

BMJ Open How COVID-19 has impacted access to healthcare and social resources among individuals experiencing homelessness in Canada: a scoping review

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To cite: Maretzki M, Geiger R, Buxton JA. How COVID-19 has impacted access to healthcare and social resources among individuals experiencing homelessness in Canada: a scoping review. *BMJ Open* 2022;**12**:e058233. doi:10.1136/bmjopen-2021-058233

► Prepublication history and additional supplemental material for this paper are available online. To view these files, please visit the journal online (<http://dx.doi.org/10.1136/bmjopen-2021-058233>).

Received 17 October 2021
Accepted 06 July 2022



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ABSTRACT

Objectives In Canada, individuals experiencing homelessness (IEH) rely on public health and social services for healthcare, food and basic necessities. The COVID-19 pandemic has disproportionately affected marginalised populations, in part by impacting their access to such services. We performed a scoping review to identify from the published literature how access to services has changed for Canadian IEH during the pandemic.

Data sources OVID Medline, Web of Science, Sociological Abstracts, CINAHL and OVID EmCare databases, and websites for the Salvation Army, Homeless Hub, Canadian Alliance to End Homelessness, Canadian Network for the Health and Housing of People Experiencing Homelessness and BC Centre for Disease Control.

Study design We used the scoping review methodology developed by the Joanna Briggs Institute framework and defined access to healthcare and social services using the 10-component Levesque framework. Academic databases and grey literature searches were used, with the final searches for each taking place 24 May and 1 June 2021, respectively. Data were compiled into an Excel spreadsheet. Title and abstract screening and full-text review were completed by two independent reviewers (RG and MM). Data extraction was completed by MM and cross checked by RG.

Results In total, 17 academic and grey literature articles were included. Positive and negative changes in service access were reported in the literature. During the COVID-19 pandemic, access to social and healthcare resources was generally reduced for Canadian IEH. A new component of access, digital connectivity, was identified. Unexpectedly, coordination and collaboration of services improved, as did the number of outreach services.

Conclusions Positive changes to service access such as improved coordination of services should be scaled up. Further work should be done to improve access to digital technologies for IEH.

INTRODUCTION

COVID-19 has had devastating impacts globally, leading to increased morbidity, mortality and unprecedented changes to daily life. Although everyone has been impacted by the pandemic, the homeless population

STRENGTHS AND LIMITATIONS OF THIS STUDY

- ⇒ Our study is the first of its kind to synthesise existing literature to examine how the pandemic has impacted access to health and social resources for individuals experiencing homelessness in Canada.
- ⇒ Scientific rigour was maintained through the use of a standardised protocol (Systematic Reviews and Meta-Analyses extension for Scoping Reviews), inclusion of a second reviewer and consultation with subject matter experts.
- ⇒ Our study used a variety of different databases and grey literature to ensure data capture included perspectives from different fields.
- ⇒ Only articles written in the English language were included; this likely excluded relevant literature.
- ⇒ Consultation with people with lived and living experience of homelessness was not undertaken in this scoping review and would have aided in contextualising results and adding richness and depth to findings.

is a particularly vulnerable group that has faced additional challenges and barriers to accessing various healthcare and social services.¹ Beyond pandemic conditions, individuals experiencing homelessness (IEH) face disproportionate health inequities relative to the general population.²

‘Homelessness’ is a broad definition describing a variety of sheltering conditions. According to the Canadian Observatory on Homelessness, it encompasses ‘the lack of stable, permanent, appropriate housing or the immediate prospect, means and ability of acquiring it’.³ This review encompassed several typologies of homelessness, including unsheltered homelessness, emergency sheltered homelessness, provisionally accommodated homelessness and those at risk of homelessness.¹

Canada’s struggle with homelessness emerged in the 1980s as the result of economic shifts, cuts to social spending, and

reduced government investment in affordable housing.⁴ Over the last 40 years, the number of IEH in Canada has grown, with an estimated 35 000 Canadians facing homelessness on any given night, and at least 235 000 Canadians experiencing homelessness at least once over the course of a single year.⁴ Unfortunately, Canada's traditionally reactive approach to homelessness has led to a reliance on services such as emergency shelters to meet the needs of individuals already homeless. While these are essential services, they are ultimately ineffective at reducing the prevalence of homelessness. Despite recent initiatives such as the 'Housing First' programme which provides low barrier, permanent housing, homelessness remains a complex and pervasive issue.⁴

Some subgroups of IEH including youth, Indigenous peoples (including First Nations, Métis and Inuit), those identifying as LGBTQ2S+ (lesbian, gay, bisexual, transgender, queer or questioning and two-spirit) and women face additional unique challenges.⁴⁻⁷ Concerns related to sexual and economic exploitation, trauma, colonialism, criminalisation, racism, stigmatisation and domestic violence disproportionately impact these groups.⁴⁻¹²

Services that are specifically tailored towards subgroups are necessary to account for unique circumstances and identities.¹⁰ However, even when services are theoretically available, inequities exist that create barriers to accessing care for these populations, including discrimination and stigma, addiction and mental illness.⁸ These difficulties are compounded by structural and environmental barriers such as when individuals lack a permanent address or health card and face a paucity of affordable transportation options.³ When individuals are able to access healthcare, gaps and barriers still exist to receiving comprehensive and timely care due to stigma from healthcare professionals, distrust of service providers by IEH and poor coordination of care systems.^{8,13}

In Canada, the Canadian Health Act provides publicly funded healthcare for all citizens, covering all in-hospital care as well as medications (for certain groups).¹⁴ Despite this theoretically equal access to 'free' care, during COVID-19 IEH were 20 times more likely to be hospitalised from the disease, 10 times more likely to receive care in the intensive care unit and five times more likely to die 3 weeks after receiving a positive COVID-19 test compared with the general population.¹⁵

According to Levesque *et al*, access is the product of dynamic interactions between characteristics of services and characteristics of individuals seeking these services which occur over the process of achieving healthcare. Access can be deconstructed into supply-side features (accessibility) and characteristics of the individual seeking access (ability).¹⁶ Accessibility and ability characteristics interface with each other with the potential to produce the outcome of access to a service. This interaction is centred around the steps taken to obtain access, creating a patient-centred framework (figure 1). This accounts for the physical, social and structural environments of access and utilisation of services and provides a means

of identifying and mapping facilitators and barriers to healthcare access at each stage of the process.¹⁶

COVID-19 has disproportionately affected the health, well-being and daily lives of IEH. With the closure of businesses, services and public areas, it is likely that access to essential resources for IEH has been further altered, but as of yet no formal synthesis of existing literature has examined how COVID-19 has impacted access for IEH across Canada. This scoping review will capture and map the breadth and depth of available literature to understand how the pandemic has affected access to healthcare and social resources for IEH in Canada.

METHODS

A scoping review methodology was used based on the Joanna Briggs Institute framework for scoping reviews alongside the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) for reporting findings.¹⁷ Both academic and grey literature were examined to ensure comprehensive analysis of the available literature.

