonal anti-Black racism on African Nova Scotian children and their families. As research on the early childhood development period among Black children remains limited, this study serves to advance the work towards equitable frameworks and to support the inclusion of Black children in early child care settings and play environments. We sought to elicit the lived experiences of Black families with young children (aged 18 months to 5 years) and early childhood educators (ECEs) who care for Black children to better understand how racism and discrimination is experienced by African Nova Scotian children during the early childhood period, and its impact on family well-being.

Methods

Ethics approval

Research Ethics Boards approval was obtained from the participating universities (#2019-168).

Study design and theoretical framework

This study used a qualitative description (QD) approach to provide a rich description of the experiences of Black families and ECEs through interviews.^{17,18} Using QD allowed the researchers to remain close to the data and apply a lens of critical race theory (CRT) and Black Critical Theory (BlackCrit) throughout the interview

and data analysis process.¹⁷ Interviews were conducted from June 2021 to January 2022.

This qualitative description research project was informed by CRT and BlackCrit. CRT was conceptualized within the field of legal research in the late 1970s. CRT seeks to understand racism and oppression and the ways race* and power are constructed and reproduced in Western society.¹⁹ It is a theoretical framework and analytic lens that can be used to demystify prevailing social inequities facing racialized peoples. Its relevance to systems and research related to education was introduced in 1995 by Ladson-Billings and Tate, who emphasized the educational institution as a site of White dominance and racial oppression.²⁰

More recently, Dumas and ross⁶ refined in the field of education what could be described as a subsection of CRT—Black Critical Theory—that centralizes the Black experience. BlackCrit seeks to understand how policies and institutional practices continue to reproduce Black suffering. BlackCrit moves beyond CRT to centralize anti-Blackness and understand its manifestations in institutional practice.⁶ BlackCrit is another analytical tool that can help to explain how and why Black bodies remain “marginalized, disregarded and disdained”^{6,p417} even in spaces such as education, where their dominant narrative celebrates uniqueness and diversity.

Although scholars across disciplines have developed a variety of tenets central to CRT, this study focussed on five. These tenets are foundational to CRT and have been expanded upon by Black critical theorists:

(1) Racism is endemic and has completely permeated and shaped Western society.²¹ Racism, and more specifically, anti-Black racism, is foundational within all social, economic, historical and cultural spaces and dimensions.⁶

(2) Equality-driven concepts such as claims of neutrality, objectivity, colour-evasiveness and meritocracy must be challenged and equity must be sought.

(3) Experiential knowledge and the value of storytelling must be central and lived experiences must be recognized as essential data.

(4) The dominant ideology must be challenged and we must criticize what is valued and normalized.

(5) We must understand and acknowledge that racism intersects with and can be shaped and amplified by the existence of other identities, such as gender, socioeconomic status and (dis)abilities.

The core tenets of CRT and BlackCrit were used to shape the design, procedures and analytic approach of this study. Recognizing that Black voices have largely been excluded from the literature on child well-being in the early childhood period, we chose to conduct individual, qualitative interviews to amplify the lived experiences of parents with Black children. Within the scope of our analysis and discussion, we recognized that racial discrimination is embedded within all societal institutions, shaping structure and practices.²² We critically examined the stories shared by families within medical and educational settings and noted the ways in which they facilitate or allow micro- and macroaggressions and normalize Whiteness, causing undue harm to Black families.¹⁹ Further, we discuss the ways in which anti-Black racism differentially impacts parents and children of different genders.

Eligibility criteria

Parent participants were eligible to participate in an interview if they had an African Nova Scotian child between 18 months and 5 years of age. In addition to lineage, indicators of connection may include, but are not limited to being born or raised in Nova Scotia; residing in, or having family in an Indigenous Black community; self-identifying as “Indigenous Black” or “African Nova Scotian;” and more. ECEs were eligible to participate if they self-identified that they had significant experience working with young African Nova Scotian children (aged 18 months to five years who were not yet in Grade Primary/kindergarten) or in an African Nova Scotian community. ECEs could have been employed

* Although “race” is a social construct for which there is no scientifically supported biological basis, discrimination on the basis of race is embedded in systems and ideologies of White supremacy. We feel that it is essential to talk about race in order to call out injustices, describe health inequities and document the systemic racism in our institutions.

within a child care centre, family day home or pre-primary program.

Procedures

The research team contacted community liaisons (developed through earlier work by members of the research team) and relevant community organizations (e.g. family resource centres, child care centres, libraries, family home daycare agencies) in new and historic African Nova Scotian communities to tell them about the research and to ask for their support to disseminate recruitment materials to families. Methods included sending electronic study posters out through community listservs, newsletters and social media and displaying hard-copy posters or information cards in their spaces. Community stakeholders were also consulted to evaluate the interview guide and provide feedback on the proposed questions.

The study was promoted to ECEs and parents through the research centre's social media and by targeting key online communities and groups for families and ECEs in the identified recruitment communities. Participants were asked to contact the research team directly by email or phone to express their interest. A research team member met with prospective participants over email or phone to establish informed consent. Qualitative, in-depth, semistructured interviews were conducted using Microsoft Teams (n = 3), over the phone (n = 12) or in person (n = 1, adhering to institutional COVID-19 guidelines for data collection). Interviews lasted between 30 and 90 minutes. Participants were compensated with a \$40 gift card.

Participants

Participants included parents (n = 7) and ECEs (n = 8) who participated in a broader qualitative study conducted in 2021 that examined the experiences of early childhood among African Nova Scotian children living in communities experiencing an opportunity gap (other papers forthcoming).²³ Participants lived or worked in urban and rural communities in the eastern Canadian province of Nova Scotia. Table 1 shows participants' demographic information.

All parents identified their children as African Nova Scotian, with all children being born in Nova Scotia or having historic roots in the province. Parents included six biological mothers and one biological father. Five parents were of

African descent and two were White. All parents lived in an urban area. Seven ECEs identified as women, one as a man. Four ECEs were of African descent, four were White. Years of experience ranged from less than one to 20 or more years (average = 11 years). Two ECEs were practising in a rural area.

Analysis

All interviews were digitally recorded and transcribed verbatim. Qualitative analysis was guided by interpretive description. Transcriptions were verified by a second transcriber. The first author (ESC) led the analysis, with all other members of the team participating in the review process. All transcripts were reviewed by ESC, NH and MP. These three authors co-constructed a codebook based on initial readings and memoing completed by ESC during and after the interviews. This coding framework was tested and refined several times. ESC, NH and MP individually coded several identical transcripts in line with the coding framework to ensure consistency between raters before the remaining transcripts were coded individually. The content of the quotations was examined and collapsed and preliminary sub-themes were described by the three coders. The entire research team met virtually and used Google JamBoard (Alphabet Inc., Mountain View, CA, US) to review codes and develop subcategories collaboratively. Final subthemes and themes were determined collectively.

Positionality

Reflexivity is an integral part of qualitative research, whereby researchers "position" themselves in the context of the research.^{24,p.229} Researchers must understand their own "biases, values and experiences," which are part of the research study.^{24,p.229} Reflexivity is a continuous process of self-reflection and self-evaluation.²⁵

Our team of researchers consisted of six individuals; two of the three principal investigators self-identified as African Nova Scotian women, and the third as a White woman. The remaining members consisted of one White woman with a child of African descent, one Afro-Latina woman and one man of African descent.

Results

Four major themes were constructed from the data: (1) intergenerational impacts of

racism; (2) anti-Black racism in the early years; (3) White is always the norm; and (4) the importance of self-identity, cultural awareness and parent advocacy.

Intergenerational impacts of racism

Parent participants in this study, as well as ECEs of African descent, spoke about the impact that anti-Black racism and racial discrimination has had on their own lives growing up. Parents reflected on their own early childhood experiences and the anti-Black violence they and their families encountered when they were children. All parents and Black ECEs described anti-Blackness as something commonplace within Nova Scotian culture and society, embedded into nearly every public system, and something they encountered often. Anti-Black violence was felt strongly within the education system by participants, including in early childhood settings. Violence and isolation were amplified in these educational spaces, where the population was majority-White, and representation of Black staff and students was low. Families and communities felt the impacts of racism "very early on." Michelle (parent) recounted her experience in the public education system as a child in Nova Scotia:

My mom tells me stories now of you know teachers actually mentioning my hair being too big or how to put it in braids to somewhat tame it so to speak you know or children you know making fun or you know, I was called the N-word.

Parent participants and Black ECEs with their own families described the lasting impacts of the racism they themselves encountered as children. Owing to their own experiences, parents knew their children would eventually encounter racial violence or injustice, just as they had experienced, and their parents before them. Families felt a great sense of anxiety and stress parenting a Black child in a colonial place where anti-Blackness remains prevalent.

Michelle, after sharing her own childhood story of racial abuse, stated, "Unfortunately, I feel my children are probably going to go through the same thing." Parents felt as though they needed to remain hypervigilant and overprotective of their children, knowing that it was not a matter of if, but

TABLE 1
Demographic information of participants in a study of anti-Black racism in the early years, Nova Scotia, 2022

Early childhood educators				Parents			
Pseudonym	Racial identity	Years of experience	Area of work	Pseudonym	Relationship	Community	Parent racial identity
Deandra	Black	20+	Halifax Regional Municipality	Imani	Mother	Halifax Regional Municipality	Black
Olivia	White	< 1	Halifax Regional Municipality	Michelle	Mother	Halifax Regional Municipality	Black
Sue	Black	20+	Halifax Regional Municipality	Kiyana	Mother	Halifax Regional Municipality	Black
Jade	Biracial	1	Halifax Regional Municipality	Jasmine	Mother	Halifax Regional Municipality	White
Carter	Biracial	20+	Halifax Regional Municipality	Aaliyah	Mother	Halifax Regional Municipality	Black
Megan	White	10+	Rural community	Alicia	Mother	Halifax Regional Municipality	White
Rebecca	White	< 1	Rural community	David	Father	Halifax Regional Municipality	Black
Hannah	White	15	Halifax Regional Municipality				

when their children would be the victim of racially motivated abuse. Aaliyah (parent) stated her concerns: “My only fear is just him experiencing, you know, some form of racism or just discrimination because of his skin.” When speaking to parents about their apprehensions about their children moving on from child care and entering the school system, racism was their foremost concern. Kiyana (parent) described her concerns: “That’s definitely a fear, like I just want to be reassured that he’s going to be treated the exact same as anyone else.”

Anxiety and apprehension were pronounced for parents with Black boys, who have encountered historical criminalization from a young age. Several parents worried that their sons would experience more frequent and severe punishments, which would impact the children’s mental health and engagement in school. This was something parents had witnessed growing up, and they were wary of their own children encountering similar prejudices. Alicia (parent) said, “Because he’s Black, I worry that he is going to be targeted, that he is going to be blamed for everything.” Aaliyah stated that her anxieties about raising a Black boy began the moment she learned her child’s sex: “When I found out that I was having a boy that kind of stress was on my

mind.” Aaliyah stated that she feels as though the school system “sets [Black children] up to fail.” Her reasoning was tied to the system’s longstanding biases that assume Black children are not as well educated, intelligent or capable compared to their White counterparts. This is something parents are acutely aware of:

I feel like especially with Black kids, they’re so quick to say they have a learning disability or put them on an IPP [individualized program plan], which is my worst fear because then, kids that are on IPP, they can’t go to university because they don’t take the right classes. So that’s a lot of what I hear, especially in my community, it’s like, parents fighting with the teachers not to put them on the IPP system. They know that they’re not going to be able to succeed later in life. (Aaliyah)

Many parents felt as though they needed to overcompensate for the early childhood and education systems’ inevitable failures. As many parents themselves felt that the education system had failed them, they were adamant about changing that experience for their own children. Parents did not have confidence in their children’s educators—except for several majority-Black spaces—feeling as though “the

schools don’t know how to handle race issues” (Kiyana). This led to parents feeling as though they needed to be highly engaged with their children’s educators and child care or school—evaluating the curriculum, checking on staff diversity, monitoring their child’s participation and relationship with their educator, and more:

My children aren’t in school yet but when they do go to school these are things that I’m going to be asking and things I’m going to be looking for if parents are allowed in schools. I need to know that they’re being represented and seeing themselves, same with the daycare really. (Michelle)

A few ECEs noted that parents, knowing their children would be neglected in the school system, pushed their children to learn mathematics and literacy as toddlers. “He was only three and they’re pushing for him to spell his name and do letters and it’s just not developmentally appropriate at that age. I mean if you can spell your name and you can do all the stuff then great but ... it’s just not expected” (Olivia, ECE). Parents felt as though it was their responsibility to reduce the opportunity gap that their children might be exposed to once they got into school. Aaliyah explained her mentality: “We know the stats of Black children, that they’re

usually, for whatever reason, behind their White counterparts. And so, it's really important, for at least my family, to instill in him the skills that he needs in order to succeed in a system that doesn't really want him to succeed."

Anti-Black racism in the early years

Parents' and ECEs' apprehensions about Black children being exposed to racial violence was, indeed, rooted in their own realities. Nearly every parent participant and ECE could recall a racist incident that impacted their child or another child in an early childhood environment. This manifested through implicit biases, overt use of hate speech with racially abusive language, over-punishment and racial profiling. Experiences were described as systemic, taking place within early childhood education spaces and the medical establishment.

Medical system

Several parent participants described negative encounters within the medical system during which they felt unsafe, mistreated and anxious. Black mothers felt highly scrutinized within health care spaces, as they were also at risk of being racially discriminated against by staff or the system. From the moment women became mothers—even before—they felt as though they were being treated differently by health care providers. Aaliyah described her experience when delivering her child: "When I had [child], I just felt like I wasn't being heard by my medical staff. My concerns during my labour weren't, I feel like they weren't being addressed, kind of pushed off."

In addition to not feeling like she was treated well during labour and delivery, Aaliyah also recalled her nurse using outdated and discriminatory language. "I remember one of the nurses ... she was like, 'and oh yeah "coloured" babies, they have this Mongolian spot [congenital dermal melanocytosis].' And I was just like, 'What?' I was just taken back. Because she said 'coloured.'" Black mothers in the health care system are forced to remain on high alert, trying to ensure that they are properly cared for and respected, but also to make sure their children are safe.

These negative interactions erode families' trust in the medical system, creating anxiety for parents when they eventually

need to seek care. Parents were not only concerned about enduring racially violent language, or feeling dismissed, but were worried about their child's injuries being perceived as abuse.

I think the anxiety stems from, you know, if he gets injured, and then going to the hospital ... I've had mixed experiences in the hospital, but I wouldn't say they're the best experiences ... Just being a Black parent going to the hospital, it makes me think, am I going to have to explain myself? How did he get hurt? And them questioning me. (Aaliyah)

Despite their additional privileges, even White mothers of Black children had been accused of abusing their children, demonstrating how widespread and pervasive these assumptions are. Alicia stated:

So it's typical for Black children to have this mark [Mongolian spot]—and I took him in and [nurse] was just questioning me.... It was almost like she was accusing me of bruising him because that's kind of what it looked like, but it is this spot that Black children have.... She didn't know about it but was assuming it was abuse.

Even though Alicia is not Black herself, the fact that she is the parent of a Black child still meant she was vulnerable to scrutiny. Moreover, this example shows the lack of cultural awareness and training that health care providers receive around supporting racialized patients, as, despite how common they are among non-White infants, this provider had never heard of congenital dermal melanocytosis (Mongolian spots).

