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Challenges in accessing HIV care for Francophone African, Caribbean and Black people living with HIV in Canada: a scoping systematic review

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Challenges in accessing HIV care for Francophone African, Caribbean and Black people living with HIV in Canada: a scoping systematic review

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1 **Abstract**

2 **Introduction:** In 2001, 50-55% of French speaking minority communities did not have access to
3 health services in French in Canada. Although Canada is officially a bilingual country, reports
4 indicate that many healthcare services offered in French in Anglophone provinces are
5 insufficient or substandard, leading to healthcare discrepancies among Canada's minority
6 Francophone communities.

7 **Objectives:** The primary aim of this scoping systematic review was to identify existing gaps in
8 HIV-care delivery to Francophone minorities living with HIV in Canada.

9 **Setting:** We conducted an exhaustive search for studies published between 1990 and November
10 2019 in English and French reporting on health and healthcare in Francophone populations in
11 Canada. Nine databases were searched including Medline, Cumulative Index to Nursing and
12 Allied Health Literature, the Cochrane Library, Global Health, PsychInfo, PubMed and Web of
13 Science.

14 **Participants:** To be eligible a study must have included data on French-speaking people with
15 HIV in an Anglophone majority Canadian province. Studies from Quebec were excluded.

16 **Outcomes:** Our primary outcome is health care service availability and access for French
17 speaking people living with HIV.

18 **Results:** The literature search resulted in 294 studies. A total of 230 studies were excluded after
19 duplicates were removed. The full texts of 43 potentially relevant papers were retrieved for
20 evaluation and data extraction. Forty-one studies were further excluded based of failure to meet
21 the inclusion criteria leaving 2 qualitative studies that met our inclusion criteria. These two
22 studies reported on barriers on access to specialized care by Francophone and highlighted
23 difficulties experienced by healthcare professionals in providing quality healthcare to
24 Francophone patients in Ontario and Manitoba.

25 **Conclusion:** The findings of this scoping systematic review highlight the need for more HIV
26 research on linguistic minority communities and should inform health policy making and
27 HIV/AIDS community organizations in providing HIV care to Francophone immigrants and
28 Canadians.

1 INTRODUCTION

2 In 2001, 50-55% of French speaking minority communities in Canada did not have
3 access to health services in French. [1] Therefore, in 2003, Health Canada launched the Official
4 Languages Health Program (OLHP) with the aim of improving access to health services for
5 official language minority communities (OLMCs). Continuity and accessibility to care is a
6 problem for general healthcare, and HIV care for Francophone communities in Canada. [2-6] In
7 Canada the term *Francophone* refers to someone whose mother tongue or First Official
8 Language Spoken (FOLS) is French and who lives outside of the province of Quebec in a
9 majority English speaking province. [7, 8]

10 Although Canada is officially a bilingual country, reports indicate that many healthcare
11 services offered in French in Anglophone provinces are insufficient or substandard, leading to
12 healthcare discrepancies among Canada's minority francophone communities. [9-12] In 2005,
13 shortages in medical interpreters, francophone's healthcare providers and services were noted in
14 Winnipeg's francophone communities, making it difficult for patients to understand medical
15 instructions and advice, find a general physician and access or be referred to specialized care.
16 [10]

17 In Ontario the French Language Service Act of 1986 (FLSA) guarantees the right of
18 individuals to receive French-language services, as well as French health care services, from the
19 Ontario government ministries and agencies. [13] However, French HIV resources including
20 Francophone's health and social workers have been described as lacking by Ontarian
21 Francophone living with HIV. Francophone professionals reported that French-service shortages
22 across Ontario left them overworked as they took on interpreting and translating duties on top of
23 their workloads. [11, 13, 14]

24 In addition, Ontarian healthcare professionals noted that Francophone patients receiving
25 care in English are more vulnerable than their Anglophone counterparts, especially if the
26 patient's issues and needs are complex, such as those with complicated illnesses, vision and
27 hearing deficiencies or mental illness. They also stated that these Francophone patients may not
28 disclose important information about their health in English or disclose less information overall.
29 This could be due to Francophone patients being unable to express themselves fully in English or

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2
3 1 being uncomfortable relaying information through an interpreter, especially if that interpreter is
4
5 2 someone whom they are personally close to. [11, 12]

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7 3 This deficiency in francophone health services is worrying, especially since Canada's
8
9 4 minority francophone population is increasing. [7, 15] In Ontario, roughly 5% of the population
10
11 5 are francophone, of which about 7.5% speak only French. [15] The francophone population in
12
13 6 Canada is bolstered by immigration, including immigrants from French-speaking African
14
15 7 countries. [14] Hence, the healthcare needs of Canada's Francophone population help illustrate
16
17 8 the increasing demand of healthcare delivery in French. [10-12, 14] In 2016, the Public Health
18
19 9 Agency of Canada (PHAC) reported that approximately a third of people living with HIV in
20
21 10 Ontario were from African, Caribbean or Black (ACB) communities. [16] Additionally, as
22
23 11 reported by a study done in the U.S., language, a social determinant of health, was one barrier
24
25 12 hindering sub-Saharan African and Caribbean immigrants from being tested for HIV. [17] While
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27 13 AIDS Support Organizations acknowledge the importance of bilingual healthcare, they also
28
29 14 reported having to prioritize their resources into dealing with other issues plaguing HIV-positive
30
31 15 communities, such as unsafe housing, food insecurity and mental illness. [9]

32
33 16 Even though the experience of African, Caribbean and Blacks living with HIV has been
34
35 17 studied before, [18] in this scoping systematic review, we aimed to identify existing gaps in
36
37 18 HIV-care delivery to HIV-infected Francophone minorities in Canada. Our secondary goal is to
38
39 19 examine the condition of this population's HIV care continuum (or cascade) by evaluating
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41 20 information on health promotion, proximity to health care centers, quality of life, quality of care,
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43 21 effect of race, stigma and discrimination on care provided, availability of bilingual health care
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45 22 providers, preventive care and patient satisfaction.

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24 **METHODS AND ANALYSES**

25 We used scoping study methodology adopted from the framework described by Arksey &
26 O'Malley. [19]The protocol for this scoping review is reported elsewhere. [8] Our methods are
27 outlined below in brief.

28

29 **Search strategy for identification of studies**

1 We conducted an exhaustive search for published studies in English and French reporting on
2 health and healthcare in Francophone populations in Canada. The online search was restricted to
3 articles published between 1990 and November 2019 (**Appendix 1**).^[8]
4 Nine databases— Medline, Cumulative Index to Nursing and Allied Health Literature
5 (CINAHL), the Cochrane Library, the National Health Service Economic Development Database
6 (NHS EDD), Global Health, PsychInfo, PubMed, Scopus, and Web of Science—were searched.
7 The population was defined using text and indexed words relating to immigration, combined
8 with the names of all French speaking countries in Africa and the Caribbean. [8] Canada as a
9 location, was specified by searching the English and French names of all the provinces and
10 territories, as well as their ministries of health. When combined, these sets were filtered to
11 include any mention of HIV, seroconversion, seropositivity, or sexually transmitted diseases.
12 The full search strategy is reported in the appendix.

14 **Grey literature**

15 We searched the websites of relevant HIV organizations such as the African and Caribbean
16 Council on HIV/AIDS in Ontario (ACCHO), Association Francophone pour le Savoir (ACFAS),
17 The Ontario HIV Treatment Network (OHTN), and Canada's source for HIV and hepatitis C
18 information (CATIE).

20 **Criteria for including studies**

21 **Types of studies**

22 Experimental, observational, qualitative, mixed methods, and studies focused on evidence
23 syntheses were considered for review.

24 **Types of participants**

25 To be eligible a study must have included data on French-speaking people with HIV in an
26 Anglophone majority Canadian province. Studies from Quebec were excluded as Francophone
27 are, by definition, French speaking people living in English speaking provinces in Canada.

29 **Outcomes**

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2
3 1 The primary outcomes investigated in this study were access to healthcare and quality of care for
4
5 2 Francophone living with or without HIV in Anglophone majority provinces. Access to HIV care
6
7 3 included HIV diagnosis, linkage and retention to care, receipt of antiretroviral therapy (ART),
8
9 4 adherence to medication and achievement of viral suppression.

10 5 Other outcomes of interest were participation in health promotion, proximity to health care
11
12 6 centers and access to bilingual health care providers and preventive care. Data were also
13
14 7 extracted on the quality of care provided as well as the effect of race, stigma and discrimination
15
16 8 on care provided as well as quality of life and patient satisfaction.
17
18 9

10 **Screening**

11 All references retrieved were imported into Rayyan QCRI to facilitate study screening and
12
13 12 selection. [20] Duplicate studies were removed prior to undertaking the abstract review.

14 13 Screening was done independently by JAO, COZ, JN and PD.

15 14 Our screening form was developed and applied independently to a sample of 50 abstracts to
16
17 15 ensure consistency of use and clarity of the instrument. A Cohen's kappa statistic was used to
18
19 16 measure inter-rater reliability, and screening started when >60% agreement was achieved. [21]
20
21 17

18 **Data collection and analyses**

19 **Data extraction and quality assessment of included studies**

20 20 The data from retrieved studies were independently extracted using standardized forms by 2
21
22 21 authors (J.A.O and C.O.Z). Studies with insufficient data to estimate outcomes of interest were
23
24 22 excluded. Collected data were validated by P.D and J.N. Any disagreement was resolved by LM.

25 23 We extracted bibliometric information such as author names, journal, and year of publication.

26 24 We also extracted the location of the study, study design, number of participants, outcomes
27
28 25 reported, outcome measures overall and outcome measures in French-speaking participants.

26 **Assessment of methodological quality of the included studies**

27 27 We did not appraise the methodological quality and risk of bias of the studies as this is not
28
29 28 required in a scoping review. [22]

29 **Analyses and reporting**

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2
3 1 Our findings are reported according to the Preferred Reporting Items for Systematic Reviews and
4 2 Meta-Analyses (PRISMA) guidelines and we conducted a narrative synthesis of qualitative data
5 3 to identify common themes and knowledge gaps. [23, 24]
6
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9 4

5 **Results**

6 **Results of search**

7 The literature search resulted in 291 studies through data base searching and 3 studies through
8 other sources and grey literature (**Fig.1**). A total of 273 studies were screened after duplicates
9 were removed. Subsequently, 230 studies were further excluded based on title and abstract
10 screening. The full texts of 43 potentially relevant papers were retrieved for evaluation and data
11 extraction. Forty-one studies were further excluded based of failure to meet the inclusion criteria
12 (**Appendix 2**): 1 paper was not a research article, [25] 32 studies had no Francophone data, [18,
13 26-56] 2 studies were not on HIV, [4, 57] 4 studies were reviews with no eligible studies, [58-
14 61] 1 study was a study not conducted in Canada, [62] and 1 study was not about access to HIV
15 care, [63] leaving 2 studies that met our inclusion criteria (**Figure 1**). [10, 14]
16

17 **Characteristics of included studies**

18 Buissé et al. (2005) conducted a qualitative study to explore the availability of Francophone
19 specialized health and mental health services in the city of Winnipeg. In this study, 24 health
20 service providers delivering services to Francophone immigrants and refugees in the city of
21 Winnipeg were interviewed. [10] The authors investigated outcomes such as health care
22 accessibility, services and continuity of care for new Francophone immigrants. They found that
23 HIV and mental health services in the city of Winnipeg had only very little Francophone
24 capacity with Francophone staff being minimal to non-existent. This resulted in the use of
25 unqualified interpreters or appointments rescheduling as some places had six months waiting list.
26 In some cases, HIV nurse specialists had to obtain materials from or refer Francophone clients to
27 HIV websites in French. The African female Francophone health service providers described the
28 situation as critical. Twenty-four health services providers from 19 organizations were
29 interviewed for the study. All these organizations did not meet 8 of the 9 criteria of Bacharach's
30 principle of continuity of care for Francophone people living with HIV in general and African

1
2
3 1 Francophone in particular. [2] Although these organization had a full array of services, there was
4
5 2 lack of cultural awareness among health care providers as well as barriers in access to care and
6
7 3 continuity of care for Francophone African newcomers living with HIV or mental illness in
8
9 4 Winnipeg.

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11
12 6 Samson and al. (2012) investigated the cultural sensitivity involved in HIV care delivery to
13
14 7 Francophone minorities living with HIV in Ontario. [14] This was a qualitative study conducted
15
16 8 with a sample of 29 participants, including AIDS Service Organization (ASO) professionals and
17
18 9 People Living with HIV (PLWH), between September and December 2009 in the cities of
19
20 10 Ottawa and Toronto. The author used phenomenological analysis to categorize his findings into
21
22 11 three themes: [64]

23
24 12 *Social Context of HIV care access in French:* ASO professionals did not perceive offering
25
26 13 bilingual services as a priority because their clients often had more severe and complex needs
27
28 14 which required the diversion of time and resources to outreach and to addressing more
29
30 15 immediate and urgent needs. Francophone PHAs (both Canadian - and African-born) reported
31
32 16 unmet expectations with respect to the delivery of services in French. Canadian born
33
34 17 francophone PHAs perceived this as a rejection of their cultural identity and citizenship while
35
36 18 African-born Francophone PHAs were shocked by the lack of service delivery in French in
37
38 19 ASOs.

39
40 20 *Language and Cultural Sensitivity and diversity:* ASO professionals perceived linguistic
41
42 21 differences as secondary. They recognized language as an aspect of the cultural diversity of their
43
44 22 clientele but considered it as a neutral tool for service delivery which does not negate cultural
45
46 23 differences. Because most Canadian born PHAs speak English, and rarely demand service in
47
48 24 their mother tongue, French language services are not a priority. They recognized that this might
49
50 25 be a barrier for African-born clients but since there is no advocacy for French services, they
51
52 26 considered that not a priority. Canadian born PHAs acknowledged initiating conversations at
53
54 27 ASOs in English due to a fear of being rejected if they speak French. Both Canadian and African
55
56 28 born Francophone PHAs described positive experiences when they were able to obtain services
57
58 29 in French. They considered that they were better understood and could express themselves better

1
2
3 1 in these situations.

4
5 2 *Emerging Reality in the Francophone communities in Canada:*

6
7 3 The study reported an increase in the clientele from French speaking African countries due to a
8
9 4 changing ethno-racial composition of the Franco-Ontarian community. This situation has created
10
11 5 a pressure for more French services in ASOs in Ontario. There is a greater awareness of the need
12
13 6 to tend to linguistic differences as an aspect of cultural sensitivity. These unilingual French
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15 7 speaking African-born PHAs described their linguistic isolation as a painful reminder of the
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17 8 rejection experienced in their countries of origin due to HIV/AIDS.
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10 **DISCUSSION**

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11 The purpose of this scoping review was to identify existing gaps in health care access by
12 and delivery to Francophone minorities living with HIV in Canada, and to uncover the reasons
13 for healthcare disparities faced by Francophone ACB living with HIV in Anglophone Canadian
14 provinces and territories.