Search strategy

Eligibility criteria

Both database searches and grey literature were subjected to the same inclusion criteria. These were as follows:

Inclusion criteria

- ▶ Relates to homeless individuals and COVID-19 and health or social resource access.
- ▶ Research focus includes a region within Canada (either exclusively or in comparison with another jurisdiction).
- ▶ Article is written in English.
- ▶ Articles published from 1 January 2020 onwards will be considered, with the final database search taking place on 24 May 2021, and the final grey literature search taking place 1 June 2021.

The search strategy and review protocol (unpublished) were iteratively developed alongside the input from a Health Science librarian from McMaster University. Iterations included refining which databases and subject headings to utilise. OVID Medline, Web of Science, Sociological Abstracts, CINAHL and OVID EmCare were used to obtain academic literature using the subject headings of (COVID-19) AND (Canada) AND (Homeless persons). Subject headings and Boolean operators were adjusted as necessary for each database. The final database search was run on 24 May 2021 (see online supplemental figure 1 for OVID Medline database search strategy). Two reviewers (MM and RG) independently completed title and abstract screening and full-text review; one reviewer (MM) completed citation chaining. All articles were cross checked by RG during title and abstract screening, full-text review and data extraction using the predetermined inclusion criteria. Disagreement regarding the inclusion of articles was resolved through discussion between MM

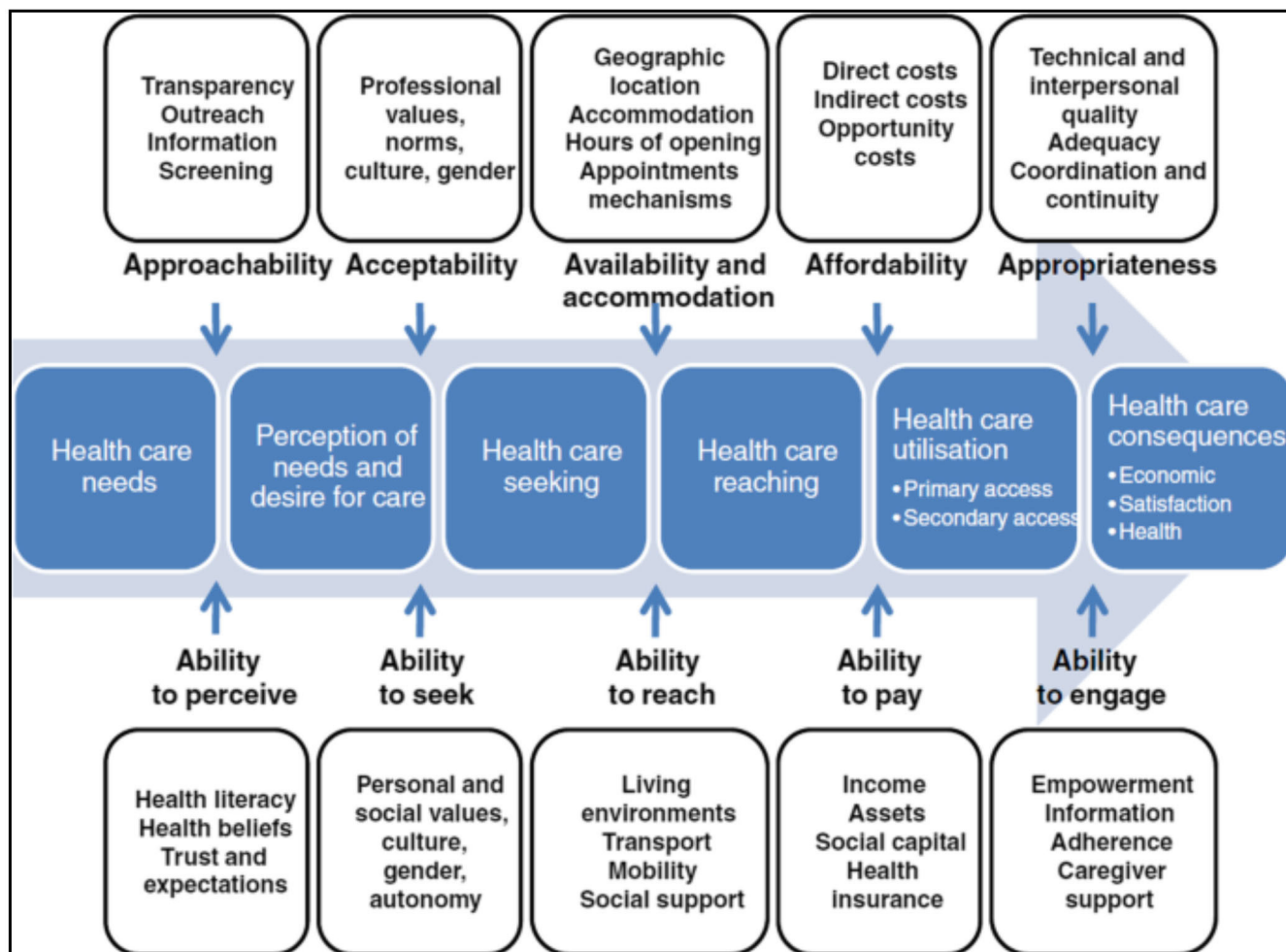


Figure 1 Conceptual framework by Levesque *et al*¹⁶ on access to healthcare.

and RG over a Zoom meeting, which ultimately resulted in consensus. The involvement of a third individual was not necessary as no instances occurred in which consensus was unattainable.

The protocol by Godin *et al* was used to identify grey literature sources and included advanced Google searches in combination with targeted website searches. The Salvation Army, Homeless Hub, Canadian Alliance to End Homelessness, Canadian Network for the Health and Housing of People Experiencing Homelessness and the BC Centre for Disease Control were used in targeted website searches.¹⁸ Due to the variability of grey literature as noted by Godin *et al*, search terms used previously in academic database searches often did not return results and were, therefore, adapted to five key terms capturing the core concepts of the study- COVID-19*, homeless*, social, health* and Canada. These were used for advanced google searches and targeted website searches. The final grey literature search was completed on 1 June 2021. In accordance with the protocol by Godin *et al*, title and abstract screening for grey literature was completed by one reviewer (MM). Expert consultation was completed with subject matter expert JAB (expert in harm reduction and public health) regarding current barriers to accessing

healthcare and social services for IEH in Canada, and how this aligned with the research findings from the present study. JAB also provided guidance regarding websites to be included for grey literature searches.

Data extraction

All data extraction was entered in an Excel spreadsheet which was collaboratively developed by MM, RG and JAB with the assistance of a science librarian. Information pertaining to the 10 components of the Levesque framework was extracted. Other spreadsheet components included the articles' citation, type of article, methods used, geographic area and population of focus, useful quotes, additional information and aspects of access not addressed by the Levesque framework. During extraction, data regarding digital connectivity was repeatedly seen in the literature. Consultation among authors led to consensus that this was a novel component of access not previously captured by Levesque *et al* and, thus, it was included as a separate, novel category for data extraction. MM completed data extraction using the Excel sheet. Independent reviewer RG then reviewed all included articles and cross-checked information. Any disagreement regarding final inclusion of data was resolved through

discussion over a Zoom meeting, with consensus being met in all cases and the inclusion of a third reviewer not necessary. The intent of the present scoping review is to provide a clear indication of the volume of current literature and describe the literature available on the subject. In accordance with the definition of a scoping review by Munn *et al*, a critical appraisal is beyond the scope of this methodology, as the aim is rather to map what literature currently exists on this emerging health issue.¹⁹ Critical appraisal (steps 12 and 16) of the PRISMA-ScR checklist was, therefore, not conducted. In total, 17 articles were included.