Early childhood environment

Child care centres were an environment in which many children encountered anti-Blackness, in the form of direct racial violence, over-punishment and maltreatment. Several ECEs recounted stories from their child care centres in which children were victims of anti-Black violence. Deandra (ECE) recounted an experience with a member of her own family: "He, at the time, was four years old and got into it with another child, and that child called him the N-word." Deandra reported that, immediately after this incident occurred,

both children were disciplined and put into a time-out. The child care centre did not use the opportunity to educate the White child on the severity and harm that accompanies racial slurs, and their parents were not informed the incident had occurred. The severity of this experience and its mishandling led Deandra's family to remove the child from the centre and find an alternative place.

A similar incident occurred in a rural community. Megan (ECE) described what occurred in her child care centre: "It was the first day for one of the Black children that was coming and the first thing that was said, a White child had stood up and said, 'Your face is black, your face is black, your face is black' and kept repeating it... I would say it probably lasted 2 to 3 months." These incidents occurred regularly, to the point where the Black child was visibly distressed and in tears. Moreover, one parent of the White child involved in the incidents of racial abuse was resistant to having at-home conversations about race and racism:

[Father] didn't feel like his kid needed to be educated that young about different cultures.... He just felt that it was too mature for his child to handle. So, he didn't—he never participated from what we've been told at home in the conversations. (Megan)

Other parents found that even in early childhood, their children were already beginning to be over-punished. Parents reported receiving a higher number of incident reports than other parents, and were told, frequently, that their children were responsible for altercations that had occurred in child care. Kiyana reflected on her experience:

I'm having to sign a lot of incident reports and some of them are I don't know, they kind of talk nonchalant about it. Not negative really, but some of them I find have a negative tone when they're talking about what he did ... there's nothing that I can say that like points to race. But I don't hear any other [parents] having incident reports.

Similarly, Alicia reported receiving calls at home and having to speak to ECEs at pick-up about any incidents that occurred with her son during the day. Her child

was often blamed for what had occurred, despite Alicia finding out later that he was not the instigator of the conflict, but the victim. She stated: “At daycare they were very quick to blame him for whatever happened.... So once again, because of the colour of his skin, he was getting in trouble and it’s not right. When it’s a light kid saying something to a Black kid, a White kid provoking a Black kid, then it’s always the Black kid who gets punished.”

White is always the norm

Elaborating further on the perpetual threat of anti-Black racism, participants described the heaviness of the “White gaze,” feeling as though Whiteness is the default. Outside of historically or prominently Black communities, families and children often felt “othered.” This was linked to the anxieties parents had about the appropriateness of their children’s education. Parents and many ECEs knew that child care spaces and elementary schools were rarely as inclusive and diverse as they would like. Not only were there few educators who were Black, but many children attended majority-White centres. Parents were hyperaware of the fact that their child might be one of few racialized children in their classroom, which was the case for many families across the province. Michelle described the lack of diversity in her son’s child care centre: “The daycare that he will be attending only has one African Nova Scotian staff in it, out of eight, and only one other child.”

Parents knew that would have consequences for their children, that they might not feel safe or seen. Deandra (ECE) had a conversation with a parent whose Black child was attending another child care centre without Black staff, and recounted the story this parent shared with her. “I picked my child up the other day, they had a runny nose, they were ashy. I don’t know if the staff understand what that means.” Several other parents described the ways their children’s hair was viewed as different, like an object for other children to engage with. Alicia said:

The teacher actually came to me and was very excited to tell me that she let all the kids touch his hair. Because it was different, right? Like, you know, they had fun today touching his hair. Which, of course, I was mortified, you know, like, he’s, like, some sort of—anyway. I was very upset.

Black parents described their own experiences growing up in predominantly White spaces. Parents felt as though they had to adjust themselves, their appearance and their behaviours to fit into a White normative environment, especially educational settings. Parents described feeling fearful of being judged, bullied or treated differently, and were expected to conform to a dominant White norm. Therefore, conforming to standards associated with a White ideology was encouraged to avoid altercations. Kiyana described her childhood:

Yeah, so that would’ve been something that I would’ve heard from her too and my mom like growing up, “Oh make sure that you don’t act like that so White people won’t think...” Fear of stereotypes, fear of being based in a Black negative stereotype, or just wanting to fit in, or wanting to, kind of, be like White people.

Now as adults with children, parents wanted to move away from the narrative that White is the default or the norm. Parents, and many ECEs, want spaces to be welcoming, safe and inclusive, where their children’s Blackness can be celebrated and not tolerated. Kiyana discussed her hopes for her children:

I hope they don’t feel different. That they know that how they look is normal and they don’t need to be “othered” or feel segregated in any way. Just to see diversity and know that diversity is normal, and that White isn’t the norm, because that’s very apparent throughout society—White is always the norm. So, I think it’s important for educational spaces to push back against that narrative.

Kiyana further mentioned the impression that educational spaces make on children. Given the significant amount of time children spend in child care and school, the culture and environment promoted in these spaces is critical for children’s socio-emotional development, safety and well-being.

Importance of self-identity, cultural awareness and parent advocacy

Knowing that they would be raising their children in spaces that were often majority-White and nondiverse, parents felt that the best they could do to support their

children was to bolster their self-confidence and sense of Black pride. Parents were actively working to counteract anti-Black sentiments that continue to prevail in Western society at home:

I think it’ll be more negative if we push the same narrative that you’re lesser than—than White people. I just want him to be confident and free and who he is and not try to tone himself down or water himself down to please people. (Kiyana)

Families felt as though these conversations and affirmations could help to protect their children from the impacts of racial discrimination and empower them to move beyond conforming to White expectations and norms. Parents spoke to their children often about the beauty and uniqueness of their skin and hair to help bolster their self-confidence and self-image. David (parent) described his family’s routine at home and the importance of affirmations: “My wife is often sitting with my daughter, and she’s telling her about her hair, she’s telling her about her skin colour, and reminding her how proud the families are that she came from.”

Families recognized that there was only so much they could do to protect their children, so they used their time at home to celebrate and discuss their Black identity. Michelle (parent) echoed the importance of having a safe, empowering home environment: “I feel that having that strong foundation at home in knowing who they are as a Black person from the core at home first and then just building them up from that.” Parents felt that if they could teach their children to be confident and value themselves, their identity and their heritage, this could serve as a protective factor. Imani (parent) stated, “My husband and I are pretty confident, and we try to instill our children with confidence because with that you can guard yourself from a lot of aggression.” Parents firmly believed that if they could support their child to love the features that often make them vulnerable to discrimination in their environment, they may become more resilient to the health and social consequences often associated with exposure to racism.

Discussion

This study is one of the first to examine the impact and manifestations of anti-Black

racism among young children and their families in Canada. Black children aged under 5 years and their parents encountered a myriad of racial traumas, influencing parental mental health and interactions with the medical, education and family welfare services sectors. Black parents, having encountered racial trauma throughout their own lives, felt as though they had to remain hypervigilant and overprotective of their Black children, knowing that they were liable to encounter similar racial violence.

The education system, including the early learning environment, was a source of heightened stress for families, given the significant amount of time young children spend in child care. Parents felt anxious about the safety of their children and were often over-involved in their children's care to ensure children were not mistreated. Parents and Black ECEs noted that early learning spaces, and Western society at large, continue to value White norms. Black children were often othered in predominantly White spaces and some had been objectified and victimized by White ECE staff and White children from as young as 18 months. From an early age, parents sought to instill a strong sense of self-confidence and pride in their children to counteract stereotyping, racial discrimination and their health-related consequences.

For Black families with historic roots in Canada, systemic and direct anti-Black racism has had intergenerational effects. Across this and other studies conducted in Nova Scotia, African Nova Scotians have described racism as a significant concern affecting their families and Black communities across the province.^{26,27} Parents in this study described the ever-present racial trauma they encountered as young people. Now, raising their own children, parents were apprehensive about their preschoolers entering formal child care and early education spaces. Parents felt the need to remain closely involved in their child's education to prevent or correct any exposure to racism, bullying or cultural erasure in their child's curriculum—all of which had impacted parents growing up. Parents are thus faced with coping with their own racial trauma while also ensuring the safety and well-being of their children.

This reality corroborates other local research that has demonstrated the insidious nature

of racism-related stress and its particular impact on the lives of Black women.²⁶⁻²⁹ It is important to note that most parent participants in our study were mothers. Black women often face the “strong Black woman” trope, facing undue pressure to maintain the health and longevity of themselves, their family and their community.^{27,29} The burden of existing with their own racial trauma, while also parenting Black children takes a toll on the health of Black women. African Nova Scotian mothers have reported experiencing physiological symptoms as a result of frequent exposure to racism, including fatigue, hypertension and migraines²⁶ and mental unwellness, including low self-esteem and anxiety.²⁸ Though limited epidemiological data are available in Canada on maternal mental health, international data from the United States corroborate these self-reported accounts.

In the United States, Black mothers who have experienced racism reported increased parenting stress, mediated by increased stress overload and depressive symptoms.³⁰ This, in turn, contributes to a negative link between maternal exposure to racism and child health, furthering the cycle of intergenerational trauma.^{31,32} The sociopsychological consequences of exposure to repeated instances of discrimination in mothers negatively impacts their children by disrupting the infant-caregiver dyad and changing caregiving behaviours.^{31,33,34} This disruption can negatively influence children's parental attachment, sleep schedules and socioemotional development.^{31,34} Further race-based data are needed to increase understanding of the impacts of racial stress on Black women in the Canadian context.

Reports from parents and ECEs in this study further detailed alarming incidents of direct racial abuse committed against preschool-aged children as young as 18 months. Exposure to adverse childhood experiences, including racial discrimination, have lasting consequences on children's academic achievement, health and future socioeconomic stability and employment.^{32,35} Adverse childhood experiences are linked to increased risk for posttraumatic stress disorder, substance use disorders, risk-taking behaviours, developmental disruptions and higher health care utilization rates.³⁶ This is some of the first research in Canada to document exposure to racial violence in early learning environments, building upon burgeoning research

in the US context. Early interventions and policy change must begin at the early childhood level to ensure Black children are learning and growing in culturally safe spaces.

Black children and families in this study further experienced racial discrimination while using early childhood education and health care services. Anti-Black racism is deeply embedded within Canadian institutions, policies and practices.^{1,7} The Canadian education system has a long and problematic history mistreating Black children and providing an education that is separate from and unequal to that of their White peers.³⁷ Other Atlantic Canadian studies have documented extensive examples of over-punishment, and differential treatment, with many elementary schools fostering non-diverse spaces with curricula that ignore Black voices and African Canadian history.¹⁰ Our findings suggest that children are encountering similar acts of systemic discrimination at the preschool level.

Moreover, it is evident that Black mothers and their children are encountering difficulties obtaining safe and appropriate reproductive and pediatric health care, further influencing the well-being of Black children and their families. Anti-Black racism within the medical establishment has contributed to significant health inequities among Black Canadians.³⁸ In the US, the maternal morbidity rate among Black women is three times greater than White women³⁹ and the infant mortality rate is twice as high among Black infants as White infants.⁴⁰ Moreover, Black newborns cared for by Black physicians in the US show significant reductions in mortality, showing the potential deadly influence of anti-Black racism in that country.⁴¹ Few Canadian studies have documented anti-Black racism in the health care system, particularly at the pediatric level.

Despite the persistent and insidious presence of anti-Black racism in Canada, Black families continue to thrive. Community strength, parental advocacy and resilient Black leaders and educators have pushed to shift the status quo. The African Nova Scotian peoples have resisted colonial violence for over 400 years, aided by close-knit communities, a deep sense of history and tradition and familial and cultural pride.^{15,27} Black parents in our study described how essential it was to lift their

children's self-esteem through affirmations, discussions about their family origins and the beauty and strength of Black people. Parents felt that a strong sense of self- and Black pride could help protect against the negative impacts of racism. Other research conducted across African Nova Scotian communities has documented the importance of family resilience, community connection and spirituality.⁴² Indeed, American literature has shown that racial affirmations for Black children and a positive racial self-concept (i.e. sense of positivity about one's race) are protective against feelings of race-based exclusion⁴³ and later onset of depressive symptoms.⁴⁴

Strengths and limitations

This paper identified the personal experiences that parents and ECEs observed with Black children living in Nova Scotia. Using a qualitative approach enabled us to better understand the context surrounding the adverse experiences of Black children during the early stages of their development. Furthermore, this paper illustrates the complexity of interrelated factors that shape the experiences of Black families, creating an opportunity to identify causative factors and gaps within early childhood settings and other public institutions. The themes identified in this article are illustrated by key examples of how the health and well-being of Black children are hindered.

Despite the depth of data received in this analysis, the study is not without its limitations. First, although the study was focussed on the experiences of African Nova Scotian children in early childhood, our sample was not fully reflective of this population. This may be attributed to the difficulty of recruiting Black families who identified as African Nova Scotian. Thus, our eligibility criteria were expanded to parents and ECEs who had and cared for Black children.

Furthermore, due to the age criteria for the children in the study, our cohort sample of participants was lower than anticipated. However, we felt that saturation had been achieved, as themes, ideas and experiences began to be repeated among parents and ECEs.

Finally, the study sample included mostly women and focussed on individuals from one province, mostly from urban areas. Future studies may explore, on a

nationwide scale, the experiences of Black children and families in the early childhood developmental period, while looking at how these experiences differ depending on geographical location and the resources and institutions available.

Conclusion

These collective findings suggest that preschool children are exposed to racism three-fold: through intergenerational racial trauma, interpersonal racial abuse and systemic discrimination and mistreatment. The early childhood years are a critical, sensitive period for brain growth and development, setting the foundation for lifelong health and development. Exposure to chronic, toxic stress driven by frequent exposure to racism contributes to the racial disparity in chronic illness later in life, which is further impaired by inaccessible health care, thus perpetuating the cycle of intergenerational trauma within Black families, perpetuating health inequities and broadening the opportunity and achievement gap.

Recommendations

We posit several recommendations guided by our data and other expert positions. Educational, institutional and government stakeholders must recognize and declare anti-Black racism as a public health emergency and acknowledge it as a significant detriment to pediatric health.³⁸ Education and medical systems must broaden their Western conceptualizations of health and academic achievement, and would benefit from implementing principles of Africentrism (or Afrocentrism), and antiracist frameworks.^{45,46} Academic programs and institutions must develop curricula focussing on understanding racism and its effects, unlearning stereotypes and biases and developing cultural humility and safety in practice.^{38,45,47} Medical and educational training programs and institutions must work to bolster hiring and retaining racially and ethnically diverse students and staff by implementing successful policies such as affirmative action, tuition waivers and racially specific cohorts and streams.^{9,47-50} Finally, governments must prioritize the collection of race-based, disaggregated data and ensure this information is regularly reported and made accessible to the public.^{14,38}

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Conflicts of interest

The authors have no conflicts of interest to declare.

Authors' contributions and statement

ESC—investigation, data curation, formal analysis, writing—original draft, project administration. NH—data curation, formal analysis, writing—review and editing. CW—conceptualization, methodology, funding acquisition, writing—review and editing. MP—data curation, formal analysis, writing—review and editing. BHH—conceptualization, methodology, funding acquisition, writing—review and editing. JLM—conceptualization, investigation, methodology, funding acquisition, resources, supervision, project administration, writing—review and editing.