15 We identified two eligible studies from two provinces in Canada -Ontario and Manitoba.
16 In Ontario, the most populated province in Canada we found that issues exist regarding
17 availability of Francophone or bilingual healthcare and HIV/AIDS organisation workers. Several
18 bilingual healthcare professionals report difficulties in providing quality healthcare to
19 Francophone patients. They attributed this to scarcities in bilingual staff and problems
20 communicating with patients who speak French which is not the providers' first language.
21 Additionally, bilingual health providers also described often being overworked, since they would
22 also take on interpretative roles on top of their regular work.[11, 12, 14]. These deficiencies in
23 French services are also notable amongst Ontarian HIV/AIDS organisations, where lack of
24 funding may have contributed to smaller numbers of bilingual staff.[65, 66] While language was
25 acknowledged as an important cultural factor and communication tool, it was also frequently
26 overlooked to better serve people living with HIV (PLWH) in Ontario by helping provide food,
27 housing and mental services. [14] The evidence of lack of French Language Healthcare Services
28 (FLHS) in Ontario has been highlighted in previous research. [67]

29 In Manitoba, it is estimated that only 25% of Francophone have access to French
30 healthcare services,[3] with Franco-Manitobans and healthcare professionals alike reporting a far

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2
3 1 greater demand for Francophone services than what was available. [3, 68] As well, new
4
5 2 Francophone ACB immigrants to Manitoba, were reported to have difficulties accessing
6
7 3 specialized services such as counseling on HIV and mental health as well as HIV testing. [10]
8
9 4 Interestingly, although there are scarcities throughout Manitoba's French healthcare,
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11 5 Anglophone Manitoban healthcare providers seemed to be under the assumption that Manitoba's
12
13 6 health resources were sufficient to meet demand. [10] Moreover, a 2015 study reported that
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15 7 Francophone immigrants to Manitoba were more likely to wait for French healthcare services
16
17 8 and interpreters. The waiting time for French services was far longer compared to Anglophone
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19 9 services.[69]

20
21 10 It is well established that language is critical to effective healthcare: it facilitates accurate
22
23 11 transmission of knowledge between a provider and a patient and allows patients to effectively
24
25 12 disclose their symptoms and medical history. [10-12] Unfortunately, official language minorities
26
27 13 frequently experience delays in healthcare due to difficulties finding interpreters and shortages in
28
29 14 bilingual healthcare personnel and management staff, which can impact travel times, the
30
31 15 accessibility and availability of specialized services and whether translated resources are present.
32
33 16 [3, 9-12] Therefore, the well-documented deficiency of French Language Healthcare Services
34
35 17 (FLHS) in Ontario and other provinces and territories where French is a minority language can
36
37 18 and should be seen as a major barrier to the receipt of quality healthcare amongst ACB
38
39 19 Francophone living with HIV. [10, 67, 70]

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41 20 Bearing in mind the enormous importance of a common language in patient-provider
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43 21 interactions, it is evident that Francophone ACBs in majority- English-speaking provinces and
44
45 22 territories are much more likely to experience lower quality healthcare services than their
46
47 23 Anglophone counterparts. In both healthcare and HIV/ AIDS organisations outside of Quebec,
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49 24 individuals in need of French-language services are expected to advocate for resources.[70] Yet,
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51 25 practitioners and organisation workers frequently note that their Francophone patients would
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53 26 communicate in English over French, if they could, even if it meant less information being
54
55 27 communicated overall. Several explanations have been postulated for this phenomenon: some
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57 28 healthcare workers think it may be due to clients' fears of receiving lesser or delayed care if
58
59 29 practitioners realised they were Francophone; others believe it may have to do with patients'
60
30 fears of HIV stigmatization.[3, 10, 12, 14, 68, 69] This latter point is especially relevant in ACB

1 people living with HIV, since stigma, discrimination and race are all associated with poor access
2 to care and retention in care [71-73]. Considering that ACB people with HIV often face multiple
3 forms of stigma, not only due to ethnicity or HIV status,[74] language barriers can present a
4 stigmatizing and significant hurdle to health and wellbeing in this population.

5 Research has also shown that cultural differences should be considered in addition to
6 stigma [75, 76], since ignoring these factors can have a negative impact on HIV prevention
7 interventions [18, 77]. Lack of consideration for these issues has been shown to be detrimental to
8 the health of African-born Francophone PLWH, who were not being able to access services in
9 French as it reinforced their sense of isolation in a new and unfamiliar country. [9, 10] Moreover,
10 ACB focus groups in Toronto suggested that to be successfully effective, HIV treatments and
11 interventions in the ACB communities should be culturally appropriate and sensitive.[78]

12 Limited research into ACB Francophone populations in Canada makes it difficult to
13 evaluate how French healthcare deficiencies impact their HIV care continuum. For instance,
14 while Manitoba reported 116 new cases of HIV in 2005, of which approximately 21% were from
15 ACB populations, it is unknown how many of these patients were Francophone. [79] Moreover,
16 although Buissé's study described "minimal to non-existent" numbers of Francophone HIV and
17 TB counselling specialists, there were no records of how many clients were expected to require
18 those services or how many had come in for HIV diagnosis and treatment. It could also be
19 possible that given the paucity of Francophone HIV and TB specialists at the time, the actual
20 rates of HIV diagnosis could indeed be higher. [10]

21 In Ontario, while 25.3% of 2017's 1184 new HIV diagnoses are estimated to come from
22 ACB populations, data on race and ethnicity was only available for 43.1% of the population.
23 Similar to Manitoba, no information on Francophone populations was available. [80] Thus, the
24 collection of data on Francophone on the provision of bilingual healthcare services is critical to
25 developing effective HIV-prevention programmes amongst francophone ACB communities.

27 **Conclusion**

28 This research has shown that culturally sensitive health-related service provision should include
29 considerations of language, especially in the context of an officially bilingual country, where
30 clients have a legitimate claim to such services. Providing services in a client's own language

1 values their identity. The findings of this scoping systematic review should inform health policy
2 making as well as community organizations and HIV/AIDS centre in providing health care to
3 Francophone ACB immigrants and Canadians. The paucity of data demonstrates the need for
4 more HIV research on these linguistic minority communities.

6 **Strengths and limitations of the study**

- 7 • We conducted a comprehensive and exhaustive search of peer reviewed articles and grey
8 literature.
- 9 • This research question has never been addressed before.
- 10 • This scoping review is focused only on Canada and therefore its global relevance is limited.
- 11 • The findings from this scoping review can be investigated in Francophone minorities
12 worldwide.

14 **Significance of the study**

15 This scoping review answers important questions related to access to care for Francophone HIV
16 infected and affected African, Caribbean and Black (ACB) people living in Canada. We
17 investigate the impact of intersectionality, the French language, race and HIV stigma on ACB
18 access to HIV care. The findings of this scoping systematic review will have implications for
19 health policy, practice and research in the provision of care to Francophone HIV-infected and
20 affected ACB immigrants and Canadians.

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27 Research (CBR) Program.

1 **Author contributions**

2 The study was conceived by Pascal Djiadeu, Lawrence Mbuagbaw, Joseph Nguemo and LaRon
3 E. Nelson. All authors revised the research question and provided content to the design.
4 Manuscript was written and edited by Pascal Djiadeu, Abban Yussuf, Lawrence Mbuagbaw,
5 Joseph Nguemo, LaRon E. Nelson, Chantal Mukandoli, Clémence Ongolo-Zogo, Apondi J.
6 Odhiambo and David Lightfoot. Principal investigator of the study is LaRon E. Nelson. All
7 authors read and approved the final version of the manuscript.

10

11 **Figure Legend**

12 **Figure 1:** PRISMA flow diagram of studies selection

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Appendix 1: Proposed search strategy for MEDLINE

Database: MEDLINE

Search strategy:

1. exp "Emigrants and Immigrants"/
2. immigrant*.mp.
3. Emigrant*.mp.
4. migrant*.mp.
5. (landed adj5 status).tw.
6. (landed adj5 person*).tw.
7. (landed adj5 resident*).tw.
8. exp Refugees/
9. asylum.tw.
10. new Canadian.tw.
11. resident.tw.
12. refugee.tw.
13. *POPULATION/
14. communit*.tw.
15. exp MINORITY GROUPS/
16. MINORITY HEALTH/
17. minorit*.tw.
18. exp patient/ or patient.tw.
19. 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16 or 17
20. french.tw.
21. francophone*.tw.
22. Francophonie.mp.
23. exp Language/
24. (french or francais or franco* or quebec*).tw.
25. 23 and 24
26. ((french or francais or franco*) adj5 language).tw.
27. 20 or 21 or 22 or 25 or 26
28. exp African Continental Ancestry Group/
29. (Africa* or African or Afrique or Africain*).tw.
30. Benin.tw.
31. Burkina Fas*.tw.
32. Burundi.tw.
33. Cameroon.tw.
34. "Central African Republic".tw.
35. Centrafrique.tw.
36. centrafricain*.tw.
37. Caribbean.mp. or exp Caribbean Region/
38. exp CHAD/
39. (Congo or congol*).tw.
40. Brazzaville.tw.
41. Kinshasa.tw.
42. Djibouti.tw.
43. Guinea.tw.

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- 4 44. French africa.tw.
- 5 45. Gabon*.tw.
- 6 46. Haiti*.tw.
- 7 47. (Ivory Coast or Ivoire or Ivorian).tw.
- 8 48. Madagascar.tw.
- 9 49. Mali.tw.
- 10 50. Morroc*.tw.
- 11 51. Niger.tw.
- 12 52. Rwanda*.tw.
- 13 53. (St? Martin or saint Martin).tw.
- 14 54. Senegal*.tw.
- 15 55. Togo.tw.
- 16 56. Black-White.tw.
- 17 57. Black.ti,ab.
- 18 58. "black canadian".tw.
- 19 59. mixed race.tw.
- 20 60. 27 or 28 or 29 or 30 or 31 or 32 or 33 or 34 or 35 or 36 or 37 or 38 or 39 or 40 or 41 or 42
- 21 or 43 or 44 or 45 or 46 or 47 or 48 or 49 or 50 or 51 or 52 or 53 or 54 or 55 or 56 or 58 or
- 22 59
- 23 61. 19 and 60
- 24 62. canada/
- 25 63. (Canada or Canad*).tw.
- 26 64. (canada or canadian\$ or alberta or british columbia or columbie britannique).tw.
- 27 65. (saskatchewan or manitoba or ontario or quebec or new brunswick or nouveau
- 28 brunswick).tw.
- 29 66. (nova scotia or nouvelle ecosse or prince edward island or ile du prince edward or
- 30 newfoundland or terre neuve or labrador or nun?v?t or nun?v?t or nwt or territoires du
- 31 nord ouest or northwest territories or yukon).tw.
- 32 67. OHIP.tw.
- 33 68. "health canada".tw.
- 34 69. "sante canada".tw.
- 35 70. medicare.tw.
- 36 71. CIHR.tw.
- 37 72. ("Alberta Health Care Insurance Plan" or AHCIP).tw.
- 38 73. ("Medical Services Plan" or MSP).tw.
- 39 74. Manitoba health.tw.
- 40 75. ("Vitalite Health Network" or "Horizon Health Network").tw.
- 41 76. "Department of Health and Community Services".tw.
- 42 77. "Health Care Card".tw.
- 43 78. ("Nova scotia health card" or MSI).tw.
- 44 79. Nunavut Health Insurance Card.tw.
- 45 80. ("Carte d'assurance maladie" or "Health Insurance Card" or "RAMQ").tw.
- 46 81. (health card adj25 canada).tw.
- 47 82. 62 or 63 or 64 or 65 or 66 or 67 or 68 or 69 or 70 or 71 or 72 or 73 or 74 or 75 or 76 or 77
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- 3 84. exp "Delivery of Health Care"/
- 4 85. proximity.ti,ab.
- 5 86. "healthcare or health care".tw.
- 6 87. exp Health Care Quality, Access/ and Evaluation/
- 7 88. Quality of care/
- 8 89. Health Promotion/
- 9 90. Primary Health Care/
- 10 91. Patient Acceptance of Health Care/
- 11 92. Healthcare Disparities/
- 12 93. exp racism/
- 13 94. multilingualism/
- 14 95. Needs Assessment/
- 15 96. exp Culturally Competent Care/
- 16 97. Health Services Accessibility/
- 17 98. exp Physicians, Family/
- 18 99. quality indicators/
- 19 100. Patient Medication Knowledge/
- 20 101. Patient Navigation/
- 21 102. Patient Compliance/
- 22 103. exp patient satisfaction/
- 23 104. exp HIV/
- 24 105. Preventive Medicine/
- 25 106. HIV.mp.
- 26 107. exp HIV infections/
- 27 108. seropositivity/
- 28 109. seroconversion/
- 29 110. Quality of Life/
- 30 111. (HRQOL or karnofsky).tw.
- 31 112. 84 or 86 or 87 or 90 or 91 or 92 or 95 or 96 or 97 or 98 or 100 or 101 or 102 or
- 32 104 or 106
- 33 113. 19 and 27 and 60 and 83 and 112
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Appendix 2: Characteristics of excluded studies

Reason for exclusion	Study reference (n=41)
No Francophone data	<ol style="list-style-type: none"> 1. Antiretroviral Therapy Cohort, C., <i>Influence of geographical origin and ethnicity on mortality in patients on antiretroviral therapy in Canada, Europe, and the United States</i>. Clinical infectious diseases : an official publication of the Infectious Diseases Society of America, 2013. 56(12): p. 1800-9. 2. Baidooobonso, S., et al., <i>Social and proximate determinants of the frequency of condom use among African, Caribbean, and other Black people in a Canadian city: Results from the BLACCH study</i>. Journal of Immigrant and Minority Health, 2016. 18(1): p. 67-85. 3. Baidooobonso, S., et al., <i>HIV risk perception and distribution of HIV risk among African, Caribbean and other Black people in a Canadian city: mixed methods results from the BLACCH study</i>. BMC public health, 2013. 13: p. 184. 4. Blot, S., et al., <i>AIDS Service Organization Access Among African, Caribbean and Other Black Residents of an Average Canadian City</i>. J Immigr Minor Health, 2017. 19(4): p. 851-860. 5. Browne, O.A., <i>Assessing healthcare providers' responses to African and Caribbean families living with HIV</i>. Dissertation Abstracts International Section A: Humanities and Social Sciences, 2009. 69(7-A): p. 2753. 6. Burton K, A.S., Kerr J, Kershner S, Maticka-Tyndale E., <i>Examining sexual concurrency and number of partners among African, Caribbean, and black women using the social ecological model: Results from the ACBY study</i>. Canadian Journal of Human Sexuality, 2009. Volume 28 (Issue 1): p. pp. 46-56. 7. Csete, J., <i>'Vectors, vessels and victims': HIV/AIDS and women's human rights in Canada</i>. 'Vectors, vessels and victims': HIV/AIDS and women's human rights in Canada, 2005. 8. dela Cruz, A.M.M., <i>A narrative inquiry into the experiences of Sub-Saharan African immigrants living with HIV in Alberta, Canada</i>. Dissertation Abstracts International: Section B: The Sciences and Engineering, 2017. 77(9-B(E)): p. No-Specified. 9. Gardezi, F., et al., <i>Experiences of and responses to HIV among African and Caribbean communities in Toronto, Canada</i>. AIDS care, 2008. 20(6): p. 718-25. 10. Kapiriri, L., et al., <i>How acceptable is it for HIV positive African, Caribbean and Black women to provide breast milk/fluid samples for research purposes?</i> BMC research notes, 2017. 10(1): p. 7. 11. Kapiriri, L., et al., <i>The experiences of making infant feeding choices by African, Caribbean and Black HIV-positive mothers in Ontario, Canada</i>. World health & population, 2014. 15(2): p. 14-22. 12. Khan, S., et al., <i>Loneliness and perceived social support in pregnancy and early postpartum of mothers living with HIV in Ontario, Canada</i>. AIDS Care, 2019. 31(3): p. 318-325. 13. Kippax, S.C., et al., <i>Living with HIV: Recent research from France and the French Caribbean (VESPA study), Australia, Canada and the United Kingdom</i>.

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Appendix 2: Characteristics of excluded studies

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<p>Review with no eligible studies</p>	<p>1. Aidala, A.A., et al., <i>Housing Status, Medical Care, and Health Outcomes Among People Living With HIV/AIDS: A Systematic Review</i>. American journal of public health, 2016. 106(1): p. e1-e23.</p> <p>2. Ha, S., et al., <i>A systematic review of HIV testing among Canadian populations</i>. Canadian journal of public health = Revue canadienne de sante publique, 2014. 105(1): p. e53-62.</p> <p>3. Jbilou, J., et al., <i>Men-centered approaches for primary and secondary prevention of HIV/AIDS: a scoping review of effective interventions</i>. Journal of AIDS and Clinical Research, 2013. 4(11): p. 257.</p> <p>4. Mbuagbaw, L., et al., <i>Strategies to improve adherence to antiretroviral therapy and retention in care for people living with HIV in high-income countries: a protocol for an overview of systematic reviews</i>. BMJ open, 2018. 8(9): p. e022982.</p>
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Not a study	1. Anonymous, <i>HIV-positive man from DRC deemed a "person in need of protection"</i> . HIV/AIDS policy & law review, 2008. 13 (2-3): p. 30.
Study not about access to HIV care	1. Kaida, A., et al., <i>Hiring, training, and supporting Peer Research Associates: Operationalizing community-based research principles within epidemiological studies by, with, and for women living with HIV</i> . Harm Reduct J, 2019. 16 (1): p. 47.

BMJ Open Barriers to HIV care among Francophone African, Caribbean and Black immigrant people living with HIV in Canada: a protocol for a scoping systematic review

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ABSTRACT

Introduction Language is a social determinant of health. Addressing social determinants of health is paramount to successful progression along the HIV-care continuum. Canada is a bilingual country with French and English as official languages. There are few studies to date that have focused on the impact of being a French-speaking linguistic minority on the HIV-care continuum. The primary objective of this scoping, systematic review of literature is to evaluate existing gaps in access to HIV-care among French-speaking people living with HIV in Canada. Our primary outcome is healthcare services availability and access for French-speaking people living with HIV.

Methods and analyses Our scoping, systematic review will draw on a systematic search of published literature, both quantitative and qualitative studies published on French-speaking individuals' healthcare and HIV status in Canada, with particular emphasis on the province of Ontario. We will conduct our search in MEDLINE, the Excerpta Medica Database, the Cumulative Index to Nursing and Allied Health Literature, Web of Science, EBSCO and Google Scholar for work published between 1990 and 2018. Identified articles will be screened in duplicate and full-text articles of relevant studies will be retrieved. Data will also be extracted by two researchers working independently. Any discrepancies that arise will be resolved by consensus or by consulting a third author. Our findings will be reported according to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses.