Synthesis

For the 17 articles included in the scoping review, a table was created (table 1) to synthesise and compare the articles based on the type of study and methodology. This table also features the region and population of focus and components of the Levesque framework included in the article. This helps to identify what components are included in which articles as well as where data tend to focus in terms of geography and population. Figure 2 provides an overview of the selection process that produced the 17 articles used in this review. Using the extracted data related to the 10 components of the Levesque framework and the novel category of digital connectivity, themes regarding how access has changed were identified (ie, if access improved or worsened, and how) based on recurring findings from the literature within each category of data collected. These findings were synthesised and summarised in table 2. In the discussion, the interaction between components of access is further described. Some of the characteristics identified in the articles were then translated to a graph (figure 3) to visually represent the number of articles that address each of the accessibility and ability characteristics of the Levesque framework as well as the novel category of digital connectivity.

Patient and public involvement

No patient involved.

RESULTS

Overview

Two searches were run using the scholarly databases, with the final search on 24 May 2021. In total, 257 articles were imported for screening; 107 were removed as duplicates leaving 150 articles for title and abstract screening. Of these, 105 were deemed irrelevant by both reviewers, leaving 45 articles for full-text review. This process yielded 33 additional exclusions that were agreed on and recorded by both reviewers. The most common reasons for exclusion were ‘wrong study design’ or ‘does not assess access’ (both n=17). In total, 12 articles were included for data extraction. Citation chaining produced eight additional articles, none of which fits the inclusion criteria and was excluded after independent review by MM and RG.

In total, 73 grey literature articles were identified, with the last grey literature search completed on 1 June. Nine duplicates were removed, leaving 64 articles for title and abstract screening. During title and abstract screening, an additional 39 articles were removed, leaving 25 articles for full-text screening. During screening, additional articles were removed for not assessing access (n=10) and wrong study design (n=5). Ultimately, 10 articles from the grey literature were included for extraction, leading to a cumulative 22 articles for extraction.

During extraction, reviewers independently agreed on the removal of an additional five articles, for reasons of: duplication (n=1), not assessing access (n=3) and failure to address COVID-19 expansively (n=1). In total, 17 articles were included in analysis, eight from grey literature and nine from academic databases (figure 2). Included articles were primarily qualitative in nature (n=10), with some including quantitative (n=4) and mixed-method (n=3) designs (table 1). In terms of geography of focus, eight articles examined Canada broadly, five were Ontario-specific (primarily focused on the Greater Toronto Area), three were specific to BC (mainly focusing on the Vancouver area), and one was focused in Alberta. All articles pertained to the experiences of IEH in Canada, however, the specific population of focus varied. Women and girls were highlighted in two articles, as were youth and service providers. The remaining articles (n=11) pertained to the experiences of IEH more generally.

In terms of the 10 characteristics of access defined by Levesque, accessibility criteria were identified in more of the articles than ability criteria (figure 3). ‘Availability and accommodation’ and ‘appropriateness’ were categories most frequently identified (n=16, n=15, respectively). Approachability was noted in 11 articles, and acceptability and affordability were each mentioned in six articles. Criteria relating to ‘ability’ were less frequently identified in the literature. Content regarding the ability to perceive and to seek healthcare were each found in four articles, ability to engage was identified in five while the ability to reach and the ability to pay were each identified in six articles. A new category, digital connectivity was identified and agreed on by both reviewers during the data extraction process. This dimension was found in five articles but did not fit into the Levesque framework categories. An overview of included articles is found in table 1.

Themes

Data were compiled into 11 themes, the first 10 falling under the components of the Levesque framework (figure 1). Digital connectivity was also identified as a recurring finding and is not accounted for by the Levesque framework. Because of this, ‘digital connectivity’ was added as an 11th category and analysed separately given its cross-cutting nature. As a result of the interconnectedness inherent to access as posed by the Levesque framework, the themes identified under each ‘pair’ of accessibility and ability criteria are analysed together (table 2).¹⁶

Table 1 Overview of included articles from database and grey literature searches

Study number	Reference list number	Data type	Methods	Region of focus	Population of focus	Themes identified
1	21	Qualitative	Qualitative report involving interviews with members of the BC Coalition to End Youth Homelessness including youth experiencing homelessness	BC, Canada	Youth experiencing homelessness	Approachability, availability and accommodation, affordability, ability to perceive, ability to seek, ability to reach, ability to pay, digital connectivity
2	20	Qualitative	Qualitative survey of service providers working with youth experiencing homelessness	Canada	Service sector	Approachability, acceptability, availability and accommodation, affordability, appropriateness, ability to perceive, ability to seek, ability to reach, ability to pay, digital connectivity
3	22	Mixed-qualitative and quantitative	Secondary analysis of data including quantitative data from regional, provincial, and national sources and qualitative data from published reports, advisory bodies and narrative accounts	Vancouver, BC, Canada	Individuals experiencing homelessness	Approachability, availability and accommodation, affordability, appropriateness
4	24	Qualitative	Qualitative report including literature review, examination of local media sources, and key informant interviews with service providers	Hastings Prince Edward, Ontario, Canada	Individuals experiencing homelessness	Approachability, availability and accommodation, appropriateness, ability to reach
5	23	Qualitative	Qualitative report involving interviews with IEH, in particular women experiencing homelessness	Canada	Women experiencing homelessness	Approachability, availability and accommodation, appropriateness, ability to pay
6	32	Qualitative	Qualitative literature review of peer and non-peer reviewed academic and grey literature examining actions implemented to meet health and social needs of IEH	Ontario, Canada	Individuals experiencing homelessness	Acceptability, availability and accommodation, appropriateness
7	30	Qualitative	Qualitative report summarising activities of Médecins Sans Frontières (MSF) teams across Canada during the COVID-19 pandemic	Canada	Individuals experiencing homelessness	Availability and accommodation, appropriateness
8	26	Qualitative	Qualitative summary of findings from surveys and focus groups with youth service providers and youth experiencing homelessness and synthesis of peer-reviewed literature	Canada	Youth experiencing homelessness	Approachability, acceptability, availability and accommodation, affordability, appropriateness, ability to seek, ability to pay, ability to engage, digital connectivity
9	27	Mixed - qualitative and quantitative	Scoping review of peer-reviewed literature on pandemic response and community planning for IEH including qualitative and quantitative analysis	English speaking countries including Canada	Individuals experiencing homelessness	Approachability, availability and accommodation, appropriateness, ability to reach
10	35	Mixed - qualitative and quantitative	Intervention evaluation regarding provision of technology to IEH in an emergency department setting using semi structured qualitative interviews with IEH, and quantitative surveys for healthcare service providers	Greater Toronto Area, Ontario, Canada	Individuals experiencing homelessness	Appropriateness, digital connectivity
11	28	Quantitative	Quantitative survey of service providers across Canada exploring barriers and facilitators to change in housing and mental health for IEH	Canada	Service providers	Availability and accommodation, appropriateness, ability to engage
12	29	Quantitative	Quantitative analysis of outreach testing in shelters including comparison of COVID-19 positivity rates between shelters where testing was done because of an outbreak vs for surveillance	Toronto, Ontario, Canada	Individuals experiencing homelessness	Approachability, availability and accommodation, affordability, ability to seek
13	25	Quantitative	Qualitative synthesis of results from focus groups with 'peer health mentors', regarding changes to work during dual public health emergencies	Vancouver, BC, Canada	People recently released from prisons (into homelessness)	Approachability, acceptability, availability and accommodation, appropriateness, ability to perceive, ability to reach, ability to engage, digital connectivity
14	31	Quantitative	Quantitative analysis of pilot project involving shelter restructuring, screening, and rapid testing to reduce COVID-19 in shelters	Hamilton, Ontario, Canada	Individuals experiencing homelessness	Availability and accommodation, appropriateness, ability to reach