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Original qualitative research

Improving access to palliative care for people experiencing socioeconomic inequities: findings from a community-based pilot research study

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Abstract

Introduction: In Canada, people experiencing socioeconomic inequities have higher rates of late diagnosis and lower survival rates than the general population. Palliative care services focussed on this population are scarce. We developed a community-based nursing intervention to improve access to palliative care for people experiencing socioeconomic inequities and living with life-limiting illnesses in an urban Canadian setting.

Methods: This community-based, qualitative research study combined critical and participatory research methodologies. The study was conducted in partnership with the Palliative Care Outreach Advocacy Team (PCOAT) based in Edmonton, Alberta, a team dedicated to serving populations experiencing socioeconomic inequities who require palliative care. Following an exploratory phase that served to delineate the intervention, we undertook a one-year pilot implementation during which a part-time registered nurse (RN) joined PCOAT. The RN engaged in trust building, resolution of health and practical needs and complex care coordination. Twenty-five patients participated in the intervention. Participants were interviewed at least once to explore their experiences with the intervention. Data were analyzed through thematic analysis.

Results: Most participants were men, were Indigenous and had advanced cancer. Participants had significant financial concerns, lived or had lived in precarious housing situations and had previously faced serious challenges accessing health care. Participants reported social and health needs including housing, finances, transportation, symptom control, harm reduction and end-of-life care. Participants reported improved access to health and social services and expressed satisfaction with the study intervention.

Conclusion: Study findings suggest the study intervention may have contributed to improved access to palliative care, improved experiences for participants and increased equity in the delivery of care.

Highlights

- Improved access to community-based palliative care for people experiencing socioeconomic inequities with life-limiting illnesses is urgently needed.
- A community-based registered nurse can improve access to palliative care and the experiences of people facing serious socioeconomic inequities.
- People experiencing socioeconomic inequities require palliative care services tailored to their context.
- Addressing the health challenges of people experiencing socioeconomic inequities is more effective when done concurrently with practical actions such as addressing precarious housing conditions and lack of income.
- Paying attention to the intersections of people's multiple social domains with their lived experiences can improve equity in palliative care.

Keywords: *palliative care, health equity, health services, socioeconomic disparities in health, social determinants of health, Canada, cancer, Indigenous*

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Introduction

Socioeconomic inequities in Canada are a growing public health concern.^{1,2} These inequities are influenced by income, education, occupation, gender, ethnicity and other factors.³ They reflect an unjust social hierarchy that results from people's social and economic positioning.⁴ People with lower socioeconomic status may experience earlier onset of illness, delayed access to health care, higher risk of complications, prolonged hospital stays and reduced life expectancy.^{5,6} The negative health impacts of socioeconomic inequities are pressing for individuals with life-limiting illnesses.⁷

Palliative care promotes quality of life and the relief of suffering of those with life-limiting illnesses and their families.⁷ Although Canada is an international leader in palliative care, disparities in access to palliative care exist,⁸ with those experiencing socioeconomic inequities being most affected.⁹ They experience a higher symptom burden,¹⁰ poorer health outcomes toward the end of life,¹¹ barriers in access to specialist palliative care,¹¹ fewer palliative home visits⁹ and poorer palliative care outcomes, such as a lower likelihood of a home death.¹¹ They also experience marginalization and discrimination within the health care and other social systems.¹²

Few palliative care services exist for people experiencing socioeconomic inequities in Canada.¹³ A program in western Canada dedicated to serving people experiencing homelessness reported improved patient satisfaction and health system navigation and better access to health and social services.¹⁴ A Toronto-based program described changes in resuscitation status that reflected patients' care preferences, and decreased acute health services utilization.¹⁵ Services designed to improve access to palliative care in people experiencing socioeconomic inequities in other countries have shown positive outcomes at the end of life.^{16,17} The purpose of this study was to explore how a community-based nursing intervention could contribute to improving access to palliative care for people experiencing socioeconomic inequities living with life-limiting illnesses in an urban Canadian setting. This article presents the qualitative findings, with a specific focus on participants' experiences with the study intervention.

Methods

Ethics approval

The study received ethics approval from the Health Research Ethics Board of Alberta Cancer Committee (HREBA.CC-17-0255).

Study design

We employed a critical theory research design and incorporated principles of community-based participatory research. The critical theory approach, informed by Paulo Freire's works,¹⁸⁻²⁰ pays attention to socioeconomic inequalities and systemic barriers that create oppressive conditions. Freire's work with groups experiencing oppression has inspired community-based participatory research. The participatory approach is a transformative opportunity to incorporate the voice of communities in research.²¹ We achieved this by first initiating an exploratory phase to learn about our study population's experiences with life-limiting illnesses, and their needs and priorities. The study was also undertaken in partnership with the Palliative Care Outreach and Advocacy Team (PCOAT) based in Edmonton, Alberta, a team dedicated to serving populations experiencing socioeconomic inequities who require palliative care. PCOAT's medical director (one of the authors and study co-principal investigator, CB) was involved in the planning, design and implementation of the study. We sought input from palliative care and community providers working with individuals with life-limiting illness and socioeconomic inequities.

Description of the study

The study included two interrelated phases. In phase one, we explored the experiences, needs and preferences of people with life-limiting conditions living in precarious housing conditions. This entailed semistructured interviews with patients and relatives, and focus groups with community and palliative care providers. Phase one of the study took place between August 2018 and January 2019. Seven patients with advanced illnesses and three relatives participated in this phase. In addition, two focus groups were held with eight palliative care, nongovernmental health care and community agency personnel serving the study population ("providers"). The interviews revealed issues with continuity of care, symptom assessment and management, and family and

community support. Participants described a need to access appropriate medical equipment and community services. Focus group findings echoed the need for improved care coordination. These findings provided the basis for delineating the community-based nursing intervention before phase two. Following development of the intervention, we secured ethics approval for phase two on 14 November 2018.

Phase two, the pilot implementation of the intervention, began in January 2019 and lasted one year (until January 2020). The intervention consisted of a part-time registered nurse (RN) who engaged in care coordination with health and social agencies, patient care and intersectoral collaboration. The RN documented care and extracted data from participants' health records. Table 1 provides an overview of the intervention.

The RN (one of the authors, HM) had previously worked with the Indigenous Wellness Clinic in which PCOAT is located. The RN had over 20 years of experience working with people with life-limiting conditions in diverse settings and had experience in Indigenous health and underserved populations and a master's degree in nursing; however, the RN had limited palliative care experience. Before the pilot implementation, the RN had a three-month orientation that included an introductory two-day palliative care training course, weekly mentoring by an expert palliative care nurse in oncology hired by the study, visits to community agencies, time with PCOAT and qualitative research training. The RN was hired by the principal investigator's home faculty and placed with PCOAT for the duration of the intervention.

Settings and sample

PCOAT is a new palliative care service that supports individuals experiencing socioeconomic inequities with life-limiting illnesses, whose director (CB) is a family physician with a palliative care specialization. PCOAT is located within the Indigenous Wellness Clinic in a tertiary hospital serving the northern half of Alberta, a western Canadian province. This clinic serves First Nations, Métis and Inuit people and promotes accessible, culturally safe and equitable health care.²² The study took place in Edmonton, a city served by a comprehensive integrated palliative care program.²³

TABLE 1

Overview of pilot palliative care intervention for people experiencing socioeconomic inequity, Edmonton, Alberta, January 2019 to January 2020

Specific intervention	<ul style="list-style-type: none"> • A part-time registered nurse was placed with the Palliative Care Outreach and Advocacy Team^a between January 2019 and January 2020. • Efforts were focussed on improving access to community-based palliative care. • The intervention was directed at people with advanced, life-limiting illnesses and socioeconomic inequities.
Development of intervention	<p>The development of the intervention was informed by</p> <ul style="list-style-type: none"> • qualitative interviews and focus groups with study population and health care and social care providers • research and clinical work to date by study investigators • evidence from the literature
Content of intervention	<p>The content focussed on</p> <ul style="list-style-type: none"> • supporting participants' palliative care experiences • coordinating patient care • building trust and relationships • improving access to services • monitoring patient health status and follow-up care • providing culturally safe care • improving wellness • supporting end-of-life decision-making
Co-interventions and additional relevant information	<ul style="list-style-type: none"> • Palliative care services were provided by the Alberta Health Services (Edmonton Zone) palliative care program. • Palliative care treatments were provided as needed. • Comorbidities were also treated.

^a A cross-functional medical outreach team working among people experiencing socioeconomic inequity in Edmonton, Alberta.

We followed purposive sampling in the accrual of participants. Each participant received thirty dollars as a thank you gesture. Inclusion criteria were: living or having lived in precarious housing with a life-limiting illness, age of 18 or older and ability to provide consent and to communicate in English. Following admission to PCOAT, potential participants received a letter of initial contact. Patients who lacked capacity were not eligible. A clinic staff member not involved in the study approached patients and explained the study. With patients' consent, the staff member provided their contact information to a study team member who contacted the patient, explained the study and obtained written consent. Participants were enrolled in the intervention immediately after signing the consent.

Data collection

We undertook individual, semistructured interviews on admission or after admission, depending on participants' preferences. We focussed on participants' experiences to determine how the intervention helped them throughout their illness. The interviews varied in length from 10 to 45 minutes. We undertook a few follow-up interviews due to patient frailty and personal preferences. The RN conducted the interviews because placing another team member was impractical due to trust issues. Although this could potentially have influenced participants'

responses, since the RN was the intervention provider, it was important to develop the relationship with participants over time, and create a space for participant autonomy. In the interviews, participants shared challenging past experiences to contrast with their experiences with PCOAT during the intervention. In our view, this increased the trustworthiness of the data, as they provided a comparison point to understand potential impacts of the intervention. The RN also kept a journal to foster reflexivity. We extracted demographic and clinical data to develop a profile of the study sample. We employed REDCap software version 13.4.10 (Vanderbilt University, Nashville, TN, US) for clinical data extraction. A clinical profile of patient study participants will be reported elsewhere.

Data analysis

Manual qualitative data analysis started shortly after data collection. We employed a thematic analysis approach.²⁴ Two research assistants (RAs) were initially engaged in data analysis, followed by advanced data analysis by the principal investigator and one RA. The study RN participated in data analysis by adding contextual information and deepening data interpretation. We moved back and forth between reading the transcripts as a whole and a focussed reading in search of rich descriptions. We examined how living and social conditions shaped participants'

experiences. Preliminary themes were generated and further developed or discarded until we achieved a thorough description of the theme. The analysis generated a rendering of participants' experiences and perceptions of the intervention that integrated theirs and the study RN's perspectives.

To ensure trustworthiness, we safeguarded the credibility, confirmability, dependability and transferability of the study.²⁵ Credibility was enhanced by incorporating the voices of people experiencing socioeconomic inequities and providers from health care and social agencies; the RN's reflexive diary recorded context, biases and misconceptions. We kept an audit trail with study documentation. Confirmability was supported by discussing interpretations with selected participants. Dependability was promoted through an audit trail and by spending a prolonged time in the clinical setting. Data collection was completed by one study team member, ensuring consistency in the interviewing process. Transferability was fostered by rich descriptions to allow health care providers to incorporate study findings in other settings.

Positionality statement

The study team included Indigenous and non-Indigenous scholars. One of the study's co-principal investigators (CB) is an Indigenous physician and scholar. LV is

a Métis scholar who engaged in data interpretation and writing. The nominated principal investigator (AS) has had Indigenous cultural training and research experience with Indigenous Peoples in Alberta. We integrated cultural safety throughout data collection, analysis and interpretation to honour the tradition of Indigenous Peoples in Canada. We were cautious with data interpretation to avoid out-of-context interpretations of Indigenous participants' experiences.

Results

All participants partook in at least one interview. We conducted 12 follow-up interviews. No family members took part in the intervention phase. Participants remained in the intervention phase until they died or until the end of the study, whichever came first. Table 2 provides a summary of participant characteristics.

Four themes were identified based on participants' experiences, including "living with unmet social care needs," "health and wellness concerns," "experiences of victimization and discrimination in health care" and "transformative experiences with PCOAT and the palliative care intervention."

Theme 1: Living with unmet social care needs

Participants faced several challenges related to unmet social care needs. Participants faced financial and health-related barriers in using transportation, affording basic needs, securing stable housing, and social isolation.

Living in insecure housing conditions

Several participants experienced precarious housing. This included pests or infestation, unsafe housing or mobility challenges due to housing layout. Some expressed a need to move to an assisted living facility while others described limited services in their place of residence. Following relocation to safe housing, one participant expressed:

I wanted to die like, last week, I wanted to die. 'Cause there was nothing, I just felt like there was nothing to live for. And today I don't feel like that, I feel like, you know, to look forward tomorrow turn to be better than yesterday. (P18)

Struggling with financial support

Most participants were on income assistance and had major financial constraints.

TABLE 2
Overview of study sample for study pilot palliative care intervention for people experiencing homelessness, Edmonton, Alberta, 2019 to 2020

Descriptor	n
Sample size	25
Age, average (range), in years	57.3 (39–84)
Ethnicity	
Indigenous ^a	15
Non-Indigenous	10
Sex	
Male	16
Female	9
Diagnosis	
Advanced cancer	15
Other advanced condition:	10
Liver failure (2)	
Advanced lung disease (6)	
Advanced kidney disease (1)	
Other (1)	
Income	
No income	1
< CAD 20 000	9
CAD 20 000–CAD 40 000 ^b	15
Housing status	
Stable housing	12
Precarious housing	11
No housing	2
Study intervention	
Length of stay in the study, average (range), in months	5.5 (0.25–12)
Study RN interactions per participant, average (range)	9 (3–32)

Abbreviations: CAD, Canadian dollars; RN, registered nurse.

^a Refers to First Nations, Métis or Inuit people in Canada.

^b Most had an annual income slightly above CAD 20 000.

They described insufficient funds, difficulty balancing health expenses and bills, inability to work due to illness and challenges accessing social support programs. The following exchange portrays some of these struggles.

P13: Oh, I have a money problem.

RN: Money problem, okay. And what are we doing about the money problem?

P13: Well, you're helping me right now, which is great.

RN: Yeah, yeah. And we're gonna get started on [income assistance].

P13: Which is really great—if that comes through, it'll really be a blessing for me. Because ... I can't pay my

rent and my cable. I don't make enough to pay my rent. I get five hundred and two dollars a month.

Limited transportation

Participants experienced transportation problems. They reported financial burden when they had to purchase bus passes or pay for parking, had to rely on others for transportation, were unable to drive or had mobility issues. They expressed a desire for independence and funding for transportation. Their symptoms and health status also interacted with their transportation needs.

I'm getting by but it's getting difficult ... just going to the store is hard right now.... For example, go to this store

over here ... it's only a block away and I have to take a cab. And just carrying a jug of milk back into this place and up here it's hard for me.... It's cost me an extra ten bucks a shot, just every time I wanna go buy a six-dollar jug of milk. (P19)

Social isolation and reconnecting

Participants desired social support though some were estranged from family, socially isolated or receiving limited social support. Some talked about having family or partners' support, while others struggled to reconnect with family.