Ethics and dissemination Our proposed research will not be conducted with human participants. We will only use secondary published data and therefore ethics approval is not required. Our findings will be disseminated as peer reviewed manuscripts at conferences and student rounds, and could be of interest to government health agencies and local HIV/AIDS service organisations.

INTRODUCTION

It is well-established that language is more than a translation of words.¹ In Canada, the term 'minority Francophone' refers

Strengths and limitations of this study

- One strength is that we will conduct a comprehensive, exhaustive search strategy with an experienced research team.
- Another strength of this study is the novelty of the research question: barriers to quality HIV-care among Francophone and French-speaking African, Caribbean and Black (ACB) immigrant people living with HIV in Canada.
- One limitation is that it is unlikely that we will find experimental studies.
- Another limitation of this scoping review is that it will be focused only on Canada and therefore its global relevance is limited; however, theoretical generalisations can be postulated and tested with Francophone diaspora minorities in predominantly anglophone communities.
- Significance of the study: This scoping review will answer important questions related to access to care for Francophone HIV-infected ACB living in Canada. Furthermore, this review will evaluate the impact of intersectionality of the French language, race and HIV stigma on ACB accessibility to HIV care. The findings of this scoping systematic review will have implications for health policy and practice in the provision of care to Francophone HIV-infected and affected ACB immigrants and Canadians.

to people living outside of the province of Quebec in majority English speaking provinces and whose mother tongue or first official language spoken is French.² Francophone individuals represent approximately 5% of the Ontario population.³ The Francophone population now includes immigrants from African countries with French as their official language.²⁻⁴ Almost 7.5% of Francophone in Ontario speak French only, regardless of their mother tongue.³ Therefore African, Caribbean and Black (ACB) people



1 who identify French as their primary language, represent
2 a growing segment of the Francophone population in
3 Ontario.

4 The French Language Service Act, 1986⁵ guarantees the
5 right of individuals to receive French-language services
6 from the Ontario government ministries and agencies,
7 including access to French healthcare services. However,
8 providing high quality French healthcare services remains
9 a challenge across the province of Ontario and other
10 English speaking provinces in Canada.^{4 6-9} A study done
11 in New Brunswick, the only official bilingual province in
12 Canada, has shown that francophone individuals are less
13 likely to report their health as being 'good' compared
14 with their Anglophone-majority counterparts.¹⁰ Other
15 studies have reported that the quality of French health-
16 care services in Canadian Anglophone provinces is subop-
17 timal.^{4 7 9 11 12}

18 In the USA, language barriers and immigration status
19 have been identified as barriers to HIV testing for new
20 immigrants from sub-Saharan Africa and the Caribbean.¹³
21 Immigrants, once healthy when compared with their
22 Canadian-born counterparts, have self-reported poor
23 health associated with language barriers, discrimination
24 and immigration status.^{14 15} In some places, the quality
25 of French healthcare services has resulted in avoidance
26 of care by the francophone living in anglophone-majority
27 provinces.¹⁶ In 2016, the Public Health Agency of Canada
28 reported that an estimated 36319 people were living
29 with HIV (PLWH) in Ontario, with about one third of
30 them from the ACB communities.¹⁷ Social determinants
31 of health such as language barriers, stigma and discrim-
32 ination have negative consequences on linkage and
33 engagement to care for HIV positive immigrants and ACB
34 in Ontario,^{4 12} and may be worse in ACB Francophone
35 minorities. The core of any community services providing
36 support to PLWH is health promotion, quality of care,
37 counselling and preventive care as well as case manage-
38 ment and patient satisfaction.^{18 19}

39 The purpose of this systematic scoping review is to
40 inform policy makers, community health centres and
41 HIV organisations on the outcomes associated with being
42 a Francophone minority living with HIV in Canada. The
43 primary objective of this scoping systematic review is to
44 document access to health services by French-speaking
45 people living with HIV in Canada. The secondary objec-
46 tive is to assess the state of the HIV-care continuum for
47 Francophone ACB people living with HIV in Canada.
48 HIV-care continuum or cascade includes the following:
49 HIV diagnosis, linkage and retention to care, receipt of
50 antiretroviral therapy (ART) and achievement of viral
51 suppression.²⁰ We will also summarise data on partici-
52 pation in health promotion, finding a regular provider,
53 receiving preventive care, satisfaction with care, the
54 effects of race, stigma and discrimination, including
55 immigration status.

METHODS AND ANALYSES

We will adopt the scoping review approach proposed by Peterson *et al* that ensures that the review is executed such that it can inform practice, policy, education and research.²¹ The scoping review approach is different from the standard systematic review in that we will not attempt to answer a specific research question, but rather appraise a broad body of evidence in order to describe HIV care for French-speaking people living with HIV in Canada. HIV-care continuum or cascade includes the following: HIV diagnosis, linkage and retention to care, receipt of ART and achievement of viral suppression.

Patient and public involvement

Patients and public will not be involved in the study.

Inclusion criteria for studies

Types of studies

We will consider experimental (randomised or non-randomised) and observational studies (longitudinal, cross-sectional), evidence syntheses (systematic reviews) and qualitative or mixed-method studies.

For a study to be eligible, it must include data on French-speaking people with HIV in an anglophone-majority Canadian province and address at least one of the outcomes of interest. Studies from Quebec will be excluded.

Outcomes

Our primary outcome is the quality of and access to health services for francophones living with HIV in anglophone-majority provinces in Canada. We will look at the HIV-care cascade which includes HIV diagnosis, linkage and retention to care, receipt of ART and achievement of viral suppression.

Our secondary outcomes

The secondary outcomes will focus on the participation of Canadian Francophone ACB PLWH in health promotion, their proximity to healthcare centres and quality of life. We will extract data on the quality of care provided to this population as well as the effect of race, stigma and discrimination on care provided. Furthermore, we will also collect data on access of Francophone ACB PLWH to bilingual healthcare providers and preventive care and patient satisfaction.

Search strategy for identification of studies

We will conduct an exhaustive search for published studies in English and French reporting on health and healthcare in francophone populations in Canada. The search will include the search terms listed in [box 1](#) and will be adapted for each database ([box 1](#)).

Electronic searches

We will conduct our searches in MEDLINE, Excerpta Medica Database, Cumulative Index to Nursing and Allied Health Literature, Web of Science, EBSCO and Google Scholar from 1990 (date that the French Language

**Box 1 Proposed search strategy for MEDLINE****Database: MEDLINE**

Search strategy:

1. exp 'Emigrants and Immigrants'/
2. immigrant*.mp.
3. Emigrant*.mp.
4. migrant*.mp.
5. (landed adj5 status).tw.
6. (landed adj5 person*).tw.
7. (landed adj5 resident*).tw.
8. exp Refugees/
9. asylum.tw.
10. new Canadian.tw.
11. resident.tw.
12. refugee.tw.
13. *POPULATION/
14. communit*.tw.
15. exp MINORITY GROUPS/
16. MINORITY HEALTH/
17. minorit*.tw.
18. exp patient/or patient.tw.
19. 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16 or 17
20. french.tw.
21. francophone*.tw.
22. Francophonie.mp.
23. exp Language/
24. (french or francais or franco* or quebec*).tw.
25. 23 and 24
26. ((french or francais or franco*) adj5 language).tw.
27. 20 or 21 or 22 or 25 or 26
28. exp African Continental Ancestry Group/
29. (Africa* or African or Afrique or Africain*).tw.
30. Benin.tw.
31. Burkina Fas*.tw.
32. Burundi.tw.
33. Cameroon.tw.
34. 'Central African Republic'.tw.
35. Centrafrique.tw.
36. centrafricain*.tw.
37. Caribbean.mp. or exp Caribbean Region/
38. exp CHAD/
39. (Congo or congol*).tw.
40. Brazzaville.tw.
41. Kinshasa.tw.
42. Djibouti.tw.
43. Guinea.tw.
44. French africa.tw.
45. Gabon*.tw.
46. Haiti*.tw.
47. (Ivory Coast or Ivoire or Ivorian).tw.
48. Madagascar.tw.
49. Mali.tw.
50. Morroc*.tw.
51. Niger.tw.
52. Rwanda*.tw.
53. (St? Martin or saint Martin).tw.
54. Senegal*.tw.
55. Togo.tw.
56. Black-White.tw.

Continued

Box 1 Continued

57. Black.ti,ab.
58. 'black canadian'.tw.
59. mixed race.tw.
60. 27 or 28 or 29 or 30 or 31 or 32 or 33 or 34 or 35 or 36 or 37 or 38 or 39 or 40 or 41 or 42 or 43 or 44 or 45 or 46 or 47 or 48 or 49 or 50 or 51 or 52 or 53 or 54 or 55 or 56 or 58 or 59
61. 19 and 60
62. canada/
63. (Canada or Canad*).tw.
64. (canada or or or or or or or canadian\$ or alberta or british columbia or columbie britannique).tw.
65. (saskatchewan or manitoba or ontario or quebec or new brunswick or nouveau brunswick).tw.
66. (nova scotia or nouvelle ecosse or prince edward island or ile du prince edward or newfoundland or terre neuve or labrador or nun?v?t or nun?v?t or nwt or territoires du nord ouest or north-west territories or yukon).tw.
67. OHIP.tw.
68. 'health canada'.tw.
69. 'sante canada'.tw.
70. medicare.tw.
71. CIHR.tw.
72. ('Alberta Health Care Insurance Plan' or AHCIIP).tw.
73. ('Medical Services Plan' or MSP).tw.
74. Manitoba health.tw.
75. ('Vitalite Health Network' or 'Horizon Health Network').tw.
76. 'Department of Health and Community Services'.tw.
77. 'Health Care Card'.tw.
78. ('Nova scotia health card' or MSI).tw.
79. Nunavut Health Insurance Card.tw.
80. ('Carte d'assurance maladie' or 'Health Insurance Card' or 'RAMQ').tw.
81. (health card adj25 canada).tw.
82. 62 or 63 or 64 or 65 or 66 or 67 or 68 or 69 or 70 or 71 or 72 or 73 or 74 or 75 or 76 or 77 or 78 or 79 or 80 or 81
83. 61 and 82
84. exp 'Delivery of Health Care'/
85. proximity.ti,ab.
86. 'healthcare or health care'.tw.
87. exp Health Care Quality, Access/and Evaluation/
88. Quality of care/
89. Health Promotion/
90. Primary Health Care/
91. Patient Acceptance of Health Care/
92. Healthcare Disparities/
93. exp racism/
94. multilingualism/
95. Needs Assessment/
96. exp Culturally Competent Care/
97. Health Services Accessibility/
98. exp Physicians, Family/
99. quality indicators/
100. Patient Medication Knowledge/
101. Patient Navigation/
102. Patient Compliance/
103. exp patient satisfaction/
104. exp HIV/
105. Preventive Medicine/
106. HIV.mp.

Continued

**Box 1 Continued**

107. exp HIV infections/
108. seropositivity/
109. seroconversion/
110. Quality of Life/
111. (HRQOL or karnofsky).tw.
112. 84 or 86 or 87 or 90 or 91 or 92 or 95 or 96 or 97 or 98 or 100 or 101 or 102 or 104 or 106
113. 19 and 27 and 60 and 83 and 112

Service Act was enacted in Ontario) to 2018.⁵ We will use specific search terms in various combinations. The search will be conducted by a health sciences librarian at the Scotia Bank Health Sciences library at St. Michael's Hospital.

Reference lists

The reference lists of all relevant citations will be searched for available related articles.

Grey literature

We will search for available theses and reports. Furthermore, experts, authors and relevant organisations such as African and Caribbean Council on HIV/AIDS in Ontario, Association Francophone pour le Savoir, The Ontario HIV Treatment Network and CATIE (Canada's source for HIV and hepatitis C information) will be contacted.

Data collection and analyses

Data will be collected from each study independently and in duplicate by PD and JN. We will extract data from eligible studies such as publication details, study design, sample populations, outcomes measured and specific barriers.

Screening

We will import all citations obtained using the search strategy into DistillerSR to facilitate study screening and selection and de-duplication of citations prior to undertaking the abstract review. DistillerSR will also allow screeners to check each other's work.

A customised form reflecting the previously described inclusion criteria will be pilot-tested by two reviewers. Specifically, the data collection form will be developed and applied by two reviewers independently to a sample of 50 abstracts to ensure consistency of use and clarity of the instrument. Cohen's kappa statistic²² will be estimated to measure inter-rater reliability and screening will begin when >60% agreement is achieved.

Study selection will proceed according to the following: first, we will conduct a title and abstract screening. The full text of potentially relevant articles will be retrieved and screened in detail for relevance prior to data extraction. All screening, data extraction and quality assessment will be conducted in duplicate by (PD and JN). Disagreements will be resolved by consensus. When consensus cannot be reached, a third author will arbitrate (LM or LN).

Data extraction

We will extract bibliometric information such as author names, journal and year of publication, in addition to the location of the study, study design, number of participants, outcomes reported, outcome measures overall and outcome measures in French-speaking participants. For each outcome, measures of mean, SD or percent (95% CIs²³) and where possible, measures of effect of the outcome in French-speaking people versus non-French speaking people (odds or risk ratios, mean differences, accompanied with 95% CIs) will also be extracted.

Assessment of methodological quality of the included studies

Two authors will independently appraise the methodological quality of the studies using the Cochrane Risk of Bias Tool or the Newcastle-Ottawa Scale for randomised and non-randomised studies respectively.²⁴ Systematic reviews will be assessed using the Risk Of Bias in Systematic Review Tool²⁵ and the Assessing Quality of Systematic Reviews criteria.²⁶

Analyses and reporting

Our findings will be reported according to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses guidelines.^{27 28} Our findings will be summarised narratively and using tables. Data will be grouped by outcomes, with the number of studies, their design and their methodological quality. Key findings of each study will also be summarised using tables. We will conduct a narrative synthesis of the data to identify common themes and knowledge gaps.

DISCUSSION

The evidence of lack of French Language Healthcare Services in Ontario has been highlighted in previous research.⁸ Stigma, discrimination and race are associated with poor HIV- care retention and access to care.²⁹⁻³¹ In this review we will answer important questions related to access to care for francophone ACB living in Canada. Furthermore, we will evaluate the impact of intersectionality of French language, race and HIV stigma on ACB accessibility to HIV care. The findings of this scoping systematic review will have implications for health policy making and how community organisations and HIV/AIDS centres provide care to Francophone ACB immigrants and Canadians.

One limitation of this scoping review is that it is focused only on Canada and, therefore, its global relevance is limited; however, theoretical generalisations can be postulated and tested with francophone diaspora minorities in predominantly Anglophone communities. Nonetheless, we will conduct a comprehensive exhaustive search, on a novel topic with an experienced research team.

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1 Barriers in accessing HIV care for Francophone African, Caribbean and Black people 2 living with HIV in Canada: A scoping systematic review

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3 **1 Abstract**

4 **2 Introduction:** In 2001, 50-55% of French speaking minority communities did not have access to
5 health services in French in Canada. Although Canada is officially a bilingual country, reports
6 indicate that many healthcare services offered in French in Anglophone provinces are
7 insufficient or substandard, leading to healthcare discrepancies among Canada's minority
8 Francophone communities.

9 **3 Objectives:** The primary aim of this scoping systematic review was to identify existing gaps in
10 HIV-care delivery to Francophone minorities living with HIV in Canada.

11 **4 Study design: Scoping systematic review**

12 **5 Data sources:** Search for studies published between 1990 and November 2019 reporting on
13 health and healthcare in Francophone populations in Canada. Nine databases were searched
14 including Medline, Cumulative Index to Nursing and Allied Health Literature, the Cochrane
15 Library, Global Health, PsychInfo, PubMed and Web of Science.

16 **6 Study selection:** English or French language studies that include data on French-speaking people
17 with HIV in an Anglophone majority Canadian province.

18 **7 Results:** The literature search resulted in 294 studies. A total of 230 studies were excluded after
19 duplicates were removed. The full texts of 43 potentially relevant papers were retrieved for
20 evaluation and data extraction. Forty-one studies were further excluded based of failure to meet
21 the inclusion criteria leaving two qualitative studies that met our inclusion criteria. These two
22 studies reported on barriers on access to specialized care by Francophone and highlighted
23 difficulties experienced by healthcare professionals in providing quality healthcare to
24 Francophone patients in Ontario and Manitoba.

25 **8 Conclusion:** The findings of this scoping systematic review highlight the need for more HIV
26 research on linguistic minority communities and should inform health policy making and
27 HIV/AIDS community organizations in providing HIV care to Francophone immigrants and
28 Canadians.