Continued

Table 1 Continued

Study number	Reference list number	Data type	Methods	Region of focus	Population of focus	Themes identified
15	1	Qualitative	Qualitative analysis of peer and non-peer reviewed literature regarding unique experiences of IEH throughout the COVID-19 pandemic	North America, including Canada	Individuals experiencing homelessness	Approachability, acceptability, appropriateness, ability to perceive, ability to pay, ability to engage
16	33	Qualitative	Qualitative analysis of peer and non-peer reviewed literature regarding perspectives of women and girls experiencing homelessness during the COVID-19 pandemic	Canada	Girls experiencing homelessness	Availability and accommodation, ability to pay
17	34	Qualitative	Qualitative evaluation of intervention providing disposable cups to IEH, to prevent COVID-19 transmission using interviews with programme users and staff to assess the effectiveness of safer drinking practices	Calgary, Alberta, Canada	People experiencing homelessness or unstable housing	Approachability, acceptability, availability and accommodation, affordability, ability to engage
IEH, individuals experiencing homelessness.						

Approachability and ability to perceive

Overall, although outreach was expanded during the pandemic, communication was ineffective and inadequate (approachability), and health literacy and trust in the system relating to COVID-19 messaging was low (ability to perceive). Outreach initiatives such as provision of naloxone²⁰ and mobile COVID-19 testing improved during the pandemic; however, information regarding public health mandates was found to be unclear,²¹ lacked timeliness and/or was inaccessible due to language barriers.^{1 22 23} This contributed to poorer health literacy²⁴ and reduced trust in the system for youth in particular.^{20 21}

Acceptability and ability to seek

In general, services offered during the pandemic were deemed unacceptable (acceptability) and help-seeking behaviours were reduced (ability to seek). A lack of appropriate services for vulnerable groups (youth, LGBTQ2S+, and Indigenous groups) was problematic and contributed to disconnection from communities.²⁵ Youth in particular found virtual services to be unsafe and unacceptable.²⁶ Preference for face to face services may have reduced help-seeking behaviour,²⁰ and viewing services like shelters as unacceptable may have led individuals to choose to sleep outside (ability to Seek).²¹

Availability and accommodation and ability to reach

Service closures reduced service availability, despite many initiatives enacted to meet the immediate needs of IEH, including provision of hotels to increase shelter spaces, temporary washrooms and hygiene spaces, and on-site shelter COVID-19 testing (availability and accommodation).^{1 20-23 25-34} While there were increased outreach services, it was generally difficult to access resources due to reductions in transportation and the transient lifestyles of many IEH (ability to reach). This was especially true for those living in rural areas.^{20 24}

Affordability and ability to pay

Emergency response funding increased during the pandemic for IEH at federal and provincial levels, and low-cost or free harm reduction initiatives were implemented.^{20 26 29 34} Despite this, housing affordability remains a primary issue for those who are precariously housed (affordability).^{21 22} Women were disproportionately affected by job losses during the pandemic and have been slower to recoup financial losses and regain employment (ability to pay).^{23 26 33}

Appropriateness and ability to engage

Despite service closures, collaboration between stakeholders and continuity of services was improved, as seen by reduced service duplication, fewer IEH being discharged into homelessness and increased emergency shelter spaces.^{20 22 27 31 32 35} However, the quality of services (in particular, emergency shelters) was deemed poor (appropriateness).^{1 21 23 24 30} Overall, IEH