My brother won't talk to me, my sisters won't talk to me or have anything to do with me. They live in the town. So like I'm slowly, I got a couple of more that came on board with me, family members, 'cause they got cancer and realize how hard it was, and they're married. And all of a sudden, the lights came on and say, 'Jesus, you know, we're not doing anything to help him.' And ... they realized how difficult life was for me, doing this by myself. (P6)

Theme 2: Health and wellness concerns

Participants reported concerns related to health and wellness such as symptom experiences, access to auxiliary health supports and harm reduction.

Symptom experiences

Participants reported diverse symptom experiences including shortness of breath, pain, mobility problems, fatigue, dysphagia and neurological issues, among others. These symptoms interfered with their wellness. Complex health status at times resulted in unbearable suffering.

'Cause there's nothing can be done anymore ... I don't ... wanna suffer anymore, and I'm suffering as it is right now. And I'm glad to get it over with, because ... I hate being like this, you know. Always hurting [pause]. Always throwing up and, it's no good for anybody. I don't wish this on anybody. (P13)

The need for auxiliary health supports

Participants described concerns related to health care procedures, prescription coverage and auxiliary supports such as hospital beds, assistive breathing devices or

hearing aids. Some expressed the need for medical cannabis. They were unable to access these resources due to cost.

One of the items that I use which has helped me greatly to deal with pain, nausea, lack of sleep—is marijuana. Well, it's expensive. And now that it is legal, you would assume that sooner or later, the people in the medical profession in this province would go, 'He's using it to deal with his cancer. Maybe we can help him out.' And whether it's reimbursed partially or something, that would definitely help out. (P3)

Accessing harm reduction services

Some participants had a history of substance use disorder and expressed the importance of accessing harm reduction services. PCOAT facilitated access to these services.

Well, no. I'm unfit, for nothing. I get tired now ... going down to get my methadone and stuff like that ... But I still do it. 'Cause it keeps me going, I gotta do it ... it gives me some purpose. (P12)

Theme 3: Experiences of victimization and discrimination in health care

Several circumstances affected participants' ability to access care. Poor prior experiences with health care providers were described. One participant recounted having been a victim of sexual and physical abuse in the hospital. Some recalled experiences of discrimination due to their Indigenous status. They shared experiences of shame, prejudice and systemic racism.

Before you see my skin, [voice breaking] if I could just go into a place where people couldn't see my skin colour before they treated me I would do that. And because I don't want anyone to see me cry, 'cause they mock us. I get mad at first ... [weeping]. Even as I leave this world I'll leave it knowing that they didn't like us, that they didn't like me because of how I was born [sniffing]. It's embarrassing, being Native. I feel ashamed. I just don't even want you guys to see me. (P20)

Theme 4: Transformative experiences with PCOAT and the palliative care intervention

Phase two was a qualitative exploration of the impact of the study intervention. The RN dedicated time to care coordination to resolve the health and practical needs of patients. Participants emphasized the difference between their prior health care experiences and those after admission to PCOAT and the study intervention. Participants described improvements in access to health and social services and wellness. Below, we describe prominent features of the nursing intervention.

Building trust

The RN created opportunities for participants to regain trust in health care providers. Building trust was a critical component of the intervention because of participants' past experiences with the health care system. Patients highlighted the understanding and supportive nature of PCOAT providers and the RN.

You're just angels of mercy, you're godsends, you know? You guys are so much better than any other doctors I've ever been to. You got a lotta heart, put it that way. A lot of empathy, empathy is a good word. But no ... I look forward to coming here when I come here. (P6)

Complex care coordination

The RN spent most of the time doing complex care coordination to support participants' health and wellness. This entailed communicating on a regular basis with community and health care providers to ensure patient concerns were addressed. The RN facilitated access to health care through regular monitoring of patients' health, home visits, phone calls and outpatient care. Complex care coordination served to lessen the impact of unequal living and working conditions and improve patient well-being.

We visited P1 today and as we were leaving the director of the building let us know that he is very close to eviction.... We know that [supportive housing] place is very harm reduction focussed ... and willing to work with patients in almost any condition.... One of my tasks for next week will be for planning a case conference meeting with the whole team ... to problem solve and work together to assist

both P1 but support the functioning of [supportive housing]. (RN note—P1)

End-of-life decision making

The RN engaged in end-of-life conversations with participants, offering assistance to reconnect with families, and doing referrals to social services to manage personal affairs. The RN helped in exploring participants' end-of-life preferences. For instance, the RN helped with requests for medical assistance in dying (MAID) by processing the referrals to the MAID team. She accompanied one participant undergoing MAID. The exchange below took place shortly before the participant died.

RN: Was there anything that the nurse or the team has been able to help you with, to assist with your needs?

P9: Yeah, they helped me get into the MAID program.

RN: Do you wanna talk about that a little bit?

P9: I like it because I have suffered my abuse physically and mentally ... mostly towards the ending of my years ... suffering through my, ah, can't breathe ... And I just having problems with just, ah, even when I am walking.... I can't even walk no more. That's how bad it is.

Improved accessibility to services

Participants described how things had improved for them in terms of access to health and social services. They spoke of how these changes supported their wellness.

Yeah, so I've got—I've got [income assistance program] now.... You guys hooked me up with [transportation].... I also got a [recreational pass] ... so that I can go to the gym, go to the sauna or the steam room. That's really a big one for me. 'Cause I think that'll work towards my recovery. (P4)

Provision of culturally safe care

Recognizing participants' preferences and needs regarding access to Indigenous care practices and traditions was important. This was made possible thanks to the support of the Indigenous Wellness Clinic and the guidance of Indigenous providers.

The background voices are the four ladies from the [Indigenous services] program that [P13] accessed before we met him. They came part way through our visit. They were preparing for a smudge in the background. After the tape stopped, we formed a circle. It was [P13], his four housing workers, his good friend, [family physician], myself and [medical student]. We smudged together and then held hands to pray. We all took turns praying aloud in our support, feelings, gratitude and honour of [P13]. Not a dry eye in the house I tell you! What a powerful and amazing experience. Everyone hugged one another even though some of us had just met. It was a powerful experience that I won't soon forget. (RN notes)

Improved wellness

Participants described that the actions of the study RN and PCOAT increased their wellness and helped them to have peace of mind. One participant stated, "I just need to know, like I wanna be able to talk to you guys and tell you what my worries are and, hopefully I'll have help. You guys will give me that" (P15). Another one expressed:

Clothing, medication, you've made me feel secure. Ah, you know, you brought my spirits up, like I got to rest finally you know when no one bothered me and I just feel, I wake up [and] feel better. I don't feel like you're a prisoner ... of someone that doesn't care. (P18)

Building hope over time

In describing their experiences with the study intervention, participants recalled contrasting episodes with the health care system before their admission to the study. They recounted encounters with providers that made them feel worthless, whereas their experiences with the study RN and PCOAT were remarkably different. These descriptions demonstrated how both PCOAT and the study intervention improved their experiences and helped them regain their sense of worth. Table 3 contains excerpts from P18, a participant with end-stage kidney disease requiring dialysis three times a week. She was living in a shelter and was relocated into stable housing. Her story recounts her transition from feelings of hopelessness,

neglect and abandonment to greater security and independence in stable housing.

Discussion

In this study, we sought to leverage the voices of people with lived experiences of socioeconomic inequities and life-limiting illnesses. Study findings revealed that participants struggled with their health and social needs, lack of access to health care and fear of discrimination. Findings suggest the need to support the unique end-of-life experiences of individuals facing socioeconomic inequities. Support should include expanding access to community-based palliative care, building transformative care practices, eliminating systemic discrimination in health care and promoting community engagement in clinical practice and research.

Expanding access to community-based palliative care

Study participants had a history of living with life-limiting illnesses, and multiple health and wellness concerns. People experiencing social disparity encounter greater challenges in access to palliative care compared to other Canadians.²⁶ Access to community-based palliative care is a pressing issue in Canada, with few Canadians accessing this service.²⁷ A recent national survey showed that only 15% of Canadians who died in 2016/17 received palliative home care in Alberta and Ontario.²⁷ Studies show that community-based palliative care increases access to palliative care and patient and provider satisfaction, reduces acute care utilization, supports a home death and may lower health care costs.²⁸ Research is needed to determine how community-based palliative care improves outcomes in groups experiencing socioeconomic inequities.²⁸ Our findings suggest registered nurses can contribute to increased access to palliative care in the community. There is a need to study the role of nurses in addressing inequities in access to palliative care in Canada. Increasing providers' access to palliative care education is another important step.⁷

Building transformative care practices

Study findings suggest participants' experiences as well as their perceived health and wellness improved with PCOAT and the study intervention. Our findings also suggest that participants' journeys were often hindered by a combination of pressing

TABLE 3
Building hope over time: one participant's experience with the study intervention

Feeling lost and abandoned	Regaining hope
<p>Feeling lost and uncared for in the shelter</p> <p>I was at the [shelter], and, ah, I was in a very, ah, bad state of mind I guess. I wasn't comfortable.... I felt lost there. I felt like I just wanted to give up on life because, I just never felt secure there, and was so, like you know, dirty. (P18)</p> <p>You can't trust nobody, 'cause they'll steal your stuff ... you turn your head and it's gone.... I never got asked if I needed help, I never got asked if I needed anything, and they didn't care, they just left me laying there. (P18)</p>	<p>Feeling secure and hopeful after being moved to stable housing</p> <p>I feel way better, I feel secure now.... I wanna ... get my stability back, and my independence, and you know get my state of mind off the track I was on which was bad. It was ... my depression and my, anxiety, of how people treat you, and how I just hate, I never been in a shelter before in my life, and that was the first time, I hope never to go back, 'cause, that's just not for me, or anybody if you know.</p> <p>I feel better about myself and I'm starting to feel better... (P18)</p>
<p>Feeling dependent on staff due to weakness, but not receiving the necessary help</p> <p>One time I sat there for an hour begging the staff to help me up, because some of the girls were sick too, they can't even pick me up.... I'm quite a big, I'm tall, and my bones are really skinny, but still I'm tall and that's still lot of bones. And they're like 'Ah, I can't pick you up' ... so I sit there and wait and wait, and it's just like they didn't come, it was like they were torturing me. Like I missed breakfast, lunch, dinner ... (P18)</p>	<p>Regaining strength and independence</p> <p>P18: I'm starting to walk better.... I am in a hotel....</p> <p>Study RN: And where are you going tomorrow?</p> <p>P18: I'm going to [assisted living facility]. Umm, it's a house hospital, I guess? Here to help me walk better and maybe, you know give me back to my feet, so then I can look into getting my own independent apartment, and you know, I get back to who I was two months ago.</p>
<p>Study RN notes</p> <p>We met her last week after receiving a call from [shelter] saying that they had a sick lady that they weren't really sure what to do with. We went to see her at the shelter. It is a dark, smelly, crowded place. Cots in the low-mobility area on the main floor are close together with a thin partition between the men and women's side.... She couldn't even sit up without assistance. Slowly, with her wheeled walker she made it back to us.... It was a story of such sadness. She said she couldn't believe she was in a shelter and homeless. She has been living out of her truck for a while but as she got sick the last time, her truck was impounded and she lost everything. She can't even find her common-law partner. She is itchy and cold with open sores on her arms and scalp. She has end-stage kidney disease and is on dialysis 3 times/week.... [PCOAT medical provider] made calls, advocated very strongly and got [P18] back in the hotel that night.... Then she battled and advocated for a place at [hospice].... She did get a place and moved in less than a week after we first met her. The most amazing and important thing is that she now has a roof over her head, a secure way to dialysis, meals provided and care aids to assist on those days when she is too weak to get up.</p>	

health and social needs, including lack of social support and food, financial insecurity, precarious housing, limited transportation and social isolation. One participant shared, "I'm getting by, but it's getting difficult." These inequities have implications for palliative care in terms of supporting comfort and quality of life, minimizing symptom burden and ensuring access to services and resources.¹⁰ PCOAT enacted a person-centred, intersectional approach that considered patients' urgent practical concerns concurrently with pressing clinical issues. Our study intervention contributed to transformative care practices by paying attention to intersecting social dimensions of participants' health and wellness and by engaging agencies from health and social sectors. There is a lack of palliative care interventions addressing the multiple intersections of social inequities,^{29,30} and a need to address this gap in Canada.

Eliminating systemic discrimination in health care

Study participants reported negative experiences when accessing health care, ranging

from racism and discrimination to actual violence against them. Discrimination is any negative action or lack of consideration toward an individual or group that occurs because of a preconceived and unjustified opinion.^{12,31} In health care settings, discrimination can manifest as delays in treatment, disrespectful care, verbal and physical abuse and outright denial of care.³² Individuals who experience discrimination face significant disparities in access to health care and quality of care, and poor health outcomes.^{33,34} Discrimination and racism violate people's human rights and affect both health service users and workers.³⁵ Discrimination in health care deters people from accessing health services, disempowers them and deprives them of their basic human dignity.³⁵ Discrimination and racism affect multiple aspects of health care delivery, including the timing of palliative care access.³⁶ Many Canadians experience discrimination based on their ethnicity, socioeconomic status, gender and other social characteristics.¹

Discrimination can negatively influence people's end-of-life experiences, including

the care they receive, how and where they die and whether their preferences are honoured.³⁷⁻³⁹ Although we did not study the possible traumas resulting from participants' past experiences, findings suggest participants lived with long-lasting impacts of systemic racism and discrimination. These call for trauma-informed care approaches in the provision of palliative care. Trauma-informed care may increase physical and psychological safety within health care and reduce the risk of retraumatizing patients, promote trusting relationships, promote recognition of people's strengths and resiliency in the face of adverse life events and increase the provision of culturally safe care.^{40,41}

Health care stakeholders hold an ethical obligation to "own" the issue and commit to meaningful action to eliminate systemic discrimination.³² This requires antiracism policies and strategies, as well as antiracism training in the health care system.³⁹ Collaboration with communities is necessary to inform initiatives that eliminate systemic discrimination and racism in health care.⁴² All research, programs and initiatives must be rooted in cultural humility

and promote nonpaternalistic, strengths-based, community-clinician partnerships.³⁹

Fostering community engagement in clinical practice and research

Implementing palliative care initiatives requires community engagement and community capacity development to collaboratively determine the most appropriate ways of supporting those affected by social disparities.^{3,10} Collaborative engagement of individuals and communities with lived experience of inequities can lead to tailored and appropriate care in the context of social disparity, as well as culturally sensitive interventions.^{43,44} Community-based research and interventions can improve accessibility and acceptability of health care services by building partnerships and trust within communities.⁴⁵ Community-based participatory research (CBPR) explores causes, consequences and solutions for health and health care disparities.⁴⁶ As a strengths-based approach, CBPR regards individuals as active agents with a wide range of capacities, talents and resources.⁴⁷ Interventions based on strengths affirm the right to self-determination and well-being of individuals and communities.⁴⁸ Future palliative and end-of-life care studies could focus on developing programs that address priorities identified by communities using a CBPR strengths-based approach.^{49,50}

Strengths and limitations

This was a qualitative exploratory study and thus research findings are confined to the lived experiences of our study participants. The richness of data helped us understand the experiences of people experiencing socioeconomic inequities living with life-limiting illnesses in an urban Canadian setting and the potential impact of a community-based intervention. There is limited evidence of the lived experiences of these populations as well as interventions to improve their access to community-based palliative care in Canada, and this study contributes knowledge that honours their experiences. Throughout the study, the RN was the participants' main nursing provider. It is difficult to disentangle the impact of the study intervention from that of PCOAT, given that participants were part of both. In human science research, it is difficult to isolate parts from the whole, given that the focus is on human experience. This study reflects the principles of human

science research and we do not intend to generate a final and conclusive truth. Further, the scope of this study was limited to understanding the experiences of people experiencing socioeconomic inequities living with life-limiting illnesses within the local context; our findings may not be reflective of experiences in other locations.