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1 Strengths and limitations of the study

- 2 • One strength of this study is that we have conducted a comprehensive and exhaustive search
3 of peer reviewed articles and grey literature on a research question that has never been
4 addressed before.
- 5 • Another strength of the study is that its findings highlight disparities in Canada's healthcare
6 systems and could be investigated in Francophone minority populations worldwide.
- 7 • One limitation is that information on HIV care in Francophone African Caribbean and Black
8 (ACB) populations was limited to two provinces: Ontario and Manitoba.
- 9 • Another limitation is the small number of studies addressing HIV care deficiencies amongst
10 Francophone ACBs, suggesting a lack of research on this population and making it difficult
11 to estimate how these disparities manifest in provinces and territories outside of Ontario and
12 Manitoba.

14 INTRODUCTION

15 In 2001, 50-55% of French speaking minority communities in Canada did not have
16 access to health services in French.[1] Therefore, in 2003, Health Canada launched the Official
17 Languages Health Program (OLHP) with the aim of improving access to health services for
18 official language minority communities (OLMCs). Continuity and accessibility to care is a
19 problem in general healthcare and HIV care for Francophone communities in Canada.[2-6] In
20 Canada the term *Francophone* refers to someone whose mother tongue or First Official
21 Language Spoken (FOLS) is French and who lives outside of the province of Quebec in a
22 majority English speaking province.[7, 8]

23 Although Canada is officially a bilingual country, reports indicate that many healthcare
24 services offered in French in Anglophone provinces are insufficient or substandard, leading to
25 healthcare discrepancies among Canada's minority Francophone communities.[9-12] In 2005,
26 shortages in medical interpreters, Francophone healthcare providers and services were noted in
27 Winnipeg's Francophone communities, making it difficult for patients to understand medical
28 instructions and advice, find a general physician and access or be referred to specialized
29 care.[10]

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3 1 In Ontario the French Language Service Act of 1986 (FLSA) guarantees the right of
4 2 individuals to receive French-language services, as well as French healthcare services, from the
5 3 Ontario government ministries and agencies.[13] However, French HIV resources including
6 4 Francophone health and social workers have been described as lacking by Ontarian Francophone
7 5 living with HIV. French-speaking professionals reported that French-service shortages across
8 6 Ontario left them overworked as they took on interpreting and translating duties on top of their
9 7 workloads.[11, 13, 14]

10 8 In addition, Ontarian healthcare professionals noted that Francophone patients receiving
11 9 care in English are more vulnerable than their Anglophone counterparts, especially if the
12 10 patient's issues and needs are complex, such as those with complicated illnesses, vision and
13 11 hearing deficiencies or mental illness. They also stated that these Francophone patients may not
14 12 disclose important information about their health in English or disclose less information overall.
15 13 This could be due to Francophone patients being unable to express themselves fully in English or
16 14 being uncomfortable relaying information through an interpreter, especially if that interpreter is
17 15 someone whom they are personally close to.[11, 12]

18 16 This deficiency in Francophone health services is worrying, especially since Canada's
19 17 minority francophone population is increasing.[7, 15] In Ontario, roughly 5% of the population
20 18 are Francophone, of which about 7.5% speak only French.[15] The Francophone population in
21 19 Canada is bolstered by immigration, including immigrants from French-speaking African and
22 20 Caribbean countries.[14] Hence, the healthcare needs of Canada's Francophone population help
23 21 illustrate the increasing demand of healthcare delivery in French.[10-12, 14] In 2016 the Public
24 22 Health Agency of Canada (PHAC) reported that approximately a third of people living with HIV
25 23 in Ontario were from ACB communities.[16] Additionally, as reported by a study done in the
26 24 U.S., language, a social determinant of health, was one barrier hindering sub-Saharan African
27 25 and Caribbean immigrants from being tested for HIV.[17] While AIDS Support Organizations
28 26 (ASOs) acknowledge the importance of bilingual healthcare, they also reported having to
29 27 prioritize their resources into dealing with other issues plaguing HIV-positive communities, such
30 28 as unsafe housing, food insecurity and mental illness.[9]

31 29 Even though the experience of African, Caribbean and Black people living with HIV has
32 30 been studied before, in this scoping systematic review, we aimed to identify existing gaps in

1 HIV-care delivery to HIV-diagnosed Francophone ACB in Canada.[18] Our secondary goal is to
2 examine the condition of this population's HIV care continuum (or cascade) by evaluating
3 information on health promotion, proximity to health care centers, quality of life, quality of care,
4 effect of race, stigma and discrimination on care provided, availability of bilingual health care
5 providers, preventive care and patient satisfaction.

6 7 **METHODS AND ANALYSES**

8 We used scoping study methodology adopted from the framework described by Arksey &
9 O'Malley.[19] The protocol for this scoping review is reported elsewhere.[8] Our methods are
10 outlined below.

11 12 **Patient and public involvement**

13 Patients or the public were involved in the design, or conduct, or reporting, or dissemination
14 plans of our research.

15 16 **Search strategy for identification of studies**

17 We conducted an exhaustive search for published studies in English or French reporting on
18 health and healthcare in Francophone populations in Canada. The online search was restricted to
19 articles published between 1990 (date that the French Language Service Act was implemented in
20 Ontario, Canada) and November 2019.[13]

21 Nine databases- Medline, Cumulative Index to Nursing and Allied Health Literature (CINAHL),
22 the Cochrane Library, the National Health Service Economic Development Database (NHS
23 EDD), Global Health, PsychInfo, PubMed, Scopus, and Web of Science- were searched. The
24 population was defined using text and indexed words relating to immigration, combined with the
25 names of all French speaking countries in Africa and the Caribbean.[8] Canada as a location, was
26 specified by searching the English and French names of all the provinces and territories, as well
27 as their ministries of health. When combined, these sets were filtered to include any mention of
28 HIV, seroconversion, seropositivity, or sexually transmitted diseases. As an example some of the
29 following terms in various combinations were used for the search: "Emigrants and Immigrants"
30 OR (French or francais or franco* or Quebec*" OR "Africa* or African or Afrique or Africain*"

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3 1 OR "Caribbean" OR "Caribbean Region" OR "Health Care Quality, Access/ and Evaluation" OR
4 "Health Services Accessibility" OR "HIV infections" OR "Seropositivity/Seroconversion" OR
5 2 "Canada or Canad*" OR "Black Canadian".
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8 4 The full search strategy is reported in the published protocol.[8]
9 5
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11 6 **Grey literature**

12 7 We searched the websites of relevant HIV organizations such as the African and Caribbean
13 8 Council on HIV/AIDS in Ontario (ACCHO), Association Francophone pour le Savoir (ACFAS),
14 9 The Ontario HIV Treatment Network (OHTN), and Canada's source for HIV and hepatitis C
15 10 information (CATIE). Furthermore, Health Canada's and Francophone community organization's
16 11 websites were also searched for literature.
17 12
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19 13 **Criteria for including studies**

20 14 **Types of studies**

21 15 Experimental, observational, qualitative, mixed methods, and studies focused on evidence
22 16 syntheses were considered for review.
23 17

24 18 **Types of participants**

25 19 To be eligible a study must have included data on French-speaking people with HIV in an
26 20 Anglophone majority Canadian province. Studies from Quebec were excluded as Francophone
27 21 are, by definition, French speaking people living in English speaking provinces in Canada.
28 22
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30 23 **Outcomes**

31 24 The primary outcomes investigated in this study were access to healthcare and quality of care for
32 25 Francophone living with or without HIV in Anglophone majority provinces. Access to HIV care
33 26 included HIV diagnosis, linkage and retention to care, receipt of antiretroviral therapy (ART),
34 27 adherence to medication and achievement of viral suppression.
35 28

36 29 Other outcomes of interest were participation in health promotion, proximity to health care
37 30 centers and access to bilingual health care providers and preventive care. Data were also
38 31 extracted on the quality of care provided as well as the effect of race, stigma and discrimination
39 32 on care provided as well as quality of life and patient satisfaction.
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Screening

All references retrieved were imported into Rayyan QCRI to facilitate study screening and selection.[20] Duplicate studies were removed prior to undertaking the abstract review.

Screening was done independently by JAO, COZ, JN and PD.

Our screening form was developed and applied independently to a sample of 50 abstracts to ensure consistency of use and clarity of the instrument. A Cohen's kappa statistic was used to measure inter-rater reliability, and screening started when >60% agreement was achieved.[21]

Data collection and analyses

Data extraction and quality assessment of included studies

The data from retrieved studies were independently extracted using standardized forms by 2 authors (J.A.O and C.O.Z). Studies with insufficient data to estimate outcomes of interest were excluded. Collected data were validated by P.D and J.N. Any disagreement was resolved by LM.

We extracted bibliometric information such as author names, journal, and year of publication.

We also extracted the location of the study, study design, number of participants, outcomes reported, outcome measures overall and outcome measures in French-speaking participants.

Assessment of methodological quality of the included studies

We did not appraise the methodological quality and risk of bias of the studies as this is not required in a scoping review.[22]

Analyses and reporting

Our findings are reported according to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) guidelines and we conducted a narrative synthesis of qualitative data to identify common themes and knowledge gaps.[23-25]

Results

Results of search

The literature search resulted in 291 studies through data base searching (**Fig. 1**). Three studies were generated through other sources and grey literature (**Fig.1**).[1, 26, 27] A total of 273 studies were screened after duplicates were removed. Subsequently, 230 studies with no focus on HIV,

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3 1 Francophone or ACB in Canada were further excluded based on title and abstract screening. The
4 full texts of 43 potentially relevant papers were retrieved for evaluation and data extraction.
5 2
6 3 Forty-one studies were further excluded based of failure to meet the inclusion criteria
7
8 4 (**Appendix 1**): 1 paper was not a research article, [28] 32 studies had no Francophone data,[18,
9 29-59] 2 studies were not on HIV,[4, 60] 4 studies were reviews with no eligible studies,[61-64]
10 5
11 6 1 study was a study not conducted in Canada,[65] and 1 study was not about access to HIV
12 7 care,[66] leaving 2 studies that met our inclusion criteria (**Figure 1**).[10, 14]
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14 8

9 **Characteristics of included studies**

10 Buissé et al. (2005) conducted a qualitative study to explore the availability of Francophone
11 specialized health and mental health services in the city of Winnipeg. In this study, 24 health
12 service providers delivering services to Francophone immigrants and refugees in the city of
13 Winnipeg were interviewed.[10] The authors investigated outcomes such as health care
14 accessibility, services and continuity of care for new Francophone immigrants. They found that
15 HIV and mental health services in the city of Winnipeg had only very little Francophone
16 capacity with Francophone staff being minimal to non-existent. This resulted in the use of
17 unqualified interpreters or appointment rescheduling as some places had a six month waiting list.
18 In some cases, HIV nurse specialists had to obtain materials from or refer Francophone clients to
19 HIV websites in French. African Francophone health service providers described the situation as
20 critical. Twenty-four health services providers from 19 organizations were interviewed for the
21 study. All of these organizations did not meet 8 of the 9 criteria of Bachrach's continuity of care
22 principles for Francophone people living with HIV in general and African Francophone in
23 particular. These principles include: administrative environments that are capable of providing
24 the aid their patients' need, accessible care, multidisciplinary care, care customized to patients'
25 needs, adaptable use of different programs and interventions, extensive linkage between
26 organizations caring for the patient, long term caregivers who help patients access care, active
27 patient involvement in organizing services and culturally-responsive programs.[2] Although
28 these organization had a full array of services, there was a lack of cultural awareness among
29 health care providers as well as barriers in access to care and continuity of care for Francophone
30 African newcomers living with HIV or mental illness in Winnipeg.[10]

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3 1 Samson and al. (2012) investigated the cultural sensitivity involved in HIV care delivery to
4 Francophone minorities living with HIV in Ontario.[14] This was a qualitative study conducted
5 2 with a sample of 29 participants, including AIDS Service Organization (ASO) professionals and
6 3 people living with HIV (PLWH), between September and December 2009 in the cities of Ottawa
7 4 and Toronto. The author used phenomenological analysis to categorize his findings into three
8 5 themes:[67]
9 6

10 7 *Social Context of HIV Care Access in French:* ASO professionals did not perceive offering
11 8 bilingual services as a priority because their clients often had more severe and complex needs
12 9 which required diverting time and resources to outreach and to addressing more immediate and
13 10 urgent needs. Francophone PLWH (both Canadian - and African-born) reported unmet
14 11 expectations with respect to the delivery of services in French. Canadian Francophone PLWH
15 12 perceived this as a rejection of their cultural identity and citizenship while African-born
16 13 Francophone PLWH were shocked by the lack of service delivery in French in ASOs.

17 14 *Language and Cultural Sensitivity and Diversity:* ASO professionals perceived linguistic
18 15 differences as secondary. They recognized language as an aspect of the cultural diversity of their
19 16 clientele but considered it as a neutral tool for service delivery which does not negate cultural
20 17 differences. Because most Canadian PLWH speak English, and rarely demand service in their
21 18 mother tongue, French language services are not a priority. They recognized that this might be a
22 19 barrier for African-born clients but since there is no advocacy for French services, they
23 20 considered that not a priority. Canadian PLWH acknowledged initiating conversations at ASOs
24 21 in English due to a fear of being rejected if they speak French. Both Canadian and African-born
25 22 Francophone PLWH described positive experiences when they were able to obtain services in
26 23 French. They considered that they were better understood and could express themselves better in
27 24 these situations.

28 25 *Emerging Reality in Canada's ACB Francophone Communities:*

29 26 The study reported an increase in the clientele from French-speaking African countries due to a
30 27 changing ethno-racial composition of the Franco-Ontarian community. This situation has created
31 28 pressure for more French services in ASOs in Ontario. There is a greater awareness of the need
32 29 to tend to linguistic differences as an aspect of cultural sensitivity. These unilingual French

1 speaking African-born PLWH described their linguistic isolation as a painful reminder of the
2 rejection experienced in their countries of origin due to HIV/AIDS.

4 **DISCUSSION**

5 The purpose of this scoping review was to identify existing gaps in health care access by
6 and delivery to Francophone minorities living with HIV in Canada, and to uncover the reasons
7 for healthcare disparities faced by Francophone ACBs living with HIV in Anglophone Canadian
8 provinces and territories.