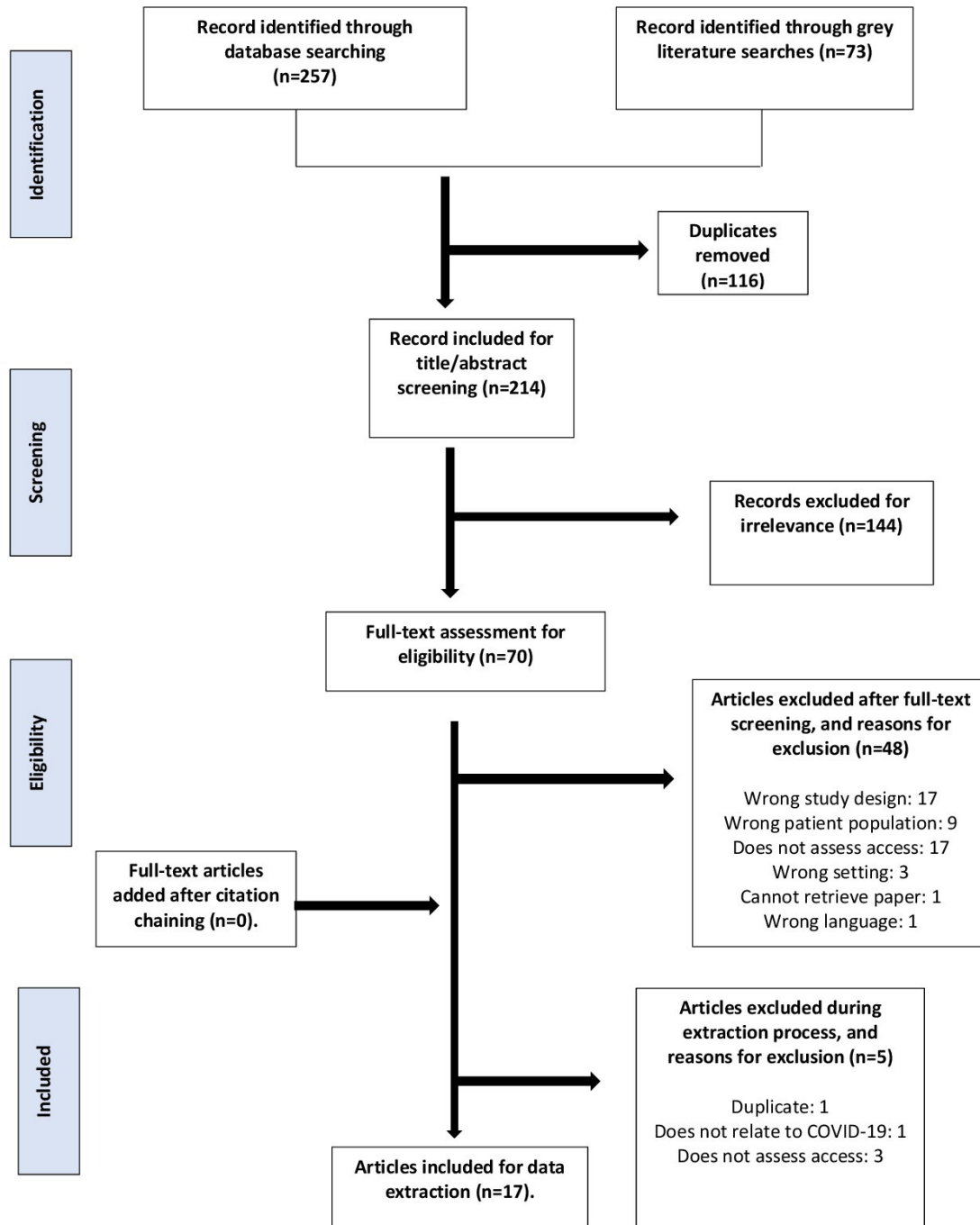


Figure 2 Preferred Reporting Items for Systematic Reviews and Meta-Analyses Extension for Scoping Reviews flow chart.

readily engaged in their care when given the opportunity, but poor quality of care, mental illness and substance use made engagement more difficult (ability to engage).^{1 25 28 34}

Digital connectivity

Digital connectivity was identified as a novel category relating to access in pandemic times for IEH. Access to a mobile phone, phone plan, internet and safe spaces to engage in virtual care were problematic barriers for IEH, with inability to afford digital technology or internet precluding engagement in virtual services.^{20 21 25 26 35}

DISCUSSION

Summary of findings

During the COVID-19 pandemic, access to social and healthcare resources was generally reduced for Canadian IEH. While each component of access can be placed into discrete categories, in reality, they interact in complex ways.¹⁶ Furthermore, while the present search was restricted to examining access to services for IEH in Canada during the COVID-19 pandemic, inequitable health outcomes flow from disparate access to resources, and, thus, such outcomes are briefly described in relation to the results.

Table 2 Overview of themes identified from Levesque framework components

Theme pair (Theme #)	Accessibility criteria	Ability criteria
Approachability (1) and ability to perceive (2)	<p>Approachability: a characteristic of services that relates to whether individuals can identify that a service actually exists. Components of approachability include transparency, outreach, and information sharing.¹⁶ Results: While outreach expanded during the pandemic, communication was ineffective and/or inadequate. Outreach expansion²⁶</p> <ul style="list-style-type: none"> ▲ Provision of naloxone and education on overdose prevention was expanded to organisations that previously did not supply these resources²⁰ ▲ Additional online and print resources were produced ▲ Mobile outreach to provide testing and information at shelters and temporary living spaces increased²⁹ ▲ Harm reduction initiatives to reduce viral spread were implemented³⁴ <p>Communication</p> <ul style="list-style-type: none"> ▲ Unclear and insufficient information regarding public health mandates and changes to services related to the pandemic²¹ ▲ Information was inaccessible to individuals whose first language was not English²² ▲ Information lacked timeliness and ease of access and was inconsistent^{1, 23} 	<p>Ability to perceive: relates to factors such as health literacy and beliefs, as well as trust and expectations towards healthcare.¹⁶ Results: Health literacy and trust in 'the system' is low among IEH. Health literacy:</p> <ul style="list-style-type: none"> ▲ Trust and health literacy are low ▲ Youth and individuals leaving prison were more greatly disadvantaged in maintaining health literacy ▲ Youth in particular had difficulty understanding public health mandates (ie, physical distancing) and became frustrated with changing rules, which reduced their trust in the system^{20, 21} ▲ Individuals leaving prison were often less aware of changes resulting from the pandemic including increased toxicity of the drug supply²⁵ ▲ Mental illness and substance use impacted health literacy and created barriers to understanding public health measures¹
Acceptability (3) and ability to seek (4)	<p>Acceptability: pertains to sociocultural factors that determine whether individuals find the service in question acceptable, and whether it is appropriate for certain individuals to seek care. This includes professional values, norms, culture, and gender considerations.¹⁶ Results: Services are consistently being deemed unacceptable and connections to cultural supports are often challenging.²⁰ Transient lifestyle of IEH made health and social services difficult to engage in.¹ Cultural Supports</p> <ul style="list-style-type: none"> ▲ Those who require cultural supports or have additional vulnerabilities faced disconnection from their communities because of a lack of services that meet their needs ▲ While some services, for example Indigenous-specific shelters were established in some provinces, connecting with these services was difficult and the supply could not meet the demand^{25, 32} ▲ Virtual services were seen as unsafe by many youth (ie, worries over a partner becoming aware of lifestyle factors such as sex work) ▲ Youth as well as providers for YEH emphasised a preference for face-to-face contact²⁶ <p>Novel harm reduction approaches</p> <ul style="list-style-type: none"> ▲ An initiative to provide disposable cups among those living with alcohol use disorder to reduce COVID-19 transmission was found to be beneficial and in line with values of both clients and providers³⁴ 	<p>Ability to seek: describes the intent to seek care based on factors of autonomy, capacity, and knowledge of options.¹⁶ Results: IEH experienced reduced help-seeking behaviours during the pandemic. Fear of contracting COVID-19, preference for face-to-face services and lack of awareness of service options, also reduced help-seeking behaviour.^{20, 29}</p> <p>Awareness of care options</p> <ul style="list-style-type: none"> ▲ Many service providers for YEH were concerned that youth were unaware of new mental health service adaptations and substance use adaptations²⁶
Availability and accommodation (5) and the ability to reach (6)	<p>Availability and Accommodation: relate to factors such as geographic location of a service, hours of operation, and appointment mechanisms.¹⁶ Results: Service availability and capacity were impacted by closures. Insufficient space in shelters, reduction of services or services not taking on new clients (including harm reduction services, healthcare, and libraries), and a lack of places to maintain hygiene were common issues faced by IEH during the pandemic.</p> <p>Temporary shelters and hygiene stations^{1, 13, 20-27, 29-31, 33, 34}</p> <ul style="list-style-type: none"> ▲ Motels and hotels provided additional shelter space for IEH during the pandemic ▲ Temporary showers and washrooms and hygiene stations were established ▲ Restructuring of shelter spaces helped individuals to maintain safe physical distance ▲ On-site COVID-19 testing removed some geographic barriers to accessing care 	<p>Ability to reach: relates to an individual's living environment, access to transport and overall mobility.¹⁶ Results: IEH experienced difficulty in accessing resources due to reductions in transportation and transient lifestyles.</p> <p>Transportation</p> <ul style="list-style-type: none"> ▲ Transportation services were reduced substantially during the pandemic and presented a substantial challenge especially for individuals living in rural areas^{20, 21, 24} <p>Transient lifestyle</p> <ul style="list-style-type: none"> ▲ Access to services that is, receiving a second dose of a COVID-19 vaccination in a timely manner was more complex for individuals with transient lifestyles²⁷ <p>Designated transport vehicles were established for IEH to access isolation centres³¹</p>