Conclusion

Study findings revealed key elements of the lived experiences of people experiencing socioeconomic inequities and living with life-limiting illnesses in an urban Canadian setting. The study provides insights into the impact of a community-based palliative care nursing intervention to improve access to palliative care and lessen health and social inequities. Research is needed to advance understanding of inequities in access to palliative care in Canada and practice modalities to tackle these inequities. There is a need to engage members of this population as partners in research to co-design services that recognize who they are at every moment.

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Conflicts of interest

The authors declare there are no conflicts of interest.

Authors' contributions and statement

AS, CB—conceptualization, data curation, formal analysis, funding acquisition, investigation, methodology, project administration, resources, supervision, validation, visualization, writing—original draft, writing—review and editing. HM—data curation,

formal analysis, investigation, project administration, resources, validation, visualization, writing—review and editing. LV—formal analysis, validation, visualization, writing—original draft, writing—review and editing. OB—data curation, formal analysis, investigation, project administration, resources, validation, visualization, writing—original draft, writing—review and editing. JE—data curation, formal analysis, investigation, project administration, resources, writing—review and editing. TW—conceptualization, formal analysis, methodology, resources, validation, writing—review and editing. WD, SW—conceptualization, funding acquisition, methodology, supervision, writing—review and editing. BS—conceptualization, funding acquisition, writing—review and editing.

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Original quantitative research

Heavy episodic drinking and self-reported increased alcohol use during the COVID-19 pandemic: a spotlight on frontline and essential workers in Canada

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Abstract

Introduction: There is evidence that some frontline and essential workers have increased their alcohol use during the COVID-19 pandemic; however, this has not been examined in Canada.

Methods: Using the Survey on COVID-19 and Mental Health 2020, weighted prevalence and 95% confidence intervals of self-reported increased alcohol consumption and heavy episodic drinking were calculated for each of the population groups: frontline workers, essential workers, and nonfrontline or essential workers (NFEW). Logistic regression was used to examine the associations between social determinants of health, mental health and alcohol use for each group.

Results: The prevalence of increased alcohol consumption and past-month heavy episodic drinking did not differ across frontline workers, essential workers and NFEW. For the three groups, nonracialized group members had significantly higher odds for both outcomes. Screening positive for either generalized anxiety disorder or mood disorder was significantly associated with increased alcohol consumption across the three groups. For frontline and essential workers, females had significantly lower odds of heavy episodic drinking compared to males. For essential workers only, living in a rural area was significantly associated with lower odds of increased alcohol use, and screening positive for posttraumatic stress disorder was significantly associated with increased odds of heavy episodic drinking. For frontline workers only, living in a rural area was significantly associated with lower odds of heavy episodic drinking.

Conclusion: While frontline and essential workers were not more likely to report increased alcohol consumption and heavy episodic drinking compared to NFEW, there were some differences in factors associated with alcohol use. Such findings demonstrate the benefit of examining each group separately to provide information for targeted prevention strategies.

Introduction

The outbreak of coronavirus disease 2019 (COVID-19) was declared a global pandemic on 11 March 2020.¹ Frontline and essential workers are individuals whose occupation has the potential to put them

in direct contact with people with COVID-19 or whose occupation is necessary for preserving society during a pandemic (e.g. first responders, health care workers, employees working in a service industry). Throughout the course of the COVID-19 pandemic, frontline and essential workers

Highlights

- There were no significant differences between frontline workers, essential workers and nonfrontline or essential workers for self-reported increased alcohol consumption and past-month heavy episodic drinking.
- Gender and living area were significantly associated with increased alcohol use and/or heavy episodic drinking only for frontline and essential workers.
- Screening positive for either generalized anxiety disorder or major depressive disorder was significantly associated with increased alcohol consumption across the three groups, which supports the association between mental health and alcohol use during COVID-19 across the Canadian population.

have faced increased pressure to deliver services and goods, such as health care, food and facilities management. The public-facing nature of their work may have increased their risk of exposure to COVID-19, which in turn may have increased risk of infection. These conditions, coupled with amplified work stress and fear of spreading the virus, may have increased the psychosocial burden among this population and may have impacted mental health and substance use.^{2,3}

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Health care is one of the few occupational sectors in which researchers have previously explored the impact of pandemics and epidemics on mental health and alcohol use. Evidence from three rapid reviews suggests that the mental health of health care professionals can be negatively impacted during a pandemic or epidemic, as was reported during the Severe Acute Respiratory Syndrome (SARS) epidemic in 2003, the influenza A (H1N1) pandemic in 2009 and the Middle East Respiratory Syndrome (MERS) epidemic in 2012.^{4,6} The pandemic- and epidemic-related impacts observed in these studies include alcohol misuse,⁴ depression,^{4,6} symptoms of burnout^{4,5} and reduced psychological well-being.⁵

Emerging evidence during the COVID-19 pandemic corroborates these findings. In a study of 544 health care personnel in Indonesia, researchers found higher odds of moderate to severe symptoms of depression (adjusted odds ratio [aOR] = 5.82, 95% confidence interval [CI]: 2.18–15.56) and burnout (aOR = 3.78, 95% CI: 1.99–7.16) among those who were at higher risk of being directly exposed to COVID-19 compared to those who were at lower risk.⁷ In a sample of 1257 health care workers in China, being a frontline worker and directly treating COVID-19 patients was associated with increased odds of depression (OR = 1.52, 95% CI: 1.11–2.09) and severe symptoms of generalized anxiety disorder (aOR = 1.57, 95% CI: 1.22–2.02) compared to working in second-line positions.⁸

Finally, data from a crowdsourced survey conducted by Statistics Canada between November and December 2020 demonstrated that 70% of health care workers reported worse mental health during the COVID-19 pandemic.^{9,10} Given that anxiety and mood disorders are risk factors for alcohol consumption,¹¹ and given the potential for excessive consumption to lead to chronic conditions and mortality,¹² assessing alcohol use behaviours in these occupational groups is important.

Preliminary research suggests that the COVID-19 pandemic has also impacted alcohol consumption among some frontline and essential workers. A US study of 571 frontline workers (98 hospital staff, 401 firefighters, 72 law enforcement) found 31% had an increased risk for alcohol use disorder during the COVID-19 pandemic.¹³ Furthermore, the study found

that frontline workers who had direct contact with patients had more than twice the odds of increased risk for alcohol use disorder (OR = 2.18, 95% CI: 1.35–3.52) than those who did not have direct patient contact.¹³ A cross-sectional study in the US found a high prevalence of alcohol use disorder (42.8%) among the 1092 health care workers from 25 medical centres.¹⁴ In both of these US studies, alcohol use disorder was quantified using the Alcohol Use Disorders Identification Test Consumption Questions (AUDIT-C) measure.^{13,14} In a cross-sectional study of 1346 participants in the UK, essential workers reported an increase in weekly alcohol consumption and drinking severity in May 2020 (i.e., during quarantine) compared to November 2019 (pre-quarantine).¹⁵ These international findings provide important preliminary evidence on alcohol use among frontline and essential workers during the COVID-19 pandemic.

While there are currently no nationally representative data on alcohol use among frontline and essential workers during the COVID-19 pandemic, increases in alcohol consumption and heavy episodic drinking have been documented among Canadians during this time, with some groups seemingly affected more than others.^{16–22} Indeed, females, parents/legal guardians and individuals who screened positive for generalized anxiety disorder (GAD), major depressive disorder (MDD) or posttraumatic stress disorder (PTSD) had a significantly higher prevalence of self-reported increased alcohol use since the onset of the pandemic.^{16,17,22} Given these differential impacts across certain social and mental determinants of health, it is crucial to examine these determinants when assessing alcohol use among frontline and essential workers.

Overall, international evidence demonstrates that frontline and essential workers may have increased risk for alcohol use disorder^{13–15} during the COVID-19 pandemic; however, no studies have examined this in the Canadian context. The objectives of this study were three-fold:

- (1) estimate the prevalence of self-reported increased alcohol consumption and past-month heavy episodic drinking among (i) frontline workers, (ii) essential workers and (iii) non-frontline or essential workers (NFEW);

- (2) determine whether there are any significant differences between groups; and

- (3) identify group-specific associations between social determinants of health, mental health variables and alcohol (increased alcohol use and heavy episodic drinking).

Methods

Study design and population

This study used data from the Survey on COVID-19 and Mental Health (SCMH), which is a nationally representative, cross-sectional survey led by Statistics Canada and the Public Health Agency of Canada (PHAC). This survey was administered to 30 000 dwellings from 11 September to 4 December 2020. A total of 14 689 individuals aged 18 years and older completed the survey, representing a response rate of 53.3%. Of this sample, 84% agreed to share their data with PHAC, resulting in a sample size of 12 344. Survey coverage did not include individuals living on reserves or other Indigenous settlements, full-time members of the Canadian Armed Forces, and individuals in institutions. These exclusions are estimated to be less than 2% of the population. Further details about the SCMH design and sampling frame can be found on Statistic Canada's website.²³

The study population included workers aged 19 to 64 years who (1) identified as a frontline worker, (2) identified as an essential worker but not a frontline worker and (3) did not identify as either an essential or a frontline worker.

Respondents who answered “Yes” to the following question were classified as frontline workers: “Were you considered a ‘frontline’ worker? A frontline worker is defined as an individual who has the potential to come in direct contact with COVID-19 by assisting those who have been diagnosed with the virus. For example, police officers, firefighters, paramedics, nurses or doctors.”

Respondents who answered “Yes” to the following question were classified as essential workers: “Was your job determined to be ‘essential’? An essential worker is defined as an individual who works in a service, a facility or in an

activity that is necessary to preserving life, health, public safety and basic societal functions of Canadians. For example, employees working in transportation (public transit, gas stations, etc.), financial institutions, health care or as first responders (police, firefighters, paramedics, etc.), pharmacies, childcare, food supply (grocery stores, truck drivers, etc.).”

The NFEW population comprised individuals who responded “No” to both of the above questions. Almost all (94%) individuals who self-identified as a frontline worker also self-identified as an essential worker. This suggested that frontline workers were a subset of essential workers. Accordingly, three mutually exclusive groups were created: (1) frontline workers (n = 880), (2) essential workers (not including frontline workers; n = 2288) and (3) NFEW (n = 5301).

Questions on frontline and essential worker status were not asked for respondents over 75 years of age. As there were large discrepancies in the proportion of frontline and essential workers (around 4%) between the ages of 65 to 75 compared to the nonfrontline or essential worker group (22%), analyses were restricted to individuals aged 19 to 64. This age restriction also takes into consideration the healthy worker bias. This restriction did not result in meaningful changes to the findings.

Outcomes

This study examined two primary outcomes: (1) increased alcohol consumption and (2) past-month heavy episodic drinking. Respondents were asked, “How has your alcohol consumption changed since before the COVID-19 pandemic?” Response options were “Increased,” “Decreased” and “No change.” The first outcome was dichotomized into (1) increased versus (2) decreased or no change.

For the second outcome, respondents were asked, “During the past 30 days, how often have you had four/five [four for females; five for males] or more drinks on one occasion?” Respondents were considered to have past-month heavy episodic drinking if they chose the options “Daily or almost daily,” “2 to 5 times a week,” “Once a week,” “2 to 3 times in the past 30 days,” or “Once in the past 30 days.” Individuals who chose the option “Not in the past 30 days” or who had not had an

alcoholic beverage in the last month were defined as not having engaged in past-month heavy episodic drinking. Heavy episodic drinking is an example of a behaviour that exceeds Canada’s Low-Risk Alcohol Drinking Guidelines²⁴ and can lead to harms.

Individuals who responded “Don’t know” or who did not answer the questions for alcohol consumption (n = 17, 0.002%) and past-month heavy episodic drinking (n = 24, 0.003%) were considered to be missing data and were excluded from the analysis.

Social determinants of health

The social determinants of health examined were education (less than high school, high school graduate, postsecondary graduate); age group (19–24, 25–44, and 45–64 years); total household income (divided into quintiles); being a parent or legal guardian of a child or children under the age of 18 years (yes, no; hereafter referred to as “parent/legal guardian”); living area (urban, rural); self-identifying as part of a racialized group (yes, no; hereafter referred to as “racialized populations or individuals”); and gender (male, female).

Living area identified whether the respondent lived in a population centre (urban area) or a rural area within or outside of a census metropolitan area or census agglomeration. Population centres have a population concentration of 1000 or more and a population density of 400 or more per square kilometre based on 2016 Census population counts.

Racialized group membership was measured by asking respondents to identify the population group or groups to which they belong. Data from respondents who did not provide a response to this question were considered missing.

Respondents were asked “What is your gender? Gender refers to current gender, which may be different from sex assigned at birth and may be different from what is indicated on legal documents. Is it: Male, Female, or please specify your gender.” Although the question asks for gender, the language used in the response options is consistent with biological sex (male, female) as opposed to gender (man, woman). As this was a secondary data

analysis limited by the survey question and responses, we chose to report on gender using the answer choices that were provided (male, female) to the people surveyed, as the most rigorous and ethical approach. For respondents who answered “Don’t know” or did not give an answer, the data were deemed to be missing.

Mental health variables

The generalized anxiety disorder (GAD) scale, GAD-7, is a validated, seven-item scale that assesses how often an individual has been affected by seven symptoms of anxiety in the past two weeks.²⁵ Examples of symptoms include not being able to stop or control worrying, trouble relaxing, feeling nervous, etc. Respondents who had a score of 10 or more (out of 21) were considered to have moderate to severe symptoms of GAD.²⁵

The Patient Health Questionnaire (PHQ-9) is a validated, nine-item scale that assesses how often an individual has been affected by symptoms of major depressive disorder (MDD) in the past two weeks.²⁶ Examples of symptoms include feeling tired or having little energy, trouble concentrating, having little interest or pleasure in doing things, etc. Respondents who had a score of 10 or more (out of 27) were considered to have moderate to severe symptoms of MDD.²⁶ Both the GAD-7 and the PHQ-9 asked about symptoms in the two weeks prior to completing the survey. Throughout the rest of the article, we refer to these variables as screening positive for GAD or MDD.

The 20-item PTSD Checklist for DSM-5 (PCL-5) assesses posttraumatic stress symptoms in the past month, such as repeated, disturbing or unwanted memories; avoiding external reminders; and being hyper alert or on guard. Respondents with a score of 33 or more (out of 80) were considered to meet the cut-point for probable PTSD.²⁷ It should be noted that the event causing the PTSD is not specified and could include PTSD due to COVID-19 or other events that occurred in the respondent’s lifetime.

Statistical analyses

A descriptive analysis to examine the characteristics of the overall survey population by calculating weighted proportions and 95% confidence intervals (CIs) for each of the three self-identified groups

was conducted. We fitted two adjusted logistic regression models to examine the associations between (1) population group and self-reported increased alcohol consumption, and (2) population group and past-month heavy episodic drinking.