9 We identified two eligible studies from two provinces in Canada -Ontario and Manitoba.
10 In Ontario, the most populated province in Canada, we found that issues exist regarding the
11 availability of Francophone or bilingual healthcare and HIV/AIDS organisation workers. Several
12 bilingual healthcare professionals report difficulties in providing quality healthcare to
13 Francophone patients. They attributed this to scarcities in bilingual staff and problems
14 communicating with patients who speak French when that was not the providers' first language.
15 Additionally, bilingual health providers also described often being overworked, since they would
16 also take on interpretative roles on top of their regular work.[11, 12, 14] These deficiencies in
17 French services are also notable amongst Ontarian HIV/AIDS organisations, where lack of
18 funding may have contributed to smaller numbers of bilingual staff.[68, 69] While language was
19 acknowledged as an important cultural factor and communication tool, it was also frequently
20 overlooked to better serve people living with HIV (PLWH) in Ontario by helping provide food,
21 housing and mental services.[14] The evidence of lack of French Language Healthcare Services
22 (FLHS) in Ontario has been highlighted in previous research.[70]

23 In Manitoba, it is estimated that only 25% of Francophone have access to French
24 healthcare services, with Franco-Manitobans and healthcare professionals alike reporting a far
25 greater demand for Francophone services than what was available.[3, 71] Furthermore, new
26 Francophone ACB immigrants to Manitoba were reported to have difficulties accessing
27 specialized services such as counseling on HIV and mental health as well as HIV testing.[10]
28 Interestingly, although there are scarcities throughout Manitoba's French healthcare,
29 Anglophone Manitoban healthcare providers seemed to be under the assumption that Manitoba's
30 health resources were sufficient to meet demand.[10] Moreover, a 2015 study reported that

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3 1 Francophone immigrants to Manitoba were more likely to wait for French healthcare services
4 and interpreters. The waiting time for French services was far longer compared to Anglophone
5 2 services.[72]
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8 4 It is well established that language is critical to effective healthcare: it facilitates accurate
9 5 transmission of knowledge between a provider and a patient and allows patients to effectively
10 6 disclose their symptoms and medical history.[10-12] Unfortunately, official language minorities
11 7 frequently experience delays in healthcare due to difficulties finding interpreters and shortages in
12 8 bilingual healthcare personnel and management staff, which can impact travel times, the
13 9 accessibility and availability of specialized services and whether translated resources are
14 10 present.[3, 9-12] Therefore, the well-documented deficiency of French Language Healthcare
15 11 Services (FLHS) in Ontario and other provinces and territories where French is a minority
16 12 language can and should be seen as a major barrier to the receipt of quality healthcare amongst
17 13 Francophone ACB living with HIV.[10, 26, 70]
18
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20 14 Bearing in mind the enormous importance of a common language in patient-provider
21 15 interactions, it is evident that Francophone ACBs in majority- English-speaking provinces and
22 16 territories are much more likely to experience lower quality healthcare services than their
23 17 Anglophone counterparts. In both healthcare and HIV/ AIDS organisations outside of Quebec,
24 18 individuals in need of French-language services are expected to advocate for resources.[26] Yet,
25 19 practitioners and organization workers frequently note that their Francophone patients would
26 20 communicate in English over French, if they could, even if it meant less information being
27 21 communicated overall. Several explanations have been postulated for this phenomenon: some
28 22 healthcare workers think it may be due to clients' fears of receiving lesser or delayed care if
29 23 practitioners realised they were Francophone; others believe it may have to do with patients'
30 24 fears of HIV stigmatization.[3, 10, 12, 14, 71, 72] This latter point is especially relevant to ACB
31 25 people living with HIV, since stigma, discrimination and race are all associated with poor access
32 26 to care and retention in care.[73-75] Considering that ACB people with HIV often face multiple
33 27 forms of stigma, not only due to ethnicity or HIV status, language barriers can present a
34 28 stigmatizing and significant hurdle to health and wellbeing in this population.[76]
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37 29 Research has also shown that cultural differences should be considered in addition to
38 30 stigma, since ignoring these factors can have a negative impact on HIV prevention
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3 1 interventions.[18, 77-79] Lack of consideration for these issues has been shown to be detrimental
4 to the health of African-born Francophone PLWH, who were not being able to access services in
5 French as it reinforced their sense of isolation in a new and unfamiliar country.[9, 10] Moreover,
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8 4 ACB focus groups in Toronto suggested that to be successfully effective, HIV treatments and
9 interventions in the ACB communities should be culturally appropriate and sensitive.[80]

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12 6 Limited research into Francophone ACB populations in Canada makes it difficult to
13 evaluate how French healthcare deficiencies impact their HIV care continuum. For instance,
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15 8 while Manitoba reported 116 new cases of HIV in 2005, of which approximately 21% were from
16 ACB populations, it is unknown how many of these patients were Francophone.[81] Moreover,
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18 9 although Buissé's study described "minimal to non-existent" numbers of Francophone HIV and
19 TB counselling specialists, there were no records of how many clients were expected to require
20 those services or how many had come in for HIV diagnosis and treatment. It could also be
21 possible that given the paucity of Francophone HIV and TB specialists at the time, the actual
22 rates of HIV diagnosis could indeed be higher.[10]

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27 15 In Ontario, while 25.3% of 2017's 1184 new HIV diagnoses are estimated to come from
28 ACB populations, data on race and ethnicity was only available for 43.1% of the population.
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30 16 Similar to Manitoba, no information on Francophone populations was available.[82] Thus, the
31 collection of data on Francophone on the provision of bilingual healthcare services is critical to
32 developing effective HIV-prevention programmes for Francophone ACB communities.

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36 20 This study answers important questions related to access to care for Francophone ACB
37 people living with or affected by HIV in Canada. Furthermore this scoping review investigated
38 the impact of intersectionality, the French language, race and HIV stigma on ACB access to HIV
39 care. The global relevance of this study is limited, since this scoping review is focused only on
40 Canada. Similarly, although Francophone healthcare deficits have been noted in several
41 provinces other than Quebec, information on HIV care in Francophone ACB populations was
42 limited to only two studies.[3, 4, 12, 71, 83-85] The low number of included studies is due to the
43 fact that although there are more studies on Francophone health and access to health care in
44 general, not enough studies are focused on HIV in the Francophone and Francophone ACB
45 communities. Thus, while the two studies outlined in this scoping review did describe significant
46 barriers to HIV care for Francophone the small number of studies addressing HIV care

1 deficiencies amongst Francophone ACBs who do not live in Quebec make it difficult to estimate
2 HIV care disparities in provinces and territories other than Ontario and Manitoba.

3 4 **Conclusion**

5 This research has shown that culturally sensitive health-related service provision should include
6 considerations of language, especially in the context of an officially bilingual country, where
7 clients have a legitimate claim to such services. Providing services in a client's own language
8 values their identity and allows for better care of those individuals. The findings of this scoping
9 systematic review should inform changes in health policy making, community organizations and
10 HIV/AIDS centre, such as increasing training and recruitment of bilingual healthcare
11 practitioners, especially specialists, and ASO staff. These bilingual providers would be
12 instrumental in providing and improving access to health care for Francophone ACB immigrants
13 and Canadians. The paucity of data on HIV care for Francophone ACB immigrants or Canadians
14 demonstrates the need for more HIV research to be done within these linguistic minority
15 communities. This research would be key in advancing our knowledge on which aspects of
16 Canadian healthcare systems impose the greatest barriers to HIV care, testing, counseling and
17 treatment amongst ACB communities.

18
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25 26 **Author contributions**

27 The study was conceived by Pascal Djiadeu, Lawrence Mbuagbaw, Joseph Nguemo and LaRon
28 E. Nelson. All authors revised the research question and provided content to the design.
29 Manuscript was written and edited by Pascal Djiadeu, Abban Yusuf, Lawrence Mbuagbaw,
30 Joseph Nguemo, LaRon E. Nelson, Chantal Mukandoli, Clémence Ongolo-Zogo, Apondi J.

1 Odhiambo and David Lightfoot. Principal investigator of the study is LaRon E. Nelson. All
2 authors read and approved the final version of the manuscript.

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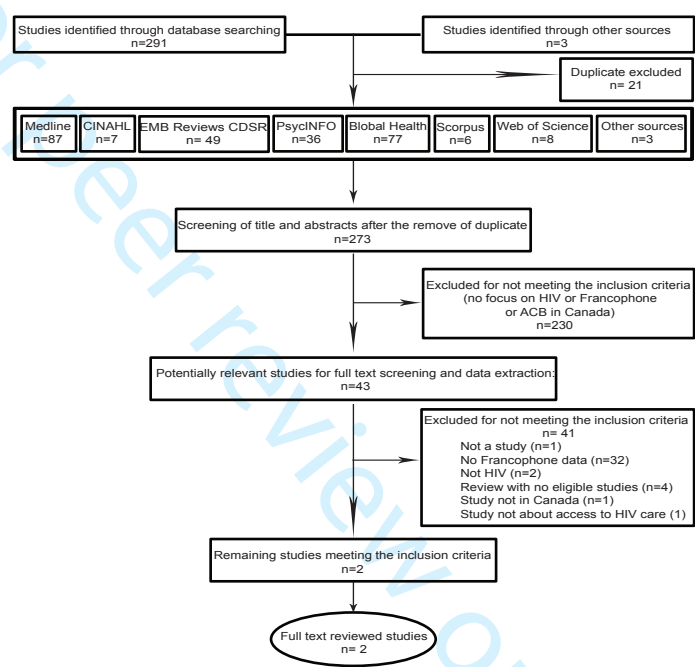


Figure 1: PRISMA flow diagram of studies selection

Appendix 1: Characteristics of excluded studies

Reason for exclusion	Study reference (n=41)
No Francophone data	<ol style="list-style-type: none"> 1. Antiretroviral Therapy Cohort, C., <i>Influence of geographical origin and ethnicity on mortality in patients on antiretroviral therapy in Canada, Europe, and the United States</i>. Clinical infectious diseases : an official publication of the Infectious Diseases Society of America, 2013. 56(12): p. 1800-9. 2. Baidooobonso, S., et al., <i>Social and proximate determinants of the frequency of condom use among African, Caribbean, and other Black people in a Canadian city: Results from the BLACCH study</i>. Journal of Immigrant and Minority Health, 2016. 18(1): p. 67-85. 3. Baidooobonso, S., et al., <i>HIV risk perception and distribution of HIV risk among African, Caribbean and other Black people in a Canadian city: mixed methods results from the BLACCH study</i>. BMC public health, 2013. 13: p. 184. 4. Blot, S., et al., <i>AIDS Service Organization Access Among African, Caribbean and Other Black Residents of an Average Canadian City</i>. J Immigr Minor Health, 2017. 19(4): p. 851-860. 5. Browne, O.A., <i>Assessing healthcare providers' responses to African and Caribbean families living with HIV</i>. Dissertation Abstracts International Section A: Humanities and Social Sciences, 2009. 69(7-A): p. 2753. 6. Burton K, A.S., Kerr J, Kershner S, Maticka-Tyndale E., <i>Examining sexual concurrency and number of partners among African, Caribbean, and black women using the social ecological model: Results from the ACBY study</i>. Canadian Journal of Human Sexuality, 2009. Volume 28 (Issue 1): p. pp. 46-56. 7. Csete, J., <i>'Vectors, vessels and victims': HIV/AIDS and women's human rights in Canada</i>. 'Vectors, vessels and victims': HIV/AIDS and women's human rights in Canada, 2005. 8. dela Cruz, A.M.M., <i>A narrative inquiry into the experiences of Sub-Saharan African immigrants living with HIV in Alberta, Canada</i>. Dissertation Abstracts International: Section B: The Sciences and Engineering, 2017. 77(9-B(E)): p. No-Specified. 9. Gardezi, F., et al., <i>Experiences of and responses to HIV among African and Caribbean communities in Toronto, Canada</i>. AIDS care, 2008. 20(6): p. 718-25. 10. Kafiriri, L., et al., <i>How acceptable is it for HIV positive African, Caribbean and Black women to provide breast milk/fluid samples for research purposes?</i> BMC research notes, 2017. 10(1): p. 7. 11. Kafiriri, L., et al., <i>The experiences of making infant feeding choices by African, Caribbean and Black HIV-positive mothers in Ontario, Canada</i>. World health & population, 2014. 15(2): p. 14-22. 12. Khan, S., et al., <i>Loneliness and perceived social support in pregnancy and early postpartum of mothers living with HIV in Ontario, Canada</i>. AIDS Care, 2019. 31(3): p. 318-325. 13. Kippax, S.C., et al., <i>Living with HIV: Recent research from France and the French Caribbean (VESPA study), Australia, Canada and the United Kingdom</i>. AIDS, 2007. 21(Suppl 1): p. S1-S3. 14. Krusi, A., et al. <i>Marginalized women living with HIV at increased risk of viral load suppression failure: implications for prosecutorial guidelines regarding criminalization of HIV non-disclosure in Canada and globally</i>. in <i>JOURNAL OF THE INTERNATIONAL AIDS SOCIETY</i>. 2018. JOHN WILEY & SONS LTD THE ATRIUM, SOUTHERN GATE, CHICHESTER PO19 8SQ, W 15. Li, A.T., et al., <i>Effects Of HIV stigma reduction interventions in diasporic communities: insights from the CHAMP study</i>. AIDS Care, 2018. 30(6): p. 739-745. 16. Logie, C., et al. <i>Developing and pilot testing TRANScending love, a multi-methods arts based workshop with African, Caribbean and Black transgender women</i>. in <i>JOURNAL OF</i>

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 23. Masindi, K.I., et al., *Co-morbid Non-communicable Diseases and Associated Health Service Use in African and Caribbean Immigrants with HIV*. J Immigr Minor Health, 2018. **20**(3): p. 536-545.
 24. Nakyonyi, M.M., *HIV/AIDS education participation by the African community*. Canadian journal of public health = Revue canadienne de sante publique, 1993. **84 Suppl 1**: p. S19-23.
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 26. Tulloch, H.E., et al., *HIV knowledge among Canadian-born and sub-Saharan African-born patients living with HIV*. Special focus on communicable diseases, 2012. **14**(1): p. 132-139.
 27. Umamaheswaran-Mahara, M. and A.J. Hunter, *Health status of a paediatric urban refugee and immigrant population in Canada*. Paediatrics and Child Health, 2010. **15**(SA): p. 48A.
 28. Webster, K., et al., *Strategies for Recruiting Women Living with Human Immunodeficiency Virus in Community-Based Research: Lessons from Canada*. Progress in community health partnerships : research, education, and action, 2018. **12**(1): p. 21-34.
 29. Williams, C.C., et al., *HIV prevention risks for Black women in Canada*. Social science & medicine (1982), 2009. **68**(1): p. 12-20.
 30. Worthington, C., et al., *African immigrant views of HIV service needs: gendered perspectives*. AIDS Care, 2013. **25**(1): p. 103-108.
 31. Worthington, C.A., et al., *Individual and jurisdictional factors associated with voluntary HIV testing in Canada: Results of a national survey, 2011*. Canadian journal of public health = Revue canadienne de sante publique, 2014. **106**(2): p. e4-9.
 32. Zhabokritsky, A., et al., *Barriers to HIV pre-exposure prophylaxis among African, Caribbean and Black men in Toronto, Canada*. PloS one, 2019. **14**(3): p. e0213740.

<p>Review with no eligible studies</p>	<ol style="list-style-type: none"> 1. Aidala, A.A., et al., <i>Housing Status, Medical Care, and Health Outcomes Among People Living With HIV/AIDS: A Systematic Review</i>. American journal of public health, 2016. 106(1): p. e1-e23. 2. Ha, S., et al., <i>A systematic review of HIV testing among Canadian populations</i>. Canadian journal of public health = Revue canadienne de sante publique, 2014. 105(1): p. e53-62. 3. Jbilou, J., et al., <i>Men-centered approaches for primary and secondary prevention of HIV/AIDS: a scoping review of effective interventions</i>. Journal of AIDS and Clinical Research, 2013. 4(11): p. 257. 4. Mbuagbaw, L., et al., <i>Strategies to improve adherence to antiretroviral therapy and retention in care for people living with HIV in high-income countries: a protocol for an overview of systematic reviews</i>. BMJ open, 2018. 8(9): p. e022982.
<p>Not HIV</p>	<ol style="list-style-type: none"> 1. Bernier, A.M., et al., <i>A survey on health care access in French for francophone immigrants in Winnipeg, Canada</i>. Articles from the 13th World Congress on Public Health. 2013. 65-68. 2. Pottie, K., et al., <i>Language proficiency, gender and self-reported health: an analysis of the first two waves of the longitudinal survey of immigrants to Canada</i>. Can J Public Health, 2008. 99(6): p. 505-10.
<p>Study not in Canada</p>	<ol style="list-style-type: none"> 1. Smith, M.L., S. Read, and A. Bitnun, <i>Neurocognitive development in young HIV-Exposed uninfected children exposed pre-or perinatally to antiretroviral medications</i>. Canadian Journal of Infectious Diseases and Medical Microbiology, 2014. 25(SUPPL. SA): p. 65A.
<p>Not a study</p>	<ol style="list-style-type: none"> 1. Anonymous, <i>HIV-positive man from DRC deemed a "person in need of protection"</i>. HIV/AIDS policy & law review, 2008. 13(2-3): p. 30.
<p>Study not about access to HIV care</p>	<ol style="list-style-type: none"> 1. Kaida, A., et al., <i>Hiring, training, and supporting Peer Research Associates: Operationalizing community-based research principles within epidemiological studies by, with, and for women living with HIV</i>. Harm Reduct J, 2019. 16(1): p. 47.

Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) Checklist

SECTION	ITEM	PRISMA-ScR CHECKLIST ITEM	REPORTED ON PAGE #
TITLE			
Title	1	Identify the report as a scoping review.	
ABSTRACT			
Structured summary	2	Provide a structured summary that includes (as applicable): background, objectives, eligibility criteria, sources of evidence, charting methods, results, and conclusions that relate to the review questions and objectives.	
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of what is already known. Explain why the review questions/objectives lend themselves to a scoping review approach.	
Objectives	4	Provide an explicit statement of the questions and objectives being addressed with reference to their key elements (e.g., population or participants, concepts, and context) or other relevant key elements used to conceptualize the review questions and/or objectives.	
METHODS			
Protocol and registration	5	Indicate whether a review protocol exists; state if and where it can be accessed (e.g., a Web address); and if available, provide registration information, including the registration number.	
Eligibility criteria	6	Specify characteristics of the sources of evidence used as eligibility criteria (e.g., years considered, language, and publication status), and provide a rationale.	
Information sources*	7	Describe all information sources in the search (e.g., databases with dates of coverage and contact with authors to identify additional sources), as well as the date the most recent search was executed.	
Search	8	Present the full electronic search strategy for at least 1 database, including any limits used, such that it could be repeated.	
Selection of sources of evidence†	9	State the process for selecting sources of evidence (i.e., screening and eligibility) included in the scoping review.	
Data charting process‡	10	Describe the methods of charting data from the included sources of evidence (e.g., calibrated forms or forms that have been tested by the team before their use, and whether data charting was done independently or in duplicate) and any processes for obtaining and confirming data from investigators.	
Data items	11	List and define all variables for which data were sought and any assumptions and simplifications made.	
Critical appraisal of individual sources of evidence§	12	If done, provide a rationale for conducting a critical appraisal of included sources of evidence; describe the methods used and how this information was used in any data synthesis (if appropriate).	
Synthesis of results	13	Describe the methods of handling and summarizing the data that were charted.	