Continued

Table 2 Continued

Theme pair (Theme #)	Accessibility criteria	Ability criteria
Affordability (7) and ability to pay (8)	<p>Affordability: encompasses direct and indirect costs of services as well as opportunity costs.¹⁶ Results: Emergency response funding was increased for IEH as well as additional free outreach services; however housing affordability was and remains a primary issue. Emergency response funding</p> <ul style="list-style-type: none"> ▶ Access to federal, provincial, or territorial funds increased²⁰ ▶ Free services such as COVID-19 testing for those without provincial health insurance, social media chats and webinars, and harm reduction initiatives allowed for low-cost or free access to some services^{26, 29, 34, 2} <p>Home affordability</p> <ul style="list-style-type: none"> ▶ Allotted financial support may still be insufficient for those who are precariously housed^{21, 22} 	<p>Ability to pay: pertains to income, assets, social capital, and means of generating economic resources.¹⁶ Results: Loss of income was a common experience during the pandemic, particularly for women and economic opportunities were reduced.²⁶ Changes to sources of income</p> <ul style="list-style-type: none"> ▶ Some sources of income include panhandling and sex work were reduced; during lockdowns, social distancing measures reduced the ability of individuals to engage in these activities¹ <p>Job loss for women</p> <ul style="list-style-type: none"> ▶ Women were disproportionately affected by job losses, and have been slower to recoup financial losses and regain employment^{23, 33} ▶ Some women who are precariously housed turned to virtual sex work in order to maintain their housing²¹ <p>Emergency benefits Canadian Emergency Response Benefit (CERB)</p> <ul style="list-style-type: none"> ▶ CERB was a federally funded financial support programme for Canadians affected by pandemic-related financial losses ▶ For youth especially, difficulty obtaining information on eligibility and the benefits and detriments of obtaining CERB vs receiving other supports were unclear - thus many youth applied but will face increased debt when claw-backs occurs^{20, 21}
Appropriateness (9) and ability to engage (10)	<p>Appropriateness: refers to the quality, adequacy, coordination and continuity of care.¹⁶ Results: Despite closure of services, continuity and coordination between stakeholders have actually increased, although the quality of certain resources (specifically shelters) remains poor. Coordination</p> <ul style="list-style-type: none"> ▶ Coordination between the private sector, government, and community improved, and allowed for better integration and collaboration of services such as providing rapid COVID-19 testing at shelters, increasing emergency shelter space, reduced duplication of initiatives through improved coordination, providing phones to individuals, and reducing the number of individuals being discharged from institutions into homelessness^{20, 22, 27, 31, 32, 35} ▶ Closure of drop-in services created a fractured and discontinuous service system²⁶ <p>Service quality</p> <ul style="list-style-type: none"> ▶ The quality of services, particularly shelter and housing services was perceived to be poor ▶ Fear of exposure to substance-use behaviours or contracting COVID-19 due to overcrowding and lack of sanitation were barriers to accessing overnight accommodations^{1, 21, 23, 24, 30} ▶ Service provider burnout contributed to lower quality of service provision²⁸ 	<p>Ability to engage: relates to empowerment of the individual, and active participation and involvement of clients in decision-making processes given capacity, health literacy and self-management.¹⁶ Results: When given the opportunity, clients were ready to engage in their care, however poor quality of care, mental illness and substance use made this more difficult²⁸ Engagement and self-advocacy</p> <ul style="list-style-type: none"> ▶ In focus groups YEH were proactive in reaching out for services and self-advocacy was frequently discussed²⁶ ▶ For IEH leaving prison, people were more engaged in the decision-making process surrounding release care planning than in pre-pandemic times²⁵ ▶ Given the opportunity, IEH were engaged and empowered to make informed decisions to prompt their own health³⁴
Digital connectivity (11)	<p>Digital connectivity emerged as a theme not encompassed by the Levesque framework. Access to a mobile phone, internet, and safe spaces to engage in virtual care opportunities was a barrier among IEH during the pandemic. Inability to afford digital technology and/or internet precluded engagement in virtual services^{20, 21, 25, 26, 35}</p>	<p>IEH, individuals experiencing homelessness; YEH, youth experiencing homelessness.</p>

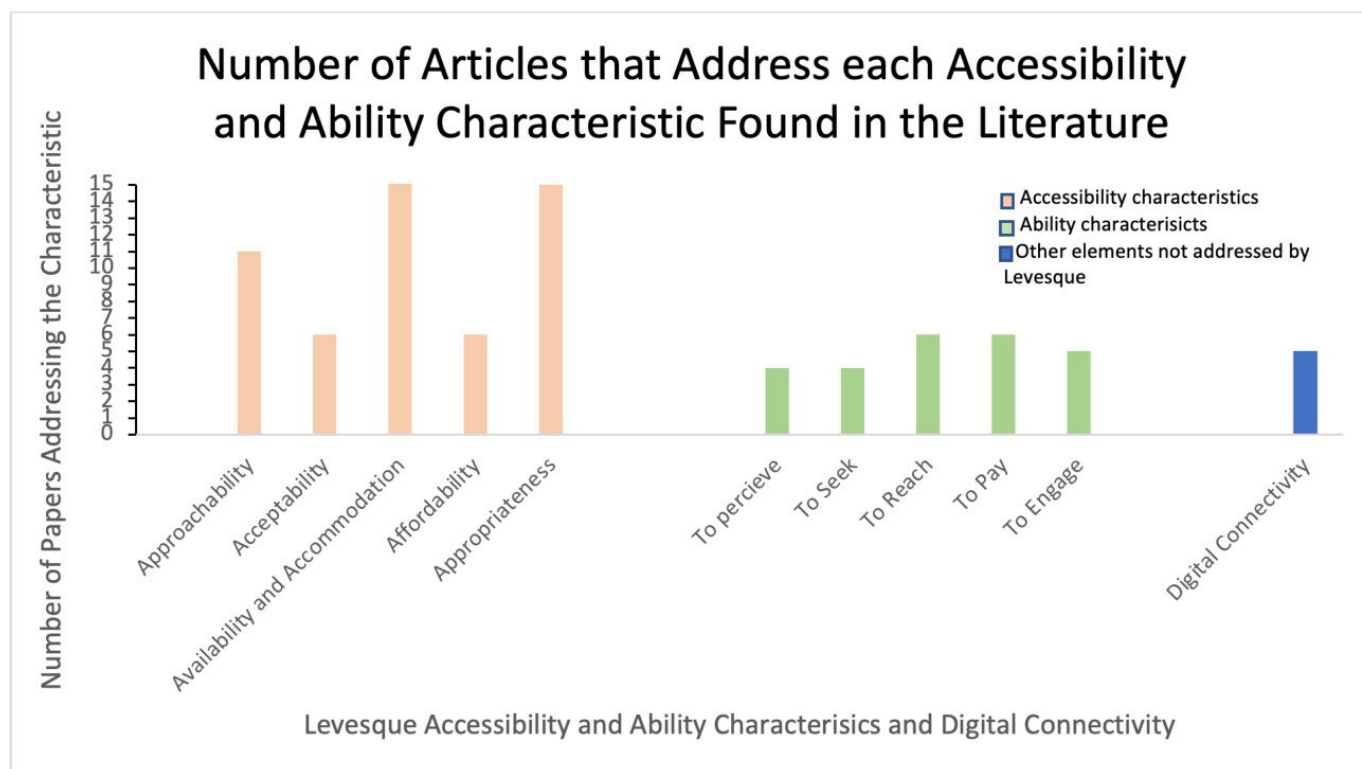


Figure 3 Frequency counts of each aspect of access described in the literature.