To examine the associations between (1) social determinants of health, mental health and increased alcohol consumption; and (2) social determinants of health, mental health and past-month heavy episodic drinking within each group, the adjusted logistic regression models were stratified by frontline workers, essential workers and NFEW. In total, six stratified adjusted logistic regression models were conducted.

Each model was adjusted for the following: gender, age group, self-reported household income quintile, education level, parent/legal guardian status, living area, racialized group membership, screening positive for GAD, screening positive for MDD and screening positive for PTSD. Odds ratios with 95% CIs that do not include 1.00 were interpreted as statistically significant. Survey sampling weights were provided by Statistics Canada to generate nationally representative estimates. Variance for prevalence estimates was estimated using the bootstrap method and SAS Enterprise Guide version 7.1 (SAS Institute Inc., Cary, NC, US) was used for statistical analyses.

Results

Prevalence estimates for the social determinants for the survey population and for the three groups are presented in Table 1. There were more females in the frontline worker (61.3%) and NFEW (50.9%) groups, while there were fewer in the essential worker group (45.1%). Age was similarly distributed across all three groups. There was a higher prevalence of NFEW in the lowest income quintile (25.1%) compared to frontline (15.7%) and essential workers (18.5%). For all three groups, most individuals were postsecondary graduates, were not a parent/legal guardian, lived in an urban area, did not identify as being a racialized group member and did not screen positive for GAD, MDD or PTSD. Frontline workers had the highest prevalence of screening positive for GAD (17.9%), MDD (20.7%) and PTSD (9.7%), while essential workers had the lowest prevalence (10.6%, 12.6% and 6.2%, respectively). After adjusting for confounders,

there were no significant between-group differences for increased alcohol consumption or heavy episodic drinking (Table 2).

Increased alcohol consumption by occupational groups

For all three groups, nonracialized individuals (aOR = 5.94 frontline; aOR = 2.86 essential; aOR = 2.32 NFEW) were significantly more likely to report increased alcohol consumption. For frontline workers and NFEW, those who screened positive for MDD (aOR = 3.90 frontline; aOR = 2.17 NFEW) had significantly higher odds of increased alcohol consumption. For essential workers and NFEW, individuals within the highest income quintile (aOR = 2.61 essential; aOR = 2.69 NFEW) and parents/legal guardians (aOR = 1.51 essential; aOR = 1.41 NFEW) were significantly more likely to report increased alcohol consumption. Essential workers living in a rural area (aOR = 0.53) had lower odds of increased alcohol consumption, while those who screened positive for GAD (aOR = 2.27) had higher odds of increased alcohol consumption. For NFEW, individuals in the fourth income quintile (aOR = 1.86) and postsecondary graduates (aOR = 3.99) had higher odds of increased alcohol consumption (Table 3).

Heavy episodic drinking by occupational groups

For all three groups, nonracialized group members (aOR = 3.85 frontline; aOR = 3.26 essential; aOR = 3.10 NFEW) were significantly more likely to report past-month heavy episodic drinking. For frontline (aOR = 0.41) and essential (aOR = 0.75) workers, females were significantly less likely to report heavy episodic drinking. For essential workers and NFEW, individuals aged 25 to 44 (aOR = 1.62 essential; aOR = 1.40 NFEW) were significantly more likely to report heavy episodic drinking compared to individuals aged 45 to 64. For NFEW, individuals in the three highest income quintiles (aOR between 1.45 and 1.56), high school graduates (aOR = 2.16), postsecondary graduates (aOR = 1.65), and those who screened positive for MDD (aOR = 1.46) were significantly more likely to report heavy episodic drinking. Frontline workers who lived in a rural area had significantly lower odds of heavy episodic drinking (aOR = 0.47). Essential workers who screened positive for PTSD were over two times more likely to report

heavy episodic drinking (aOR = 2.15; Table 4).

Discussion

The stress and uncertainty generated by the COVID-19 pandemic, including wider social and economic impacts, have impacted the substance use patterns of many Canadians.¹⁰ National data show that some Canadians have reported an increase in their consumption of alcohol since the beginning of COVID-19.¹⁶⁻²² Yet, there are currently no national estimates specifically for frontline and essential workers—two occupational groups impacted in this unprecedented time. This study aimed to address this gap.

From September to December 2020, we did not find significant differences in the prevalence and likelihood of increased alcohol consumption and heavy episodic drinking among frontline and essential workers compared to NFEW. While these findings are not consistent with some of the other cross-sectional studies in the US and the UK,¹³⁻¹⁵ alcohol use was measured differently in this study, which may explain these discrepancies. This analysis suggests that factors other than occupation may have played a role in increased alcohol use and heavy episodic drinking during the COVID-19 pandemic in Canada. Nevertheless, the stratified regression models identified some interesting similarities and differences across the three groups.

A few differences in factors associated with increased alcohol use and heavy episodic drinking across groups were identified in this study. First, female frontline and essential workers had lower odds of heavy episodic drinking compared to males, whereas this was not seen for NFEW. No comparable results could be found in the current literature; however, findings from a global rapid review indicated that male health care workers had a higher risk of depression than female health care workers,²⁸ which could be an underlying condition leading to alcohol use beyond low-risk guidelines.

Second, living in a rural area was significantly associated with lower odds of heavy episodic drinking for frontline workers and lower odds of increased alcohol use for essential workers. There was no significant relationship between living area and the two outcomes for NFEW.

TABLE 1
Prevalence estimates of the overall sample, frontline workers, essential workers and nonfrontline or essential workers disaggregated by social determinants of health, mental health variables and alcohol outcomes

Social determinants of health	Total population % (95% CI)	Frontline workers % (95% CI)	Essential workers (excluding frontline workers) % (95% CI)	Nonfrontline or essential workers % (95% CI)
Total unweighted	8797	880	2288	5301
Total weighted	23 078 096	1 872 014	5 893 453	14 408 423
Gender	(n = 8774)	(n = 878)	(n = 2283)	(n = 5287)
Male	49.9 (49.6–50.2)	38.7 (33.6–43.8)	54.9 (52.3–57.6)	49.1 (47.8–50.3)
Female	50.1 (49.8–50.4)	61.3 (56.2–66.4)	45.1 (42.4–47.7)	50.9 (49.7–52.2)
Age group (y)	(n = 8797)	(n = 880)	(n = 2288)	(n = 5301)
19–24	10.8 (9.7–11.9)	8.9 (4.5–13.2)	8.7 (6.4–11.0)	12.0 (10.4–13.6)
25–44	46.4 (45.3–47.5)	47.8 (42.6–53.0)	47.5 (44.6–50.4)	45.4 (43.6–47.2)
45–64	42.8 (42.6–43.0)	43.3 (38.4–48.2)	43.8 (41.2–46.4)	42.6 (41.4–43.9)
Self-reported household income quintile	(n = 8114)	(n = 812)	(n = 2110)	(n = 4877)
Q1	22.7 (21.4–24.1)	15.7 (11.7–19.6)	18.5 (16.2–20.7)	25.1 (23.3–26.9)
Q2	20.0 (18.7–21.4)	23.0 (18.0–27.9)	20.9 (18.3–23.5)	19.2 (17.5–20.9)
Q3	19.0 (17.6–20.3)	18.4 (14.4–22.5)	21.0 (18.3–23.7)	18.1 (16.4–19.8)
Q4	20.4 (19.0–21.7)	21.0 (16.9–25.0)	21.3 (18.5–24.0)	20.2 (18.5–22.0)
Q5	17.9 (16.6–19.2)	22.0 (17.3–26.6)	18.4 (15.8–21.0)	17.4 (15.8–19.0)
Education level	(n = 8783)	(n = 878)	(n = 2286)	(n = 5293)
Less than high school	4.8 (4.0–5.5)	1.0 (0.3–1.7)	3.8 (2.6–5.0)	5.5 (4.5–6.4)
High school graduate	21.5 (20.0–22.9)	11.9 (7.7–16.0)	23.0 (20.2–25.7)	22.3 (20.4–24.3)
Postsecondary graduate	73.8 (72.3–75.2)	87.1 (82.9–91.3)	73.2 (70.3–76.1)	72.2 (70.2–74.2)
Parent/legal guardian	(n = 8783)	(n = 880)	(n = 2282)	(n = 5293)
Yes	35.6 (34.4–36.8)	42.0 (36.8–47.2)	39.7 (36.8–42.6)	32.9 (31.2–34.6)
No	64.4 (63.2–65.6)	58.0 (52.8–63.2)	60.3 (57.4–63.2)	67.1 (65.4–68.8)
Living area	(n = 8720)	(n = 871)	(n = 2269)	(n = 5256)
Urban	83.3 (82.3–84.2)	83.6 (80.0–87.2)	81.6 (79.4–83.9)	84.0 (82.7–85.3)
Rural	16.7 (15.8–17.7)	16.4 (12.8–20.0)	18.4 (16.1–20.6)	16.0 (14.7–17.3)
Racialized group member	(n = 8723)	(n = 872)	(n = 2268)	(n = 5262)
Yes	28.5 (27.1–29.9)	30.9 (25.5–36.2)	24.8 (21.8–27.9)	29.9 (28.0–31.8)
No	71.5 (70.1–72.9)	69.1 (63.8–74.5)	75.2 (72.1–78.2)	70.1 (68.2–72.0)
Screened positive for GAD	(n = 8661)	(n = 863)	(n = 2259)	(n = 5218)
Yes	14.5 (13.3–15.6)	17.9 (13.5–22.2)	10.6 (8.6–12.6)	15.5 (14.1–17.0)
No	85.5 (84.4–86.7)	82.1 (77.8–86.5)	89.4 (87.4–91.4)	84.5 (83.0–85.9)
Screened positive for MDD	(n = 8610)	(n = 865)	(n = 2235)	(n = 5193)
Yes	17.2 (16.0–18.4)	20.7 (16.3–25.2)	12.6 (10.3–14.9)	18.6 (17.0–20.2)
No	82.8 (81.6–84.0)	79.3 (74.8–83.7)	87.4 (85.1–89.7)	81.4 (79.8–83.0)
Screened positive for PTSD	(n = 8448)	(n = 839)	(n = 2210)	(n = 5080)
Yes	7.2 (6.4–8.1)	9.7 (6.0–13.3)	6.2 (4.6–7.9)	7.4 (6.4–8.4)
No	92.8 (91.9–93.6)	90.3 (86.7–94.0)	93.8 (92.1–95.4)	92.6 (91.6–93.6)
Self-reported change in alcohol consumption	(n = 8780)	(n = 878)	(n = 2285)	(n = 5291)
Increased	18.2 (17.0–19.4)	18.4 (14.4–22.3)	18.9 (16.3–21.4)	18.0 (16.5–19.4)
Decreased	11.1 (10.0–12.1)	13.1 (9.0–17.2)	9.6 (7.6–11.5)	11.3 (10.0–12.7)
No change	70.7 (69.2–72.1)	68.6 (63.5–73.6)	71.6 (68.5–74.6)	70.7 (68.8–72.5)
Past-month heavy episodic drinking	(n = 8773)	(n = 879)	(n = 2284)	(n = 5284)
At least once	31.6 (30.1–33.1)	29.5 (24.8–34.2)	34.0 (31.0–37.0)	30.5 (28.6–32.4)
No	68.4 (66.9–69.9)	70.5 (65.8–75.2)	66.0 (63.0–69.0)	69.5 (67.6–71.4)

Data source: Survey on COVID-19 and Mental Health 2020.

Abbreviations: CI, confidence interval; GAD, generalized anxiety disorder; MDD, major depressive disorder; PTSD, posttraumatic stress disorder; Q, quintile; y, years.

Notes: Totals do not always equal 100% due to rounding. The sample sizes of frontline workers, essential workers and nonfrontline essential workers (n = 8469) do not add up to the sample size for the total population (n = 8797). The total population includes all respondents aged 19 to 64, whereas frontline workers, essential workers and nonfrontline or essential workers included respondents aged 19 to 64 who worked in the last week and who answered the questions about frontline and essential workers. Total sample size (n) is unweighted.

TABLE 2
Adjusted odds ratios for increased alcohol consumption and heavy episodic drinking

	Increased alcohol consumption aOR (95% CI)	Heavy episodic drinking aOR (95% CI)
Frontline workers	0.86 (0.63–1.17)	0.92 (0.70–1.20)
Essential workers (excluding frontline workers)	1.04 (0.84–1.30)	1.07 (0.90–1.28)
Nonfrontline or essential workers	Ref	Ref

Data source: Survey on COVID-19 and Mental Health 2020.

Abbreviations: aOR, adjusted odds ratio; CI, confidence interval; GAD, generalized anxiety disorder; MDD, major depressive disorder; PTSD, posttraumatic stress disorder; Ref, reference group.

Note: The two logistic regression models were adjusted for these social determinants of health: occupational group, gender, age group, income quintile, parent/legal guardian, education level, living area, racialized group member, screened positive for GAD, screened positive for MDD, screened positive for PTSD.

TABLE 3
Adjusted odds ratios of self-reported increased alcohol use during the COVID-19 pandemic by occupational group

	Frontline workers aOR (95%CI)	Essential workers (excluding frontline workers) aOR (95%CI)	Nonfrontline or essential workers aOR (95%CI)
Gender			
Male	Ref	Ref	Ref
Female	0.75 (0.40–1.41)	1.04 (0.73–1.48)	1.04 (0.81–1.32)
Age group (y)			
19–24	0.50 (0.09–2.96)	1.81 (0.67–4.92)	1.11 (0.61–1.99)
25–44	1.04 (0.53–2.04)	1.37 (0.96–1.95)	1.03 (0.80–1.31)
45–64	Ref	Ref	Ref
Self-reported household income quintile			
Q1	Ref	Ref	Ref
Q2	1.26 (0.16–9.66)	1.10 (0.59–2.04)	1.18 (0.79–1.75)
Q3	0.83 (0.11–6.46)	1.57 (0.81–3.03)	1.33 (0.89–1.99)
Q4	3.45 (0.53–22.48)	1.44 (0.75–2.74)	1.86* (1.24–2.77)
Q5	3.72 (0.58–23.79)	2.61* (1.39–4.91)	2.69* (1.85–3.90)
Parent/legal guardian			
Yes	1.46 (0.72–2.96)	1.51* (1.04–2.18)	1.41* (1.09–1.82)
No	Ref	Ref	Ref
Education level			
Less than high school	Ref	Ref	Ref
High school graduate	0.43 (0.05–3.50)	0.65 (0.21–2.02)	2.09 (0.88–4.96)
Postsecondary graduate	0.34 (0.05–2.31)	0.65 (0.22–1.90)	3.99* (1.70–9.34)
Living area			
Urban	Ref	Ref	Ref
Rural	0.61 (0.29–1.29)	0.53* (0.34–0.82)	0.89 (0.64–1.23)
Racialized group member			
Yes	Ref	Ref	Ref
No	5.94* (1.38–25.53)	2.86* (1.54–5.30)	2.32* (1.62–3.33)
Screened positive for GAD			
Yes	1.41 (0.38–5.16)	2.27* (1.18–4.38)	1.41 (0.97–2.06)
No	Ref	Ref	Ref
Screened positive for MDD			
Yes	3.90* (1.54–9.90)	1.87 (0.98–3.58)	2.17* (1.55–3.04)
No	Ref	Ref	Ref
Screened positive for PTSD			
Yes	0.85 (0.18–4.05)	0.83 (0.38–1.81)	1.12 (0.74–1.69)
No	Ref	Ref	Ref

Data source: Survey on COVID-19 and Mental Health 2020.