SECTION	ITEM	PRISMA-ScR CHECKLIST ITEM	REPORTED ON PAGE #
RESULTS			
Selection of sources of evidence	14	Give numbers of sources of evidence screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally using a flow diagram.	
Characteristics of sources of evidence	15	For each source of evidence, present characteristics for which data were charted and provide the citations.	
Critical appraisal within sources of evidence	16	If done, present data on critical appraisal of included sources of evidence (see item 12).	
Results of individual sources of evidence	17	For each included source of evidence, present the relevant data that were charted that relate to the review questions and objectives.	
Synthesis of results	18	Summarize and/or present the charting results as they relate to the review questions and objectives.	
DISCUSSION			
Summary of evidence	19	Summarize the main results (including an overview of concepts, themes, and types of evidence available), link to the review questions and objectives, and consider the relevance to key groups.	
Limitations	20	Discuss the limitations of the scoping review process.	
Conclusions	21	Provide a general interpretation of the results with respect to the review questions and objectives, as well as potential implications and/or next steps.	
FUNDING			
Funding	22	Describe sources of funding for the included sources of evidence, as well as sources of funding for the scoping review. Describe the role of the funders of the scoping review.	

JBI = Joanna Briggs Institute; PRISMA-ScR = Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews.

* Where *sources of evidence* (see second footnote) are compiled from, such as bibliographic databases, social media platforms, and Web sites.

† A more inclusive/heterogeneous term used to account for the different types of evidence or data sources (e.g., quantitative and/or qualitative research, expert opinion, and policy documents) that may be eligible in a scoping review as opposed to only studies. This is not to be confused with *information sources* (see first footnote).

‡ The frameworks by Arksey and O'Malley (6) and Levac and colleagues (7) and the JBI guidance (4, 5) refer to the process of data extraction in a scoping review as data charting.

§ The process of systematically examining research evidence to assess its validity, results, and relevance before using it to inform a decision. This term is used for items 12 and 19 instead of "risk of bias" (which is more applicable to systematic reviews of interventions) to include and acknowledge the various sources of evidence that may be used in a scoping review (e.g., quantitative and/or qualitative research, expert opinion, and policy document).

From: Tricco AC, Lillie E, Zarin W, O'Brien KK, Colquhoun H, Levac D, et al. PRISMA Extension for Scoping Reviews (PRISMA-ScR): Checklist and Explanation. *Ann Intern Med.* 2018;169:467–473. doi: [10.7326/M18-0850](https://doi.org/10.7326/M18-0850).



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Barriers in accessing HIV care for Francophone African, Caribbean and Black people living with HIV in Canada: A scoping review

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1 Barriers in accessing HIV care for Francophone African, Caribbean and Black people 2 living with HIV in Canada: A scoping review

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37
38 **Key words:** African, Caribbean, Black, French speaking, Francophone, Canada, HIV

39
40 **Word count:** 3916

1 **Abstract**

2 **Introduction:** In 2001, 50-55% of French speaking minority communities did not have access to
3 health services in French in Canada. Although Canada is officially a bilingual country, reports
4 indicate that many healthcare services offered in French in Anglophone provinces are
5 insufficient or substandard, leading to healthcare discrepancies among Canada's minority
6 Francophone communities.

7 **Objectives:** The primary aim of this scoping systematic review was to identify existing gaps in
8 HIV(human immunodeficiency viruses)-care delivery to Francophone minorities living with HIV
9 in Canada.

10 **Study design: Scoping systematic review**

11 **Data sources:** Search for studies published between 1990 and November 2019 reporting on
12 health and healthcare in Francophone populations in Canada. Nine databases were searched
13 including Medline, Cumulative Index to Nursing and Allied Health Literature, the Cochrane
14 Library, Global Health, PsychInfo, PubMed and Web of Science.

15 **Study selection:** English or French language studies that include data on French-speaking people
16 with HIV in an Anglophone majority Canadian province.

17 **Results:** The literature search resulted in 294 studies. A total of 230 studies were excluded after
18 duplicates were removed. The full texts of 43 potentially relevant papers were retrieved for
19 evaluation and data extraction. Forty-one studies were further excluded based of failure to meet
20 the inclusion criteria leaving two qualitative studies that met our inclusion criteria. These two
21 studies reported on barriers on access to specialized care by Francophone and highlighted
22 difficulties experienced by healthcare professionals in providing quality healthcare to
23 Francophone patients in Ontario and Manitoba.

24 **Conclusion:** The findings of this scoping systematic review highlight the need for more HIV
25 research on linguistic minority communities and should inform health policy making and HIV/
26 AIDS (acquired immunodeficiency syndrome) community organizations in providing HIV care
27 to Francophone immigrants and Canadians.

Strengths and limitations of the study

- A strength of this study is that we have conducted a comprehensive and exhaustive search of peer-reviewed articles and grey literature on a research question that has never been addressed before.
- Another strength of the study is that its findings highlight disparities in Canada's healthcare systems and could be investigated in Francophone minority populations worldwide.
- A limitation is that information on HIV care in Francophone African Caribbean and Black (ACB) populations was limited to two provinces: Ontario and Manitoba.
- Another limitation is the small number of studies addressing HIV care deficiencies amongst Francophone ACBs, suggesting a lack of research on this population and making it difficult to estimate how these disparities manifest in provinces and territories outside of Ontario and Manitoba.

INTRODUCTION

In 2001, 50-55% of French-speaking minority communities in Canada did not have access to health services in French.[1] Therefore, in 2003, Health Canada launched the Official Languages Health Program (OLHP) with the aim of improving access to health services for official language minority communities (OLMCs). Continuity and accessibility to care is a problem in general healthcare and HIV care for Francophone communities in Canada.[2-6] In Canada, the term *Francophone* refers to someone whose mother tongue or First Official Language Spoken (FOLS) is French and who lives outside of the province of Quebec in a majority English speaking province.[7, 8]

Although Canada is officially a bilingual country, reports indicate that many healthcare services offered in French in Anglophone provinces are insufficient or substandard, leading to healthcare discrepancies among Canada's minority Francophone communities.[9-12] In 2005, shortages in medical interpreters, Francophone healthcare providers and services were noted in Winnipeg's Francophone communities, making it difficult for patients to understand medical instructions and advice, find a general physician and access or be referred to specialized care.[10]

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3 1 In Ontario the French Language Service Act of 1986 (FLSA) guarantees the right of
4 2 individuals to receive French-language services, as well as French healthcare services, from the
5 3 Ontario government ministries and agencies.[13] However, French HIV resources, including
6 4 Francophone health and social workers, have been described as lacking by Ontarian
7 5 Francophone living with HIV. French-speaking professionals reported that French-service
8 6 shortages across Ontario left them overworked as they took on interpreting and translating duties
9 7 on top of their workloads.[11, 13, 14]

10 8 In addition, Ontarian healthcare professionals noted that Francophone patients receiving
11 9 care in English are more vulnerable than their Anglophone counterparts, especially if the
12 10 patient's issues and needs are complex, such as those with complicated illnesses, vision and
13 11 hearing deficiencies or mental illness. They also stated that these Francophone patients may not
14 12 disclose important information about their health in English or disclose less information overall.
15 13 This could be due to Francophone patients being unable to express themselves fully in English or
16 14 being uncomfortable relaying information through an interpreter, especially if that interpreter is
17 15 someone whom they are personally close to.[11, 12]

18 16 This deficiency in Francophone health services is worrying, especially since Canada's
19 17 minority francophone population is increasing.[7, 15] In Ontario, roughly 5% of the population
20 18 are Francophone, of which about 7.5% speak only French.[15] The Francophone population in
21 19 Canada is bolstered by immigration, including immigrants from French-speaking African and
22 20 Caribbean countries.[14] Hence, the healthcare needs of Canada's Francophone population help
23 21 illustrate the increasing demand for healthcare delivery in French.[10-12, 14] In 2016, the Public
24 22 Health Agency of Canada (PHAC) reported that approximately a third of people living with HIV
25 23 in Ontario were from ACB communities.[16] Additionally, as reported by a study done in the
26 24 United States, language, a social determinant of health, was one barrier hindering sub-Saharan
27 25 African and Caribbean immigrants from being tested for HIV.[17] While AIDS Support
28 26 Organizations (ASOs) acknowledge the importance of bilingual healthcare, they also reported
29 27 having to prioritize their resources into dealing with other issues plaguing HIV-positive
30 28 communities, such as unsafe housing, food insecurity and mental illness.[9]

31 29 Even though the experience of African, Caribbean and Black people living with HIV has
32 30 been studied before, in this scoping systematic review, we aimed to identify existing gaps in

1 HIV-care delivery to HIV-diagnosed Francophone ACB in Canada.[18] Our secondary goal is to
2 examine the condition of this population's HIV care continuum (or cascade) by evaluating
3 information on health promotion, proximity to health care centers, quality of life, quality of care,
4 effect of race, stigma and discrimination on care provided, availability of bilingual health care
5 providers, preventive care and patient satisfaction.

6 7 **METHODS AND ANALYSES**

8 We used scoping review methodology adopted from the framework described by Arksey &
9 O'Malley.[19] The protocol for this scoping review is reported elsewhere.[8] Our methods are
10 outlined below.

11 12 **Patient and public involvement**

13 Patients or the public were involved in the design, or conduct, or reporting, or dissemination
14 plans of our research.

15 16 **Search strategy for identification of studies**

17 We conducted an exhaustive search for published studies in English or French reporting on
18 health and healthcare in Francophone populations in Canada. The online search was restricted to
19 articles published between 1990 (the date that the French Language Service Act was
20 implemented in Ontario, Canada) and November 2019.[13]

21 Nine databases- Medline, Cumulative Index to Nursing and Allied Health Literature (CINAHL),
22 the Cochrane Library, the National Health Service Economic Development Database (NHS
23 EDD), Global Health, PsychInfo, PubMed, Scopus, and Web of Science- were searched. The
24 population was defined using text and indexed words relating to immigration, combined with the
25 names of all French speaking countries in Africa and the Caribbean.[8] Canada as a location, was
26 specified by searching the English and French names of all the provinces and territories, as well
27 as their ministries of health. When combined, these sets were filtered to include any mention of
28 HIV, seroconversion, seropositivity, or sexually transmitted diseases. As an example some of the
29 following terms in various combinations were used for the search: "Emigrants and Immigrants"
30 OR (French or francais or franco* or Quebec*" OR "Africa* or African or Afrique or Africain*"

1
2
3 1 OR "Caribbean" OR "Caribbean Region" OR "Health Care Quality, Access/ and Evaluation" OR
4 "Health Services Accessibility" OR "HIV infections" OR "Seropositivity/Seroconversion" OR
5 2 "Canada or Canad*" OR "Black Canadian" (**Supplement 1**).
6 3

7
8 4 The search strategy is also reported in the published protocol.[8]
9 5

11 6 **Grey literature**

12 7 We searched the websites of relevant HIV organizations such as the African and Caribbean
13 8 Council on HIV/AIDS in Ontario (ACCHO), Association Francophone pour le Savoir (ACFAS),
14 9 The Ontario HIV Treatment Network (OHTN), and Canada's source for HIV and hepatitis C
15 10 information (CATIE). Furthermore, Health Canada's and Francophone community organizations'
16 11 websites were also searched for literature.
17 12

18 13 **Criteria for including studies**

19 14 **Types of studies**

20 15 Experimental, observational, qualitative, mixed methods, and studies focused on evidence
21 16 syntheses were considered for review.
22 17

23 18 **Types of participants**

24 19 To be eligible a study must have included data on French-speaking people with HIV in an
25 20 Anglophone majority Canadian province. Studies from Quebec were excluded as Francophone
26 21 are, by definition, French-speaking people living in English speaking provinces in Canada.
27 22

28 23 **Outcomes**

29 24 The primary outcomes investigated in this study were access to healthcare and quality of care for
30 25 Francophone living with or without HIV in Anglophone majority provinces. Access to HIV care
31 26 included HIV diagnosis, linkage and retention to care, receipt of antiretroviral therapy (ART),
32 27 adherence to medication and achievement of viral suppression.
33 28

34 29 Other outcomes of interest were participation in health promotion, proximity to health care
35 30 centers and access to bilingual health care providers and preventive care. Data were also
36 31 extracted on the quality of care provided as well as the effect of race, stigma and discrimination
37 32 on care provided as well as quality of life and patient satisfaction.
38 33

Screening

All references retrieved were imported into Rayyan QCRI (Qatar Computing Research Institute) to facilitate study screening and selection.[20] Duplicate studies were removed prior to undertaking the abstract review. Screening was done independently by JAO, COZ, JN and PD. Our screening form was developed and applied independently to a sample of 50 abstracts to ensure consistency of use and clarity of the instrument. A Cohen's kappa statistic was used to measure inter-rater reliability, and screening started when >60% agreement was achieved.[21]

Data collection and analyses

Data extraction and quality assessment of included studies

The data from retrieved studies were independently extracted using standardized forms by 2 authors (J.A.O and C.O.Z). Studies with insufficient data to estimate outcomes of interest were excluded. Collected data were validated by P.D and J.N. Any disagreement was resolved by LM. We extracted bibliometric information such as author names, journal, and year of publication. We also extracted the location of the study, study design, number of participants, outcomes reported, outcome measures overall and outcome measures in French-speaking participants.

Assessment of methodological quality of the included studies

We did not appraise the methodological quality and risk of bias of the studies as this is not required in a scoping review.[22]

Analyses and reporting

Our findings are reported according to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) guidelines and we conducted a narrative synthesis of qualitative data to identify common themes and knowledge gaps.[23-25]

Results

Results of search

The literature search resulted in 291 studies through data base searching (**Fig. 1**). Three studies were generated through other sources and grey literature (**Fig.1**).[1, 26, 27] A total of 273 studies were screened after duplicates were removed. Subsequently, 230 studies with no focus on HIV,

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3 1 Francophone or ACB in Canada were further excluded based on title and abstract screening. The
4 full texts of 43 potentially relevant papers were retrieved for evaluation and data extraction.
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6 3 Forty-one studies were further excluded based of failure to meet the inclusion criteria
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8 4 (**Appendix 1**): 1 paper was not a research article, [28] 32 studies had no Francophone data,[18,
9 29-59] 2 studies were not on HIV,[4, 60] 4 studies were reviews with no eligible studies,[61-64]
10 5
11 6 1 study was a study not conducted in Canada,[65] and 1 study was not about access to HIV
12 7 care,[66] leaving 2 studies that met our inclusion criteria (**Figure 1**).[10, 14]
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9 **Characteristics of included studies**

10 Buissé et al. (2005) conducted a qualitative study to explore the availability of Francophone
11 specialized health and mental health services in the city of Winnipeg. In this study, 24 health
12 service providers delivering services to Francophone immigrants and refugees in the city of
13 Winnipeg were interviewed.[10] The authors investigated outcomes such as health care
14 accessibility, services and continuity of care for new Francophone immigrants. They found that
15 HIV and mental health services in the city of Winnipeg had only minimal Francophone capacity
16 with Francophone staff being minimal to non-existent. This resulted in the use of unqualified
17 interpreters or appointment rescheduling as some places had a six-month waiting list. In some
18 cases, HIV nurse specialists had to obtain materials from or refer Francophone clients to HIV
19 websites in French. African Francophone health service providers described the situation as
20 critical. Twenty-four health service providers from 19 organizations were interviewed for the
21 study. All of these organizations did not meet 8 of the 9 criteria of Bachrach's continuity of care
22 principles for Francophone people living with HIV in general and African Francophone in
23 particular. These principles include: administrative environments that are capable of providing
24 the aid their patients' need, accessible care, multidisciplinary care, care customized to patients'
25 needs, adaptable use of different programs and interventions, extensive linkage between
26 organizations caring for the patient, long term caregivers who help patients access care, active
27 patient involvement in organizing services and culturally-responsive programs.[2] Although
28 these organization had a full array of services, there was a lack of cultural awareness among
29 health care providers as well as barriers in access to care and continuity of care for Francophone
30 African newcomers living with HIV or mental illness in Winnipeg.[10]

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3 1 Samson and al. (2012) investigated the cultural sensitivity involved in HIV care delivery to
4 Francophone minorities living with HIV in Ontario.[14] This was a qualitative study conducted
5 2 with a sample of 29 participants, including AIDS Service Organization (ASO) professionals and
6 3 people living with HIV (PLWH), between September and December 2009 in the cities of Ottawa
7 4 and Toronto. The author used phenomenological analysis to categorize his findings into three
8 5 themes:[67]
9 6

10 7 *Social Context of HIV Care Access in French:* ASO professionals did not perceive offering
11 8 bilingual services as a priority because their clients often had more severe and complex needs
12 9 which required diverting time and resources to outreach and to addressing more immediate and
13 10 urgent needs. Francophone PLWH (both Canadian - and African-born) reported unmet
14 11 expectations with respect to the delivery of services in French. Canadian Francophone PLWH
15 12 perceived this as a rejection of their cultural identity and citizenship while African-born
16 13 Francophone PLWH were shocked by the lack of service delivery in French in ASOs.