Barriers in receiving, understanding and ultimately taking action to apply new public health directives impeded COVID-19-related health literacy among IEH during the pandemic, largely due to a lack of digital connectivity and language barriers. This resulted in disengagement with services as well as reduced trust in health and social care systems, particularly for youth experiencing homelessness (themes: approachability, ability to perceive).^{20-22 24-28} This contributed to reduced service-seeking behaviours (particularly among youth) (ability to seek).^{25 26} Even if public health messaging was received and understood in a timely manner, messages to isolate, practice-enhanced hygiene and physically distance from others were based on the incorrect assumption that every person receiving such messaging had the assets and capacity to adapt to these new protocols.^{22 23}

Service closures compounded self-reported feelings of isolation,²⁵ with qualitative data indicating that feelings of isolation and loneliness worsened youth's mental health. This, in turn, increased substance use (despite an increasingly toxic supply), which can exacerbate difficulties in achieving access to care and worsen pre-existing mental health challenges.^{20 26}

Additionally, during the pandemic, a lack of culturally appropriate and safe services for Indigenous, LGBTQ2S+ and ethnic individuals contributed to increased feelings of isolation, disconnection and worsened mental health due to being cut-off from social and cultural networks (themes: acceptability, appropriateness).^{20 25} It is possible that health impacts were exacerbated as a result of disconnection from culturally appropriate religious practices

such as traditional healings. Other additionally vulnerable groups including women and youth also faced increased hardships and barriers to accessing services. During the pandemic, gender-based violence has increased both globally and within Canada.^{33 36} Because domestic and gender-based violence is often a precursor to women's homelessness as a result. Conversely, in an attempt to maintain health, women and youth may choose to move back into housing that is unsafe. This puts women and youth, and especially LGBTQ2S+ youth, at increased risk of violence, exploitation and abuse, negatively impacting physical, mental and social health.^{20 21 23}

Shelter spaces (especially those that serve women) are typically underfunded and face rapid staff turnover (theme: availability).^{28 33} During the pandemic, the need to reduce overcrowding and enhance physical distancing, as well as greater staff turnover, exacerbated limitations on shelter infrastructure and human resources.^{1 24 28 32} Even if shelters were available, many IEH deemed them inadequate due to overcrowding and concerns of contracting COVID-19, sparking the creation of tent cities and encampments (themes: acceptability accommodation). This contributed to poor nutrition, exposure to the elements and reduced access to clean water.²³

Stigma towards women and youth has also led to difficulty in obtaining housing. With eviction prevention measures implemented during the pandemic, landlords are reportedly unwilling to rent to youth because of feared income loss should youth be unable to pay for living spaces and cannot be evicted.²¹ Financially, women

have experienced disproportionate job losses and longer waits to be rehired during the pandemic (themes: affordability, ability to pay). Coupled with school and childcare service closures and embedded gender norms dictating that women are responsible for childcare, women have encountered additional barriers to obtaining and maintaining employment, with some turning to sex work.²¹ Opportunities like resume building, interview training and volunteer experiences to improve employability have been reduced due to closure of services.²¹ Considering the gendered and age-specific needs of these groups, it is necessary to alleviate additional barriers to accessing social resources such as employment and housing services.

Finally, the pivot to offering services virtually was a departure from how services have historically been delivered (themes: ability to engage, digital connectivity). While this benefited those in rural areas by reducing transport-related barriers, it was a barrier for those lacking the financial means to obtain a phone, phone plan and/or internet (themes: ability to reach, digital connectivity).²⁶ This was especially true for youth.²⁰ Not only is the cost of digital technology prohibitively expensive for many IEH but finding a safe space in which to participate in appointments can also be problematic. Government initiatives meant to engage the public in health promotion in low-barrier ways, such as the COVID-19 Alert App, were barriers, rather than facilitators, for IEH in accessing healthcare information.³⁵ Together, the multiple reductions in access to services indicate a lack of inclusion of IEH in programme and policy development, resulting in misinformed and misaligned programmes that are exclusionary to those most in need of support.

While access to services has been reduced in many ways, positive changes should not be ignored. Expansion of outreach initiatives designed to provide daily necessities like transportation options, on-site COVID-19 testing at shelters, washrooms, showers, food, harm reduction and temporary housing in motels and hotels were critical in maintaining the well-being of IEH (themes: approachability, accommodation).^{20 22 27 29–32 34} Increases in funding federally and provincially for the homeless service sector allowed outreach programmes to be initiated and maintained.²⁰ Financial barriers to services were dismantled in numerous ways, such as making COVID-19 testing free and allocating funds to low-income individuals.²⁹ Finally, in some instances, coordination between organisations, the community and government improved, which led to streamlining of the system, better partnership and engagement with clients, and fewer IEH falling through system 'gaps'.^{20 21 25 27 31 32 34}

Contextualising Canadian homelessness to facilitate change

COVID-19 has exacerbated and illuminated cracks in the current healthcare and social service system.³⁰ The disparate health outcomes IEH experience are not solely attributable to the pandemic but are downstream products of broad upstream factors, including a lack of affordable housing, colonialism and associated stigma and

discrimination. Clearly, improving access is not enough to eliminate the disproportionate poor health outcomes of IEH populations.

Racism, stigma and discrimination are key factors intimately linked with homelessness. Colonialism of Indigenous peoples is a structural determinant of health initiating and perpetuating homelessness in Canada, which has affected Indigenous peoples spiritually, emotionally, physically and mentally³⁷ and has led to disproportionate representation of Indigenous peoples in Canada's homeless population.⁹ The present study found that Indigenous peoples have faced disconnection from social and cultural networks related to a lack of culturally appropriate and safe services.^{20 25} While the pandemic has undoubtedly exacerbated feelings of isolation and barriers to accessing appropriate services for Indigenous peoples, these are systemic issues, and this disconnection to culturally safe care is a product of long-standing and ongoing colonial forces in Canada.

Stigmatisation and discrimination are additional structural inequities that can manifest in the criminalisation of homelessness, which creates a vicious cycle of incarceration and discharge back into homelessness.³⁸ In Canada, during the COVID-19 pandemic, those without a home could be fined (\$500–\$10 000 CAD) for failure to follow physical distancing orders, despite lacking permanent, safe and adequate shelter or places to remain distant.¹ Furthermore, prior to the COVID-19 pandemic, IEH experienced reduced access to quality care due to discrimination, stigma and distrust of service providers in combination with structural barriers.^{3 8 13} Issues with transportation, inability to access digital care, poor communication of information and distrust in the healthcare system were identified in this review as key barriers to accessing resources for IEH during the pandemic.^{20 22–26 35} While the pandemic may have augmented such barriers, they are not novel.