Abbreviations: aOR, adjusted odds ratio; CI, confidence interval; GAD, generalized anxiety disorder; MDD, major depressive disorder; PTSD, posttraumatic stress disorder; Q, quintile; Ref, reference group; y, years.

* Statistically significant association based on nonoverlapping confidence intervals.

Urban centres have had greater numbers of COVID-19 cases and strict lockdowns, and have had to manage COVID-19 cases with more severe outcomes compared to rural areas.²⁹ Frontline and essential workers in urban areas may have experienced heightened COVID-19-related job stress, and may subsequently be attempting to cope with this stress by engaging in heavy episodic drinking or increasing their alcohol consumption.

Third, essential workers were the only group with a significant association between PTSD and heavy episodic drinking. These patterns are partially supported by an Australian study that found higher levels of anxiety, stress and dissatisfaction among essential workers compared to frontline workers and the rest of the study population.³⁰ The authors speculated that this could have been due to inadequate training, inadequate protection and limited job stability among other essential workers compared to frontline workers.³⁰

Overall, increased resources and targeted public health prevention strategies for male frontline and essential workers, frontline and essential workers living in urban areas, and essential workers with symptoms of PTSD may be warranted.

There were also common social determinants associated with increased alcohol consumption across frontline workers, essential workers and NFEW. Individuals who did not identify as racialized group members had significantly higher odds of increased alcohol consumption and heavy episodic drinking. This finding is consistent with findings from other studies depicting similar patterns.^{16,31} Screening positive for MDD was significantly associated with increased alcohol consumption for frontline workers and NFEW. Furthermore, screening positive for GAD was significantly associated with increased alcohol consumption for essential workers. The relationship and comorbidity between anxiety, depression and alcohol use is documented across the literature,^{32–34} and specifically during the COVID-19 pandemic.^{16,18,19,35,36} Findings from this study and others in the literature^{16,18,19,35,36} suggest that mental health is a significant risk factor for alcohol use across the Canadian population and not just among certain occupational groups. It is critical to continue promoting mental health, well-being

TABLE 4
Adjusted odds ratios of self-reported, past-month, heavy episodic drinking by occupational group

	Frontline workers aOR (95% CI)	Essential workers (excluding frontline workers) aOR (95% CI)	Nonfrontline or essential workers aOR (95% CI)
Gender			
Male	Ref	Ref	Ref
Female	0.41* (0.24–0.71)	0.75* (0.56–0.99)	0.88 (0.73–1.07)
Age group (y)			
19–24	0.78 (0.14–4.35)	0.91 (0.42–1.96)	1.15 (0.73–1.81)
25–44	1.61 (0.93–2.80)	1.62* (1.19–2.21)	1.40* (1.14–1.73)
45–64	Ref	Ref	Ref
Self-reported household income quintile			
Q1	Ref	Ref	Ref
Q2	1.12 (0.36–3.44)	0.95 (0.61–1.48)	1.19 (0.89–1.59)
Q3	1.94 (0.61–6.11)	1.16 (0.72–1.88)	1.45* (1.07–1.96)
Q4	2.37 (0.87–6.50)	1.24 (0.77–2.01)	1.56* (1.14–2.14)
Q5	1.81 (0.62–5.25)	1.20 (0.75–1.91)	1.54* (1.15–2.07)
Parent/legal guardian			
Yes	0.77 (0.43–1.41)	1.07 (0.77–1.48)	0.90 (0.73–1.11)
No	Ref	Ref	Ref
Education level			
Less than high school	Ref	Ref	Ref
High school graduate	1.55 (0.26–9.13)	1.01 (0.46–2.21)	2.16* (1.33–3.51)
Postsecondary graduate	1.06 (0.20–5.58)	1.05 (0.49–2.24)	1.65* (1.04–2.62)
Living area			
Urban	Ref	Ref	Ref
Rural	0.47* (0.24–0.93)	1.14 (0.80–1.61)	1.04 (0.83–1.30)
Racialized group member			
Yes	Ref	Ref	Ref
No	3.85* (1.70–8.73)	3.26* (2.05–5.19)	3.10* (2.30–4.18)
Screened positive for GAD			
Yes	1.02 (0.36–2.87)	1.26 (0.71–2.23)	1.02 (0.72–1.42)
No	Ref	Ref	Ref
Screened positive for MDD			
Yes	2.32 (0.95–5.70)	1.02 (0.57–1.83)	1.46* (1.07–1.99)
No	Ref	Ref	Ref
Screened positive for PTSD			
Yes	1.49 (0.39–5.73)	2.15* (1.07–4.33)	0.94 (0.63–1.39)
No	Ref	Ref	Ref

Data source: Survey on COVID-19 and Mental Health 2020.

Abbreviations: aOR, adjusted odds ratio; CI, confidence interval; GAD, generalized anxiety disorder; MDD, major depressive disorder; PTSD, posttraumatic stress disorder; Q, quintile; Ref, reference group; y, years.

* Statistically significant association based on nonoverlapping confidence intervals.

and access to services and resources at a population level.

Strengths and limitations

A key strength of this study is that it fills a gap in the literature on alcohol use and episodic drinking among frontline and essential workers in Canada during COVID-19. Another strength is the use of a large and nationally representative sample.

While the present findings contribute to an emerging evidence base, there are limitations to highlight. First, as this was a

national survey not specifically focussed on frontline and essential workers, data on specific occupational concerns (such as shortage of personal protective equipment, unmet needs, limited resources and fear of contracting or transmitting the disease) were not collected. Future research could expand on these findings to examine occupation-specific factors that may have impacted alcohol use during the pandemic.

Second, as the data was cross-sectional, causation cannot be inferred based on findings.

Third, we were unable to adjust for the drinking frequency (number of alcoholic beverages consumed weekly) before the COVID-19 pandemic. Individuals who reported increasing their alcohol consumption by one or two drinks per week are likely different from those who reported increasing their alcohol consumption by five or more drinks. The analysis did not achieve that level of granularity.

Fourth, it is important to note that this survey was initiated, developed and deployed in the field in unprecedented

circumstances. The language for the “gender” question response options is consistent with biological sex (male and female vs. man and woman). However, the question specifically asked about gender. Using the answer choices that were provided to the people surveyed was the most rigorous way to report on this variable.

Fifth, information collected through the SCMHS was self-reported, and answers were subject to recall and social desirability biases.

Conclusion

Frontline and essential workers were not more likely to report increased alcohol consumption and heavy episodic drinking during the COVID-19 pandemic compared to NFEW. However, there were noteworthy differences regarding factors associated with increased alcohol use and heavy episodic drinking across the three groups. This fact highlights the benefit of examining each occupational group separately, as it could provide guidance for targeted public health prevention strategies. Moreover, individuals who screened positive for either GAD or MDD had significantly higher odds of increased alcohol consumption across all three groups. These findings indicate a possible link between mental health and alcohol use during the COVID-19 pandemic that is widespread across the Canadian population. This is especially concerning as longer-term impacts of the COVID-19 pandemic on the mental health of Canadians and related harms remain unknown.¹⁰ These findings signal an opportunity to mitigate the negative effects of alcohol consumption through greater provision of and access to mental health supports among the general population.

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Conflicts of interest

The authors have no conflicts of interest to disclose.

Authors' contributions and statement

MV—conceptualization, formal analysis, methodology, project administration, visualization, writing—original draft, writing—review and editing. JV, LL—conceptualization, methodology, validation, writing—review and editing. KHM, MW and MMB—conceptualization, methodology, writing—review and editing. AML—conceptualization, methodology, project administration, supervision and writing—review and editing.

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At-a-glance

Systematic news media scanning and synthesis: creating a dataset of emergent initiatives and localized responses to public washroom provision in Canada during the COVID-19 pandemic

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Abstract

News media are an underused source of localized information on complex and structural public health issues that are neglected in policy and unaccounted for in mainstream data collection. We applied systematic review search methods to online news media and developed a dataset highlighting municipal reactions and initiatives in response to public washroom pressures during the first year of the COVID-19 pandemic. Reliance on consumer-based models of washroom access “became news” amid the closures and lockdowns. Our results showed that many municipalities were grappling with the issue, but overwhelmingly responding with temporary and pandemic-specific measures that did not address the needs of marginalized groups.

Keywords: *toilets, washrooms, COVID-19, news, media, Canada, public health, equity*

Introduction

News media are an opportune source of localized information. Embedded in the community context, local news can serve as a forum for public and community leaders, as well as a source of evidence for local decision making and collective action.^{1,2} Monitoring local newspapers is an established form of public health surveillance, especially in times of crisis³; however, news scanning is less established for detecting complex or structural community health issues across broad geographies. For issues that remain neglected in policy, and that are unaccounted for in mainstream data collection efforts, systematic news media scanning offers an alternative way to connect the disconnected.⁴ Indeed, “many issues of structural inequality are problems of scale, and they can seem anecdotal until they are viewed as a whole.”^{4,p.98}

Public washrooms are an example of neglected, yet critical, public health

infrastructures that are individualized and decontextualized from the needs and experiences of the people that use them, the role they play in public health and the consequences of their absence, resulting in gaps in provision that are not addressed in research or policy and are largely absent in public discourse.⁵⁻⁷ Public washrooms play an integral role in peoples’ health, through broad mechanisms of health promotion, health protection and health equity.⁷ Public washrooms influence the accessibility and inclusivity of public outdoor spaces, people’s modes of travel and transportation, social gatherings, work away from home, physical activity, recreation and play.⁸⁻¹¹

Historically, public washrooms were introduced into the urban landscape in response to the sanitation problems of the industrial age. Part of what is known as the “great sanitation awakening,” the appearance of public washrooms greatly curtailed street filth and were instrumental in preventing the spread of disease.^{12,13}

Highlights

- Systematic news media scanning offers a different way to connect the disconnected for issues neglected in policy and unaccounted for in mainstream data collection.
- Public washrooms are critical public health infrastructure, yet they are scarce and there is little data on their provision.
- We adapted systematic review search methods to online news media to capture municipal responses to public washroom pressures during the first year of the pandemic.
- The resulting dataset showed that 33 unique municipalities across all provinces were represented in news coverage; responses to public washroom pressures were overwhelmingly temporary, pandemic-specific and lacked consideration for needs of diverse user groups.

Despite these benefits, public washroom provision has steadily receded in recent decades.^{14,15} In Canada, public washroom provision is left to individual municipalities and hinges upon a public-private model.¹⁶ In other words, municipalities rely on “publicly available” washrooms located in commercial sites where people must purchase goods to gain access.¹⁷ Having to “pay to pee” introduces layers of gatekeeping to washroom access and disproportionately affects people experiencing poverty or homelessness, as well as causing other forms of stigma and

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exclusion.¹⁸ As feminist geographer Joni Seagar lamented, “what gets counted counts;”¹⁹ the lack of data on the availability and distribution of public washrooms remains a fundamental challenge for addressing inadequate provision. There is no centralized Canadian database for public washroom strategies, despite several crowdsourcing efforts to map locations and hours of operation.²⁰⁻²²

In the early stages of the COVID-19 pandemic, amid closures of private and retail spaces, as well as closures of public buildings housing washrooms available to the public (e.g. libraries, municipal buildings, transit terminals, etc.), pressure for public washroom provision was amplified. Thus, public washrooms “became news,”^{23,24} which underlies our motivation for using an approach that highlights and synthesizes action-specific content about public washroom news coverage. In this At-a-glance article, we detail how we applied systematic review search methods to Canadian online news media to develop a dataset highlighting municipal reactions to the sudden and drastic reduction of public washroom availability and their initiatives in response.

Our objectives were both methodological and issue specific. We identified searchable online news databases, outlined a rigorous search strategy adapted from academic literature synthesis methods and compiled results into a functional dataset, demonstrating the process and establishing the feasibility of systematic news media scanning and synthesis. This article offers a documentation of public washroom provision efforts across Canada within the first year of the pandemic, thereby providing local decision makers and public washroom advocates with an overview of the actions taken in other jurisdictions and across Canada.

Methods

We applied systematic review search methods to news media outputs²⁵ (Figure 1). Data were collected between March 2020 and March 2021 from several computerized news databases. News articles across databases were pooled and deduplicated. We independently screened titles and full-text articles, and then extracted

qualitative details about changes to public washrooms.

Results

Description of news records

Our search resulted in an initial sample of 2862 news outputs and a final sample of 170 news pieces (Figure 1), including 149 news articles (88%), 24 opinion pieces and editorials (14%), and three letters to the editor (3%). Articles came from all provinces and no territories, with the most from British Columbia (27%) and Ontario (41%). Sixty Canadian municipalities are represented in these data.

Most articles (70/170) focussed on alerting the public to an unreliable and changing landscape of public washroom availability by providing the dates and locations of public washroom closures and openings, as well as the cleaning and sanitation schedules. Some such announcements were included secondarily, alongside closure or opening announcements of other public amenities (e.g. parks).

Development of the dataset

Of the 170 articles discussing public washrooms during the first year of the pandemic, 100 discussed new funding or new interventions across 33 unique municipalities, plus BC overall (Table 1). The scale and target of funding varied across announcements and locales. Investments included the re-allocation of operating budgets or the securing of pandemic-related emergency funding; however, most of these investments were geared towards temporary needs and solutions in response to pandemic conditions (e.g. closures of other facilities, need for greater sanitation).

There was a mix of initiatives, including extending opening hours of charitable organizations; taking over otherwise closed municipally owned buildings to increase toilet access; winterizing previously seasonally operated municipal washroom facilities; recruiting private businesses and corporations to provide washrooms for specific customer groups; and halting bylaw enforcement of fines for urinating or defecating in public. Most initiatives involved the introduction of porta-potties

or temporary toilet trailers and sanitation stations to specific locations (i.e. at truck stops, at trail heads, on transportation routes for drivers, or in downtown areas for people experiencing homelessness). Several articles also described the spread of porta-potty installations across large cities, including Vancouver, Toronto, Ottawa and Montréal. Five articles described permanent changes to the public washroom landscape.

We found evidence of community involvement advocating for improvements to public washroom provision alongside the coverage of investments and initiatives. For example, graduate students from McMaster University (Hamilton, Ontario) researched the issue and presented to the City’s Emergency and Community Services Committee on the feasibility of all-season public washrooms.²⁶ Another example of evolved community involvement included the GottaGo! campaign (Ottawa, Ontario),²⁷ which described letter writing strategies aimed at drawing attention to the need for stand-alone public washrooms in strategic locations. These efforts were connected to the shortlisting of two self-cleaning toilets among projects suitable for short-term federal and provincial COVID-19 funding. We discovered a pop-up toilet project, “Places to Go,” (Winnipeg, Manitoba)²⁸ from 2018; Winnipeg was the only city in which we found mention of permanent infrastructure being explicitly developed for people experiencing homelessness.