17 14 *Language and Cultural Sensitivity and Diversity:* ASO professionals perceived linguistic
18 15 differences as secondary. They recognized language as an aspect of the cultural diversity of their
19 16 clientele but considered it as a neutral tool for service delivery which does not negate cultural
20 17 differences. Because most Canadian PLWH speak English, and rarely demand service in their
21 18 mother tongue, French language services are not a priority. They recognized that this might be a
22 19 barrier for African-born clients but since there is no advocacy for French services, they
23 20 considered that not a priority. Canadian PLWH acknowledged initiating conversations at ASOs
24 21 in English due to a fear of being rejected if they speak French. Both Canadian and African-born
25 22 Francophone PLWH described positive experiences when they were able to obtain services in
26 23 French. They considered that they were better understood and could express themselves better in
27 24 these situations.

28 25 *Emerging Reality in Canada's ACB Francophone Communities:*

29 26 The study reported an increase in the clientele from French-speaking African countries due to a
30 27 changing ethno-racial composition of the Franco-Ontarian community. This situation has created
31 28 pressure for more French services in ASOs in Ontario. There is a greater awareness of the need
32 29 to tend to linguistic differences as an aspect of cultural sensitivity. These unilingual French-

1 speaking African-born PLWH described their linguistic isolation as a painful reminder of the
2 rejection experienced in their countries of origin due to HIV/AIDS.

4 **DISCUSSION**

5 The purpose of this scoping review was to identify existing gaps in health care access by
6 and delivery to Francophone minorities living with HIV in Canada, and to uncover the reasons
7 for healthcare disparities faced by Francophone ACBs living with HIV in Anglophone Canadian
8 provinces and territories.

9 We identified two eligible studies from two provinces in Canada -Ontario and Manitoba.
10 In Ontario, the most populated province in Canada, we found that issues exist regarding the
11 availability of Francophone or bilingual healthcare and HIV/AIDS organisation workers. Several
12 bilingual healthcare professionals report difficulties in providing quality healthcare to
13 Francophone patients. They attributed this to scarcities in bilingual staff and problems
14 communicating with patients who speak French when that was not the providers' first language.
15 Additionally, bilingual health providers also described often being overworked, since they would
16 also take on interpretative roles on top of their regular work.[11, 12, 14] These deficiencies in
17 French services are also notable amongst Ontarian HIV/AIDS organisations, where lack of
18 funding may have contributed to smaller numbers of bilingual staff.[68, 69] While language was
19 acknowledged as an important cultural factor and communication tool, it was also frequently
20 overlooked to better serve PLWH in Ontario by helping provide food, housing and mental
21 services.[14] The evidence of lack of French Language Healthcare Services (FLHS) in Ontario
22 has been highlighted in previous research.[70]

23 In Manitoba, it is estimated that only 25% of Francophone have access to French
24 healthcare services, with Franco-Manitobans and healthcare professionals alike reporting a far
25 greater demand for Francophone services than what was available.[3, 71] Furthermore, new
26 Francophone ACB immigrants to Manitoba were reported to have difficulties accessing
27 specialized services such as counseling on HIV and mental health as well as HIV testing.[10]
28 Interestingly, although there are scarcities throughout Manitoba's French healthcare,
29 Anglophone Manitoban healthcare providers seemed to be under the assumption that Manitoba's
30 health resources were sufficient to meet demand.[10] Moreover, a 2015 study reported that

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3 1 Francophone immigrants to Manitoba were more likely to wait for French healthcare services
4 and interpreters. The waiting time for French services was far longer compared to Anglophone
5 2 services.[72]
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8 4 It is well established that language is critical to effective healthcare: it facilitates accurate
9 5 transmission of knowledge between a provider and a patient and allows patients to effectively
10 6 disclose their symptoms and medical history.[10-12] Unfortunately, official language minorities
11 7 frequently experience delays in healthcare due to difficulties finding interpreters and shortages in
12 8 bilingual healthcare personnel and management staff, which can impact travel times, the
13 9 accessibility and availability of specialized services and whether translated resources are
14 10 present.[3, 9-12] Therefore, the well-documented deficiency of French Language Healthcare
15 11 Services (FLHS) in Ontario and other provinces and territories where French is a minority
16 12 language can and should be seen as a major barrier to the receipt of quality healthcare amongst
17 13 Francophone ACB living with HIV.[10, 26, 70]
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20 14 Bearing in mind the enormous importance of a common language in patient-provider
21 15 interactions, it is evident that Francophone ACBs in majority- English-speaking provinces and
22 16 territories are much more likely to experience lower quality healthcare services than their
23 17 Anglophone counterparts. In both healthcare and HIV/ AIDS organisations outside of Quebec,
24 18 individuals in need of French-language services are expected to advocate for resources.[26] Yet,
25 19 practitioners and organization workers frequently note that their Francophone patients would
26 20 communicate in English over French, if they could, even if it meant less information being
27 21 communicated overall. Several explanations have been postulated for this phenomenon: some
28 22 healthcare workers think it may be due to clients' fears of receiving lesser or delayed care if
29 23 practitioners realised they were Francophone; others believe it may have to do with patients'
30 24 fears of HIV stigmatization.[3, 10, 12, 14, 71, 72] This latter point is especially relevant to ACB
31 25 people living with HIV, since stigma, discrimination and race are all associated with poor access
32 26 to care and retention in care.[73-75] Considering that ACB people with HIV often face multiple
33 27 forms of stigma, not only due to ethnicity or HIV status, language barriers can present a
34 28 stigmatizing and significant hurdle to health and wellbeing in this population.[76]
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37 29 Research has also shown that cultural differences should be considered in addition to
38 30 stigma, since ignoring these factors can have a negative impact on HIV prevention
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3 1 interventions.[18, 77-79] Lack of consideration for these issues has been shown to be detrimental
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5 2 to the health of African-born Francophone PLWH, who were not being able to access services in
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7 3 French as it reinforced their sense of isolation in a new and unfamiliar country.[9, 10] Moreover,
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9 4 ACB focus groups in Toronto suggested that to be successfully effective, HIV treatments and
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11 5 interventions in the ACB communities should be culturally appropriate and sensitive.[80]

12 6 Limited research into Francophone ACB populations in Canada makes it difficult to
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14 7 evaluate how French healthcare deficiencies impact their HIV care continuum. For instance,
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16 8 while Manitoba reported 116 new cases of HIV in 2005, of which approximately 21% were from
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18 9 ACB populations, it is unknown how many of these patients were Francophone.[81] Moreover,
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20 10 although Buissé's study described "minimal to non-existent" numbers of Francophone HIV and
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22 11 TB counselling specialists, there were no records of how many clients were expected to require
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24 12 those services or how many had come in for HIV diagnosis and treatment. It could also be
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26 13 possible that given the paucity of Francophone HIV and TB (Tuberculosis) specialists at the
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28 14 time, the actual rates of HIV diagnosis could indeed be higher.[10]

29 15 In Ontario, while 25.3% of 2017's 1184 new HIV diagnoses are estimated to come from
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31 16 ACB populations, data on race and ethnicity was only available for 43.1% of the population.
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33 17 Similar to Manitoba, no information on Francophone populations was available.[82] Thus, the
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35 18 collection of data on Francophone on the provision of bilingual healthcare services is critical to
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37 19 developing effective HIV-prevention programmes for Francophone ACB communities.

38 20 This study answers important questions related to access to care for Francophone ACB
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40 21 people living with or affected by HIV in Canada. Furthermore this scoping review investigated
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42 22 the impact of intersectionality, the French language, race and HIV stigma on ACB access to HIV
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44 23 care. The global relevance of this study is limited, since this scoping review is focused only on
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46 24 Canada. Similarly, although Francophone healthcare deficits have been noted in several
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48 25 provinces other than Quebec, information on HIV care in Francophone ACB populations was
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50 26 limited to only two studies.[3, 4, 12, 71, 83-85] The low number of included studies is due to the
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52 27 fact that although there are more studies on Francophone health and access to health care in
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54 28 general, not enough studies are focused on HIV in the Francophone and Francophone ACB
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56 29 communities. Thus, while the two studies outlined in this scoping review did describe significant
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58 30 barriers to HIV care for Francophone the small number of studies addressing HIV care

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3 1 deficiencies amongst Francophone ACBs who do not live in Quebec make it difficult to estimate
4 HIV care disparities in provinces and territories other than Ontario and Manitoba.
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8 4 **Conclusion**

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10 5 This research has shown that culturally sensitive health-related service provision should include
11 6 considerations of language, especially in the context of an officially bilingual country, where
12 7 clients have a legitimate claim to such services. Providing services in a client's first language
13 8 values their identity and allows for better care of those individuals. The findings of this scoping
14 9 review should inform changes in health policy making, community organizations and HIV/AIDS
15 10 centre, such as increasing training and recruitment of bilingual healthcare practitioners,
16 11 especially specialists, and ASO staff. These bilingual providers would be instrumental in
17 12 providing and improving access to health care for Francophone ACB immigrants and Canadians.
18 13 The paucity of data on HIV care for Francophone ACB immigrants or Canadians demonstrates
19 14 the need for more HIV research to be done within these linguistic minority communities. This
20 15 research may be vital in advancing our knowledge on which aspects of Canadian healthcare
21 16 systems impose the most significant barriers to HIV care, testing, counseling and treatment
22 17 amongst ACB communities.
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41 24 Research (CBR) Program.
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48 26 **Author contributions**

49 27 The study was conceived by Pascal Djiadeu, Lawrence Mbuagbaw, Joseph Nguemo and LaRon
50 28 E. Nelson. All authors revised the research question and provided content to the design. The
51 29 manuscript was written and edited by Pascal Djiadeu, Abban Yusuf, Lawrence Mbuagbaw,
52 30 Joseph Nguemo, LaRon E. Nelson, Chantal Mukandoli, Clémence Ongolo-Zogo, Apondi J.
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3 1 Odhiambo and David Lightfoot. Principal investigator of the study is LaRon E. Nelson. All
4 authors read and approved the final version of the manuscript.
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8 4 **Figure Legend**

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10 5 **Figure 1:** PRISMA flow diagram of studies selection
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13 7 **Competing Interests**

14
15 8 None declared.
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17 9 **Data sharing statement**

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19 10 No additional data are available.
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31 *Caribbean and Black men in Toronto, Canada*. PloS one, 2019. **14**(3): p. e0213740.
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33 *the first two waves of the longitudinal survey of immigrants to Canada*. Can J Public
34 Health, 2008. **99**(6): p. 505-10.
- 35 61. Aidala, A.A., et al., *Housing Status, Medical Care, and Health Outcomes Among People*
36 *Living With HIV/AIDS: A Systematic Review*. American journal of public health, 2016.
37 **106**(1): p. e1-e23.
- 38 62. Ha, S., et al., *A systematic review of HIV testing among Canadian populations*. Canadian
39 journal of public health = Revue canadienne de sante publique, 2014. **105**(1): p. e53-62.
- 40 63. Jbilou, J., et al., *Men-centered approaches for primary and secondary prevention of*
41 *HIV/AIDS: a scoping review of effective interventions*. Journal of AIDS and Clinical
42 Research, 2013. **4**(11): p. 257.
- 43 64. Mbuagbaw, L., et al., *Strategies to improve adherence to antiretroviral therapy and*
44 *retention in care for people living with HIV in high-income countries: a protocol for an*
45 *overview of systematic reviews*. BMJ open, 2018. **8**(9): p. e022982.

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65. Smith, M.L., S. Read, and A. Bitnun, *Neurocognitive development in young HIV-Exposed uninfected children exposed pre-or perinatally to antiretroviral medications*. Canadian Journal of Infectious Diseases and Medical Microbiology, 2014. **25**(SUPPL. SA): p. 65A.
 66. Kaida, A., et al., *Hiring, training, and supporting Peer Research Associates: Operationalizing community-based research principles within epidemiological studies by, with, and for women living with HIV*. Harm Reduct J, 2019. **16**(1): p. 47.
 67. Englander, M., *The phenomenological method in qualitative psychology and psychiatry*. Int J Qual Stud Health Well-being, 2016. **11**: p. 30682.
 68. Mail, T.G.A., *Ontario to lay off more than 400 people at health agencies as government continues cutting jobs*. 2019.
 69. Canada, G.N., *Ontario government to slash funding to Toronto Public Health, officials say*. 2019.
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 71. de Moissac, D. and S. Bowen, *Impact of Language Barriers on Quality of Care and Patient Safety for Official Language Minority Francophones in Canada*. J Patient Exp, 2019. **6**(1): p. 24-32.
 72. de Moissac, D., F. Giasson, and M. Roch-Gagné, *Accès aux services sociaux et de santé en français: l'expérience des Franco-Manitobains*. Minorités linguistiques et société/Linguistic Minorities and Society, 2015(6): p. 42-65.
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 74. Loutfy, M., et al., *Systematic review of stigma reducing interventions for African/Black diasporic women*. J Int AIDS Soc, 2015. **18**: p. 19835.
 75. Earnshaw, V.A., et al., *Stigma and racial/ethnic HIV disparities: moving toward resilience*. Am Psychol, 2013. **68**(4): p. 225-36.
 76. Logie, C.H., et al., *HIV, gender, race, sexual orientation, and sex work: a qualitative study of intersectional stigma experienced by HIV-positive women in Ontario, Canada*. PLoS Med, 2011. **8**(11): p. e1001124.
 77. Aidala, A.A., et al., *HIV-positive men sexually active with women: sexual behaviors and sexual risks*. J Urban Health, 2006. **83**(4): p. 637-55.
 78. Aidala, A.A., et al., *Sexual behaviors and sexual risk in a prospective cohort of HIV-positive men and women in New York City, 1994-2002: implications for prevention*. AIDS Educ Prev, 2006. **18**(1): p. 12-32.
 79. Newman, P.A., et al., *HIV prevention for Black women: structural barriers and opportunities*. J Health Care Poor Underserved, 2008. **19**(3): p. 829-41.
 80. Williams, C.C., et al., *HIV prevention risks for Black women in Canada*. Social Science & Medicine, 2009. **68**(1): p. 12-20.
 81. Manitoba, G.o., *Manitoba Health Statistical Update on HIV/AIDS 1985 To 2005*. 2006.
 82. Haddad, N., et al., *HIV in Canada-Surveillance Report, 2017*. Can Commun Dis Rep, 2018. **44**(12): p. 348-356.