Entry into and perpetuation of homelessness is largely facilitated by structural factors.³⁹ Contextualising drivers of homelessness is necessary in facilitating its resolution. Historically, Canada's cuts to social spending have led to increased homelessness and a reduced social safety net, contributing to housing unaffordability.⁴ The findings of this review highlight the ways in which the pandemic has exacerbated this, particularly for additionally marginalised groups such as women who faced disproportionate job losses and difficulty obtaining housing.^{21 23 26 33} This has the potential to compound negative health outcomes as individuals may opt to live in unsafe environments.^{20 21 23} The precarity of maintaining housing that is appropriate and affordable must, therefore, be addressed to prevent the transition into homelessness. In Canada, increased investments in affordable housing and supports for IEH are needed, and work must be done to empower and partner with individuals, particularly those holding additional vulnerable identities, to identify and implement appropriate solutions. Partnering with individuals with lived and living experience of homelessness can provide

insights that lead to policy and programme change that is more effective and sustainable.⁴⁰ Thus, partnership can help politicians and programme developers not to ‘miss the mark’ when creating interventions.

Strengths and limitations

The use of a standardised protocol (PRISMA-ScR), inclusion of a second reviewer and consultation with subject matter experts contributed to the scientific rigour of this review. Additionally, our study used a variety of databases and search strategies as detailed above. This allowed for enhanced capture of diverse perspectives from many fields. This review would have benefitted from consultation and engagement with people with lived and living experience of homelessness to contextualise study findings and ensure results capture lived experiences of those impacted by homelessness in its many forms. Literature included in this scoping review pertains only to the Canadian context, which likely limits generalisability.

Comparison with previous research

While it should be recognised that the pandemic has had global impacts, addressing such effects is out of scope in this review. To date, there exists no globally agreed upon definition of homelessness.^{41 42} In addition, countries have different approaches to managing homelessness and have responded to the pandemic in different ways.^{43 44} Because of the lack of shared language and various approaches to responding to the pandemic, the current review has focused on Canada. This may improve internal validity of the findings, while still providing a level of application and generalisability to countries with similar healthcare and social infrastructures, and common socioeconomic and political contexts driving and perpetuating homelessness.

While a comparison to the broader literature is not included in this study, it should be noted that the current findings align with those provided by Nouri *et al* who highlight four factors that led to increased vulnerability for IEH during the COVID-19 pandemic. These include personal, lifestyle, social and managerial factors. Within these categories on an international scale, social isolation and stigma, lack of housing, shutdown of services and a lack of technology all contributed to reduced access to care for IEH, leading to vulnerabilities in this population.⁴⁵ Likewise, findings from this review concur with a recent Canadian rapid review conducted by Oudshoorn *et al* where authors noted that IEH are uniquely vulnerable to COVID-19. Governmental actions were found to be inconsistent in addressing the unique needs of people experiencing homelessness and authors noted that despite pandemic response efforts, there is little evidence that broader strategic housing approaches are being considered.⁴⁶ Findings from the current review indicate that increased capacity was limited to emergency shelter sites, but long-term, sustainable housing supports remain underexplored.¹ Both Nouri *et al* and Oudshoorn *et al* highlight inadequate housing as a core issue to address.^{45 46}

Understanding that IEH experienced reduced access to services during the pandemic is insufficient to create positive change. As seen in this review, it is important to consider the concept of access in all its forms, and to recognise both gaps in access and positive changes seen during the COVID-19 pandemic to facilitate positive policy change and programme refinement in the future.

Directions for future research

Further investigation must be done to better understand how social, economic, and political factors intersect and uniquely impact IEH both during the pandemic and outside of pandemic conditions. Inclusion of marginalised groups is an important component of research and policy development in order to enact better informed, relevant and sustained change while promoting collaboration among stakeholders.⁴⁰ As such, the inclusion of people with lived and living experience of homelessness in all future research activities is essential. Already, policy and research regarding illegal drug use is being informed by people with lived and living experience, who are seen as experts in their own right.⁴⁷ Likewise, involving those who have experienced homelessness in research and policy development may provide an opportunity to gain valuable insights into the lived realities of IEH during the pandemic. In addition, literature indicates that IEH have different perspectives from service providers about factors that facilitate engagement with services.⁴⁸ Authentic partnership may potentiate the ability to address root causes of inequity, rather than responding to downstream outcomes of stigmatisation and disparity. Overall, responses to homelessness were not seen as acceptable or appropriate to IEH during the pandemic.^{1 21 23 24 26 30} By including people with lived and living experience of homelessness in future planning, it is possible that the disproportionate reductions in access seen during the COVID-pandemic can be avoided in the future.

Additionally, the emergence of a novel component of access, digital connectivity, warrants further investigation. Given accelerating technological innovation as well as pandemic-related shifts to virtual care and services, reducing disparities in access to digital mediums should be a public health and policy priority.

Finally, it may be beneficial for future research to compare pandemic responses and issues of access to health and social resources for IEH during COVID-19 on a global scale.

Conclusion

During the COVID-19 pandemic, access to social and healthcare resources was generally reduced for IEH. Clearly, barriers and facilitators to access are tied to stigmatisation, discrimination and marginalisation. Despite the exacerbated barriers to accessing services driven by COVID-19, some positive changes were seen. Collaboration and coordination of services improved, as did the number of outreach services and temporary accommodations. Such interventions should be scaled up locally,

provincially and nationally, with collaboration between stakeholders (including people with lived and living experience of homelessness) to facilitate a coordinated approach to improve resource access now, and to ensure continuity after the pandemic.

Digital connectivity was a novel category related to access and was not previously identified in the Levesque framework. This demonstrates that the dimensions of access are changing with the expansion of technology, creating new forms of inequity. Work should be done to support improvements in access to cellphones and internet for IEH, which may have a positive impact on their ability to access health and social services.

Homelessness is driven by social, political, and economic factors. There is a need to contextualise homelessness in order to address upstream causes, rather than maintain a singular focus on downstream outcomes. The disparities experienced by IEH seen in the current review are not novel; the pandemic has merely exacerbated and illuminated existing inequities. Addressing these foundational issues in collaboration with people with lived and living experience of homelessness may have a significant impact on reducing disparate access to healthcare and social resources experienced by IEH both now and in future crises.

Acknowledgements We would like to extend our thanks to Dr Laura Banfield, the health science librarian at McMaster University, for her assistance in the creation of the scoping review protocol.

Contributors The methodology and protocol for this paper were developed by MM with input from a health science librarian (Dr Laura Banfield) at McMaster University. Planning was conducted by MM, RG and JAB. RG cross-checked articles during title and abstract screening, full text review, and data extraction, as well as written preparation of the manuscript. JAB acted as guarantor, and oversaw and guided the project, including provision of expert knowledge, and assisted in manuscript preparation. All authors have provided critical input into the design and conduct of the paper, including interpretation of data. All authors participated in creation of the manuscript and have approved the final version.

Funding The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

Competing interests None declared.

Patient and public involvement Patients and/or the public were not involved in the design, or conduct, or reporting, or dissemination plans of this research.

Patient consent for publication Not applicable.

Provenance and peer review Not commissioned; externally peer reviewed.

Data availability statement All data relevant to the study are included in the article or uploaded as supplementary information.

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