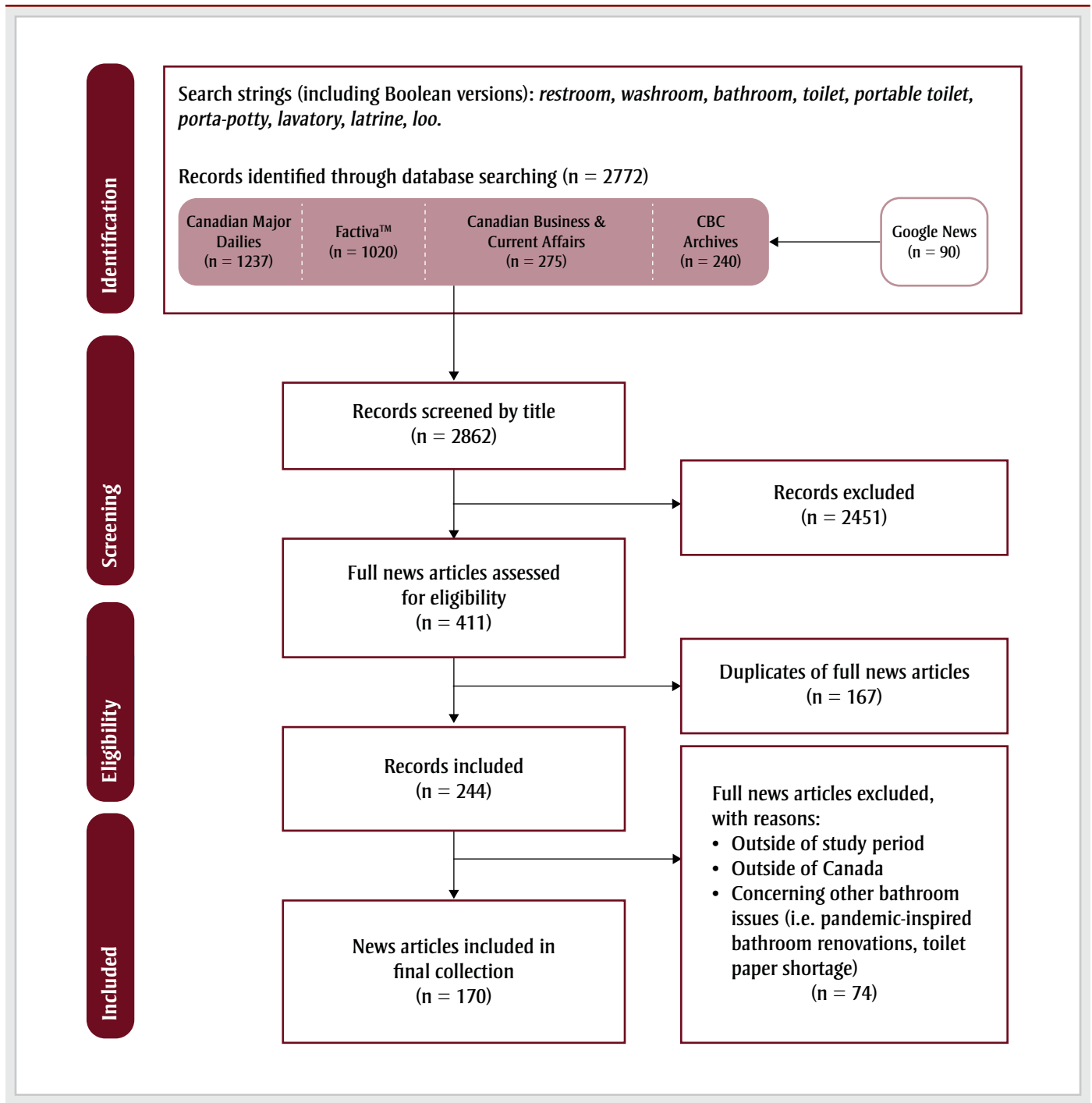
Discussion

We leveraged local news media to learn about localized and emergent responses to the issue of public washrooms across Canada during the first year of the COVID-19 pandemic. This analysis offers important baseline data necessary for further exploring this issue, as no central database currently exists,* nor are we aware of other research that pulls together and compares efforts across Canada.

Our approach highlighted the responses and strategies of a range of Canadian cities, including enough mid-sized and smaller cities to enable like-size, like-budget jurisdictional comparisons.²⁹ We found many municipalities grappling with this issue, but responses were overwhelmingly

* Examples of data repositories for other types of public health infrastructure include: Muniscope (<https://www.muniscope.ca>); CityShare Canada (<https://citysharecanada.ca/>); Open Data Portals (<https://open.canada.ca/en/open-data>); GeoHub (<https://geohub.lio.gov.on.ca/>); Municipal Affairs and Housing (<https://www.ontario.ca/page/ministry-municipal-affairs-housing>); MunicipalWorld—Associations of Municipal Clerks and Treasurers (<https://www.municipalworld.com/>)

FIGURE 1
Diagram^a of screening process and selection of news pieces related to public washrooms, Canada, March 2020 to March 2021



^a PRISMA diagram adapted from Moher et al., 2009.²⁵

temporary and pandemic-specific. We found minimal action towards supporting the needs of diverse user groups. In addition, we discovered that another potential form of “data” to be gleaned from news is the names of advocates working for change in other locales. This data subset could be of help in the development of sharing networks and coalition building for broadening

community organizing efforts. It is through the delocalization of each municipality’s struggle with public washrooms that we recognize larger patterns of neglect, and that the status quo model of provision can be challenged. Our study demonstrates the process and feasibility of systematic news media scanning and synthesis, thus offering a methodological contribution to

public health, albeit one that requires further development.

Strengths and limitations

While offering valuable insight into structural public health issues, news media data are incomplete. News is subjective and biased, reflecting the political orientations

TABLE 1
Investments and initiatives in public washrooms by location (city, province) as indicated in news piece, March 2020 to March 2021

Location	Demographics ^a	Investment/initiative
Unspecified locations, BC	N/A	<ul style="list-style-type: none"> • 35 portable toilets along major transport routes in BC • 20 portable toilets installed at commercial pull-outs and inspection stations • Maintenance company installed a number of portable washrooms in the Kootenays
Campbell River, BC	Population: 32 588 Density: 225.7	<ul style="list-style-type: none"> • Portable washroom placed near downtown firehall
Castlegar, BC	Population: 8039 Density: 408.6	<ul style="list-style-type: none"> • Columbia Basin Trust provided CAD 322 000 to help pay for washroom upgrade project • Millennium Park project: all-season washrooms, change rooms, outdoor showers, dedicated family and disabled accessible rooms
Hope, BC	Population: 6181 Density: 151.0	<ul style="list-style-type: none"> • Handicap-accessible portable toilets and hand wash stations in Memorial Park
Kelowna, BC	Population: 127 380 Density: 601.3	<ul style="list-style-type: none"> • Ribbons of Green Trails Society and Friends of Okanagan Rail Trail wrote letters to Regional District of North Okanagan to install year-round toilets • Permanent, architecturally interesting washroom to be constructed (2 universal stalls, dog water station, drinking fountain)
Ladysmith, BC	Population: 8537 Density: 711.9	<ul style="list-style-type: none"> • Nearby business initiated petition for removal of portable washroom; City Council voted to leave in place for 3 additional months
New Westminster, BC	Population: 70 996 Density: 4543	<ul style="list-style-type: none"> • Advocacy group initiated petition calling for more bathrooms
Oliver, BC	Population: 4928 Density: 896.0	<ul style="list-style-type: none"> • 3 portable toilets with hand washing stations installed downtown
Osoyoos, BC	Population: 5085 Density: 598.2	<ul style="list-style-type: none"> • Portable toilets placed at truck stops all along Highway 3; province announced more will be funded • Dairy Queen put up portable toilet
Penticton, BC	Population: 33 761 Density: 801.8	<ul style="list-style-type: none"> • Council pursuing CAD 400 000 grant for public washrooms along Riverside Drive (2 unisex facilities) and Gyro Park (5–6 accessible, unisex, winterized stalls)
Prince Rupert, BC	Population: 12 220 Density: 184.4	<ul style="list-style-type: none"> • Council pursuing CAD 200 000 funding for installation of 24-hour, stand-alone public washroom facility
Quesnel, BC	Population: 9879 Density: 279.2	<ul style="list-style-type: none"> • Partnership between City and Emergency Management BC: temporary washrooms in 2 city parks, serviced and cleaned daily, includes hand washing stations
Sidney, BC	Population: 11 672 Density: 2290	<ul style="list-style-type: none"> • Saanich Peninsula Chamber of Commerce request for funding from city councils to cover costs of cleaning washrooms on HWY 17
Vancouver, BC	Population: 631 486 Density: 5492	<ul style="list-style-type: none"> • Vancouver Park Board operates 97 public bathrooms in parks and beaches across the city (sanitized and cleaned twice-daily) • City of Vancouver operates 11 automated public toilets and two comfort stations underground, plus 3 temporary washroom trailers • Set up portable toilets • Temporary washroom facilities set up in Strathcona Park homeless encampment
Vernon, BC	Population: 40 116 Density: 417.7	<ul style="list-style-type: none"> • One portable washroom set up in downtown, open 24 hours on 3-month trial basis • Modest, architecturally interesting washroom being constructed on Okanagan Rail Trail (fully equipped, universal stalls)
Whistler, BC	Population: 11 854 Density: 49.3	<ul style="list-style-type: none"> • Public washroom project includes 28 new toilet and urinal stalls in Whistler Village (accessible, family, universal options at each location)
Collingwood, ON	Population: 21 793 Density: 645.1	<ul style="list-style-type: none"> • Extending hours at park washroom
Gananoque, ON	Population: 5159 Density: 733.6	<ul style="list-style-type: none"> • Reopening previously closed washrooms; hired students for extra hours/cost savings due to cleaning and longer opening hours
Hamilton, ON	Population: 536 917 Density: 480.6	<ul style="list-style-type: none"> • City previously provided 6 portable toilets (removed as businesses reopened) • City set up portable washrooms in the core • St. Patrick parish to offer hygiene and rest space in the back of the church • Bylaw officers not handing out fines for public urination or defecation • McMaster graduate students presented to Emergency and Community Services Committee on dire need for washrooms; council considering feasibility of all-season public washrooms

Continued on the following page

TABLE 1 (continued)
Investments and initiatives in public washrooms by location (city, province) as indicated in news piece, March 2020 to March 2021

Location	Demographics ^a	Investment/initiative
Kincardine, ON	Population: 11 389 Density: 21.2	<ul style="list-style-type: none"> • Portable toilets set up at select beach access locations
London, ON	Population: 383 822 Density: 913.1	<ul style="list-style-type: none"> • City of London, downtown YMCA partnered to provide sanitation services to homeless
Ottawa, ON	Population: 934 243 Density: 334.8	<ul style="list-style-type: none"> • Installed a dozen temporary portable toilets • Rents and pays staff to clean porta-potties across the city • GottaGo! campaign wrote to mayor requesting stand-alone public toilets in strategic locations (parks, high pedestrian traffic locations) • Short-listed two self-cleaning toilets among projects suitable for short-term federal and provincial COVID-19 funding
Quinte West, ON	Population: 43 577 Density: 88.2	<ul style="list-style-type: none"> • Two porta-potties installed at park and splashpad
Toronto, ON	Population: 2 731 571 Density: 4334.4	<ul style="list-style-type: none"> • TTC to place portable toilets at locations previously decided in collaboration with TTC drivers • City has opened sanitation and washroom service locations across the city, ranging from portables to fully equipped locations • City announced 79 new winter washrooms, on top of existing 64: at parks, stadiums, fieldhouses, other City-run locations normally inaccessible in colder months • Washrooms provided at 47 outdoor rinks once season begins in late November • Durham region opened community centres and added portable facilities
St. Catharines, ON	Population: 133 113 Density: 1384.8	<ul style="list-style-type: none"> • Municipality looking into self-cleaning washrooms that could be open year-round (as part of capital budget process)
Winnipeg, MB	Population: 705 244 Density: 1518.8	<ul style="list-style-type: none"> • City has CAD 670 000 grant to build one more permanent 24/7 washroom in the downtown, following pop-up toilet project from years prior • Bridgman Collaborative Architecture donating land for installation of permanent toilet • Proposed pilot project: City will partner with businesses to keep washrooms open, accessible, clean • 7 temporary public washrooms being set up, to be followed by permanent sites, after adopting “Places to Go” downtown public restroom strategy • Millennium Library shelter, St. Boniface Library shelter to be open daily with washrooms, funded by City
Calgary, AB	Population: 1 239 220 Density: 1501.1	<ul style="list-style-type: none"> • CAD 4.5 million funding for parks in Calgary area, some of which will support work in Fish Creek (trail improvements, parking, washrooms, shelters)
Edmonton, AB	Population: 932 546 Density: 1360.9	<ul style="list-style-type: none"> • City worked with local social agency to provide attendants at some public toilets, boosted cleaning of unstaffed parks washrooms
Montréal, QC	Population: 1 704 694 Density: 4662.1	<ul style="list-style-type: none"> • 139 porta-potties installed in various boroughs • 4 self-cleaning toilets in downtown core (pre-pandemic) • Portable toilets provided at outdoor drive-in theatres, to be sanitized and cleaned after each use
Halifax, NS	Population: 403 131 Density: 73.4	<ul style="list-style-type: none"> • 2 portable washrooms installed in plaza behind Halifax Central Library • Added public toilets information to open data site
Regina, SK	Population: 215 106 Density: 1195.2	<ul style="list-style-type: none"> • Husky Convenience washrooms and shower facilities are staying open • Tim Hortons said 400 of its locations along major highways across Canada have washrooms available for truckers
Saskatoon, SK	Population: 246 376 Density: 1080.0	<ul style="list-style-type: none"> • AIDS Saskatoon opened washroom to public; Saskatoon Community Foundation has paid for regular cleaning
Moncton, NB	Population: 71 889 Density: 506.5	<ul style="list-style-type: none"> • Put out tender for CAD 300 000 to purchase 2 permanent, self-cleaning toilet units (unisex) for downtown
Saint John, NB	Population: 67 575 Density: 213.9	<ul style="list-style-type: none"> • CAD 100 000 for improvements and accessibility upgrades at public library

Abbreviations: AB, Alberta; BC, British Columbia; CAD, Canadian dollars; MB, Manitoba; N/A, not available; NB, New Brunswick; NS, Nova Scotia; ON, Ontario; QC, Quebec; SK, Saskatchewan.

^a Population counts and density per square kilometre; 2016 Statistics Canada Census Profile for municipalities.

of the particular journalist and news outlet. Practically, news databases are not as searchable or reliable as academic literature databases. In terms of implementation, news reporting may not reflect the intentions of the decision makers in the stories, and in our case, news scanning may not capture the full extent of efforts addressing public washroom provision. A limitation specific to our study was the exclusion of non-English articles. Canada is an officially bilingual country, and we did not capture news from smaller or exclusively French-speaking communities where there may have been different efforts to address the issue of public washrooms. This limited the scope of our dataset and findings.

Conclusion

In creating a dataset drawn from news reports about public washrooms during the early stages of the COVID-19 pandemic, we were able to demonstrate the method of systematic news media scanning and synthesis, while bringing attention to the issue of public washrooms as being one of scale. News-generated datasets can prompt action on public health issues otherwise neglected in research and policy.

Conflicts of interest

The authors declare no conflicts of interest with respect to the research, authorship or publication of this article.

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Authors' contributions and statement

JL—conceptualization, methodology, analysis, writing—original draft. EM—conceptualization, analysis, writing—review and editing.

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