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3 1 83. Farmanova, E., L. Bonneville, and L. Bouchard, *Organizational Health Literacy: Review*
4 2 *of Theories, Frameworks, Guides, and Implementation Issues*. *Inquiry*, 2018. **55**: p.
5 3 46958018757848.
6 4
7 4 84. Ngwakongnwi, E., et al., *Experiences of French speaking immigrants and non-*
8 5 *immigrants accessing health care services in a large Canadian city*. *Int J Environ Res*
9 6 *Public Health*, 2012. **9**(10): p. 3755-68.
10 7
11 7 85. Gauthier, A.P., et al., *Strategies for improved French-language health services:*
12 8 *Perspectives of family physicians in northeastern Ontario*. *Canadian Family Physician*,
13 9 2015. **61**(8): p. e382-e390.
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For peer review only

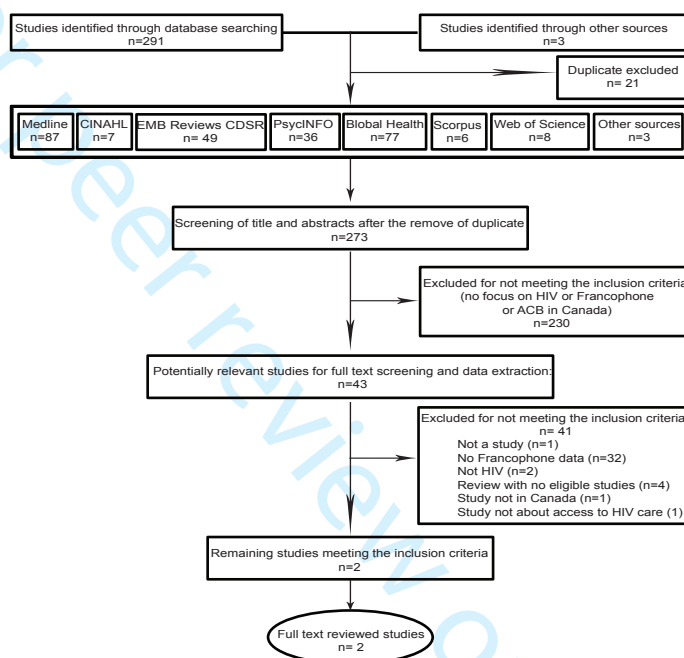


Figure 1: PRISMA flow diagram of studies selection

Appendix 1: Characteristics of excluded studies

Reason for exclusion	Study reference (n=41)
No Francophone data	<ol style="list-style-type: none"> 1. Antiretroviral Therapy Cohort, C., <i>Influence of geographical origin and ethnicity on mortality in patients on antiretroviral therapy in Canada, Europe, and the United States</i>. Clinical infectious diseases : an official publication of the Infectious Diseases Society of America, 2013. 56(12): p. 1800-9. 2. Baidooobonso, S., et al., <i>Social and proximate determinants of the frequency of condom use among African, Caribbean, and other Black people in a Canadian city: Results from the BLACCH study</i>. Journal of Immigrant and Minority Health, 2016. 18(1): p. 67-85. 3. Baidooobonso, S., et al., <i>HIV risk perception and distribution of HIV risk among African, Caribbean and other Black people in a Canadian city: mixed methods results from the BLACCH study</i>. BMC public health, 2013. 13: p. 184. 4. Blot, S., et al., <i>AIDS Service Organization Access Among African, Caribbean and Other Black Residents of an Average Canadian City</i>. J Immigr Minor Health, 2017. 19(4): p. 851-860. 5. Browne, O.A., <i>Assessing healthcare providers' responses to African and Caribbean families living with HIV</i>. Dissertation Abstracts International Section A: Humanities and Social Sciences, 2009. 69(7-A): p. 2753. 6. Burton K, A.S., Kerr J, Kershner S, Maticka-Tyndale E., <i>Examining sexual concurrency and number of partners among African, Caribbean, and black women using the social ecological model: Results from the ACBY study</i>. Canadian Journal of Human Sexuality, 2009. Volume 28 (Issue 1): p. pp. 46-56. 7. Csete, J., <i>'Vectors, vessels and victims': HIV/AIDS and women's human rights in Canada</i>. 'Vectors, vessels and victims': HIV/AIDS and women's human rights in Canada, 2005. 8. dela Cruz, A.M.M., <i>A narrative inquiry into the experiences of Sub-Saharan African immigrants living with HIV in Alberta, Canada</i>. Dissertation Abstracts International: Section B: The Sciences and Engineering, 2017. 77(9-B(E)): p. No-Specified. 9. Gardezi, F., et al., <i>Experiences of and responses to HIV among African and Caribbean communities in Toronto, Canada</i>. AIDS care, 2008. 20(6): p. 718-25. 10. Kafiriri, L., et al., <i>How acceptable is it for HIV positive African, Caribbean and Black women to provide breast milk/fluid samples for research purposes?</i> BMC research notes, 2017. 10(1): p. 7. 11. Kafiriri, L., et al., <i>The experiences of making infant feeding choices by African, Caribbean and Black HIV-positive mothers in Ontario, Canada</i>. World health & population, 2014. 15(2): p. 14-22. 12. Khan, S., et al., <i>Loneliness and perceived social support in pregnancy and early postpartum of mothers living with HIV in Ontario, Canada</i>. AIDS Care, 2019. 31(3): p. 318-325. 13. Kippax, S.C., et al., <i>Living with HIV: Recent research from France and the French Caribbean (VESPA study), Australia, Canada and the United Kingdom</i>. AIDS, 2007. 21(Suppl 1): p. S1-S3. 14. Krusi, A., et al. <i>Marginalized women living with HIV at increased risk of viral load suppression failure: implications for prosecutorial guidelines regarding criminalization of HIV non-disclosure in Canada and globally</i>. in <i>JOURNAL OF THE INTERNATIONAL AIDS SOCIETY</i>. 2018. JOHN WILEY & SONS LTD THE ATRIUM, SOUTHERN GATE, CHICHESTER PO19 8SQ, W 15. Li, A.T., et al., <i>Effects Of HIV stigma reduction interventions in diasporic communities: insights from the CHAMP study</i>. AIDS Care, 2018. 30(6): p. 739-745. 16. Logie, C., et al. <i>Developing and pilot testing TRANScending love, a multi-methods arts based workshop with African, Caribbean and Black transgender women</i>. in <i>JOURNAL OF</i>

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- THE INTERNATIONAL AIDS SOCIETY*. 2018. JOHN WILEY & SONS LTD THE ATRIUM, SOUTHERN GATE, CHICHESTER PO19 8SQ, W
17. Logie, C.H., et al., *Prevalence and Correlates of Forced Sex as a Self-Reported Mode of HIV Acquisition Among a Cohort of Women Living With HIV in Canada*. Journal of interpersonal violence, 2017: p. 886260517718832.
 18. Logie, C.H., et al., *Engagement in and continuity of HIV care among African and Caribbean Black women living with HIV in Ontario, Canada*. International journal of STD & AIDS, 2017. **28**(10): p. 969-974.
 19. Logie, C.H., et al., *"It's for US-newcomers, LGBTQ persons and HIV-positive persons. You feel free to be": Social support groups as an HIV prevention strategy with LGBTQ African, Caribbean and black newcomers and refugees in Toronto, Canada*. Canadian Journal of Infectious Diseases and Medical Microbiology, 2015. **26**(SUPPL. SB): p. 24B.
 20. Logie, C.H., et al., *Adapting and pilot testing the Healthy Love HIV and sexually transmitted infection prevention intervention with African, Caribbean and Black women in community-based settings in Toronto, Canada*. International journal of STD & AIDS, 2018. **29**(8): p. 751-759.
 21. Logie, C.H., et al., *Adapting and pilot testing the Healthy Love HIV and sexually transmitted infection prevention intervention with African, Caribbean and Black women in community-based settings in Toronto, Canada*. Int J STD AIDS, 2018. **29**(8): p. 751-759.
 22. Loutfy, M., et al., *Cohort profile: the Canadian HIV Women's Sexual and Reproductive Health Cohort Study (CHIWOS)*. PLoS ONE, 2017. **12**(9): p. e0184708.
 23. Masindi, K.I., et al., *Co-morbid Non-communicable Diseases and Associated Health Service Use in African and Caribbean Immigrants with HIV*. J Immigr Minor Health, 2018. **20**(3): p. 536-545.
 24. Nakyonyi, M.M., *HIV/AIDS education participation by the African community*. Canadian journal of public health = Revue canadienne de sante publique, 1993. **84 Suppl 1**: p. S19-23.
 25. Nelson, L.E., et al., *A recipe for increasing racial and gender disparities in HIV infection: A critical analysis of the Canadian guideline on pre-exposure prophylaxis and non-occupational post-exposure prophylaxis' responsiveness to the HIV epidemics among women and Black communities*. The Canadian Journal of Human Sexuality, 2019. **28**(1): p. 1-4.
 26. Tulloch, H.E., et al., *HIV knowledge among Canadian-born and sub-Saharan African-born patients living with HIV*. Special focus on communicable diseases, 2012. **14**(1): p. 132-139.
 27. Umamaheswaran-Mahara, M. and A.J. Hunter, *Health status of a paediatric urban refugee and immigrant population in Canada*. Paediatrics and Child Health, 2010. **15**(SA): p. 48A.
 28. Webster, K., et al., *Strategies for Recruiting Women Living with Human Immunodeficiency Virus in Community-Based Research: Lessons from Canada*. Progress in community health partnerships : research, education, and action, 2018. **12**(1): p. 21-34.
 29. Williams, C.C., et al., *HIV prevention risks for Black women in Canada*. Social science & medicine (1982), 2009. **68**(1): p. 12-20.
 30. Worthington, C., et al., *African immigrant views of HIV service needs: gendered perspectives*. AIDS Care, 2013. **25**(1): p. 103-108.
 31. Worthington, C.A., et al., *Individual and jurisdictional factors associated with voluntary HIV testing in Canada: Results of a national survey, 2011*. Canadian journal of public health = Revue canadienne de sante publique, 2014. **106**(2): p. e4-9.
 32. Zhabokritsky, A., et al., *Barriers to HIV pre-exposure prophylaxis among African, Caribbean and Black men in Toronto, Canada*. PloS one, 2019. **14**(3): p. e0213740.

<p>Review with no eligible studies</p>	<ol style="list-style-type: none"> 1. Aidala, A.A., et al., <i>Housing Status, Medical Care, and Health Outcomes Among People Living With HIV/AIDS: A Systematic Review</i>. American journal of public health, 2016. 106(1): p. e1-e23. 2. Ha, S., et al., <i>A systematic review of HIV testing among Canadian populations</i>. Canadian journal of public health = Revue canadienne de sante publique, 2014. 105(1): p. e53-62. 3. Jbilou, J., et al., <i>Men-centered approaches for primary and secondary prevention of HIV/AIDS: a scoping review of effective interventions</i>. Journal of AIDS and Clinical Research, 2013. 4(11): p. 257. 4. Mbuagbaw, L., et al., <i>Strategies to improve adherence to antiretroviral therapy and retention in care for people living with HIV in high-income countries: a protocol for an overview of systematic reviews</i>. BMJ open, 2018. 8(9): p. e022982.
<p>Not HIV</p>	<ol style="list-style-type: none"> 1. Bernier, A.M., et al., <i>A survey on health care access in French for francophone immigrants in Winnipeg, Canada</i>. Articles from the 13th World Congress on Public Health. 2013. 65-68. 2. Pottie, K., et al., <i>Language proficiency, gender and self-reported health: an analysis of the first two waves of the longitudinal survey of immigrants to Canada</i>. Can J Public Health, 2008. 99(6): p. 505-10.
<p>Study not in Canada</p>	<ol style="list-style-type: none"> 1. Smith, M.L., S. Read, and A. Bitnun, <i>Neurocognitive development in young HIV-Exposed uninfected children exposed pre-or perinatally to antiretroviral medications</i>. Canadian Journal of Infectious Diseases and Medical Microbiology, 2014. 25(SUPPL. SA): p. 65A.
<p>Not a study</p>	<ol style="list-style-type: none"> 1. Anonymous, <i>HIV-positive man from DRC deemed a "person in need of protection"</i>. HIV/AIDS policy & law review, 2008. 13(2-3): p. 30.
<p>Study not about access to HIV care</p>	<ol style="list-style-type: none"> 1. Kaida, A., et al., <i>Hiring, training, and supporting Peer Research Associates: Operationalizing community-based research principles within epidemiological studies by, with, and for women living with HIV</i>. Harm Reduct J, 2019. 16(1): p. 47.

Search strategy for MEDLINE

Database: MEDLINE

Search strategy:

1. exp "Emigrants and Immigrants"/
2. immigrant*.mp.
3. Emigrant*.mp.
4. migrant*.mp.
5. (landed adj5 status).tw.
6. (landed adj5 person*).tw.
7. (landed adj5 resident*).tw.
8. exp Refugees/
9. asylum.tw.
10. new Canadian.tw.
11. resident.tw.
12. refugee.tw.
13. *POPULATION/
14. communit*.tw.
15. exp MINORITY GROUPS/
16. MINORITY HEALTH/
17. minorit*.tw.
18. exp patient/ or patient.tw.
19. 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16 or 17
20. french.tw.
21. francophone*.tw.
22. Francophonie.mp.
23. exp Language/
24. (french or francais or franco* or quebec*).tw.
25. 23 and 24
26. ((french or francais or franco*) adj5 language).tw.
27. 20 or 21 or 22 or 25 or 26
28. exp African Continental Ancestry Group/
29. (Africa* or African or Afrique or Africain*).tw.
30. Benin.tw.
31. Burkina Fas*.tw.
32. Burundi.tw.
33. Cameroon.tw.
34. "Central African Republic".tw.
35. Centrafrique.tw.
36. centrafricain*.tw.
37. Caribbean.mp. or exp Caribbean Region/
38. exp CHAD/
39. (Congo or congol*).tw.
40. Brazzaville.tw.
41. Kinshasa.tw.
42. Djibouti.tw.

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- 4 43. Guinea.tw.
- 5 44. French africa.tw.
- 6 45. Gabon*.tw.
- 7 46. Haiti*.tw.
- 8 47. (Ivory Coast or Ivoire or Ivorian).tw.
- 9 48. Madagascar.tw.
- 10 49. Mali.tw.
- 11 50. Morroc*.tw.
- 12 51. Niger.tw.
- 13 52. Rwanda*.tw.
- 14 53. (St? Martin or saint Martin).tw.
- 15 54. Senegal*.tw.
- 16 55. Togo.tw.
- 17 56. Black-White.tw.
- 18 57. Black.ti,ab.
- 19 58. "black canadian".tw.
- 20 59. mixed race.tw.
- 21 60. 27 or 28 or 29 or 30 or 31 or 32 or 33 or 34 or 35 or 36 or 37 or 38 or 39 or 40 or 41 or 42
- 22 or 43 or 44 or 45 or 46 or 47 or 48 or 49 or 50 or 51 or 52 or 53 or 54 or 55 or 56 or 58 or
- 23 59
- 24 61. 19 and 60
- 25 62. canada/
- 26 63. (Canada or Canad*).tw.
- 27 64. (canada or canadian\$ or alberta or british columbia or columbie britannique).tw.
- 28 65. (saskatchewan or manitoba or ontario or quebec or new brunswick or nouveau
- 29 brunswick).tw.
- 30 66. (nova scotia or nouvelle ecosse or prince edward island or ile du prince edward or
- 31 newfoundland or terre neuve or labrador or nun?v?t or nun?v?t or nwt or territoires du
- 32 nord ouest or northwest territories or yukon).tw.
- 33 67. OHIP.tw.
- 34 68. "health canada".tw.
- 35 69. "sante canada".tw.
- 36 70. medicare.tw.
- 37 71. CIHR.tw.
- 38 72. ("Alberta Health Care Insurance Plan" or AHCIP).tw.
- 39 73. ("Medical Services Plan" or MSP).tw.
- 40 74. Manitoba health.tw.
- 41 75. ("Vitalite Health Network" or "Horizon Health Network").tw.
- 42 76. "Department of Health and Community Services".tw.
- 43 77. "Health Care Card".tw.
- 44 78. ("Nova scotia health card" or MSI).tw.
- 45 79. Nunavut Health Insurance Card.tw.
- 46 80. ("Carte d'assurance maladie" or "Health Insurance Card" or "RAMQ").tw.
- 47 81. (health card adj25 canada).tw.
- 48 82. 62 or 63 or 64 or 65 or 66 or 67 or 68 or 69 or 70 or 71 or 72 or 73 or 74 or 75 or 76 or 77
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- 3 83. 61 and 82
- 4 84. exp "Delivery of Health Care"/
- 5 85. proximity.ti,ab.
- 6 86. "healthcare or health care".tw.
- 7 87. exp Health Care Quality, Access/ and Evaluation/
- 8 88. Quality of care/
- 9 89. Health Promotion/
- 10 90. Primary Health Care/
- 11 91. Patient Acceptance of Health Care/
- 12 92. Healthcare Disparities/
- 13 93. exp racism/
- 14 94. multilingualism/
- 15 95. Needs Assessment/
- 16 96. exp Culturally Competent Care/
- 17 97. Health Services Accessibility/
- 18 98. exp Physicians, Family/
- 19 99. quality indicators/
- 20 100. Patient Medication Knowledge/
- 21 101. Patient Navigation/
- 22 102. Patient Compliance/
- 23 103. exp patient satisfaction/
- 24 104. exp HIV/
- 25 105. Preventive Medicine/
- 26 106. HIV.mp.
- 27 107. exp HIV infections/
- 28 108. seropositivity/
- 29 109. seroconversion/
- 30 110. Quality of Life/
- 31 111. (HRQOL or karnofsky).tw.
- 32 112. 84 or 86 or 87 or 90 or 91 or 92 or 95 or 96 or 97 or 98 or 100 or 101 or 102 or
- 33 104 or 106
- 34 113. 19 and 27 and 60 and 83 and 112
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Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) Checklist

SECTION	ITEM	PRISMA-ScR CHECKLIST ITEM	REPORTED ON PAGE #
TITLE			
Title	1	Identify the report as a scoping review.	
ABSTRACT			
Structured summary	2	Provide a structured summary that includes (as applicable): background, objectives, eligibility criteria, sources of evidence, charting methods, results, and conclusions that relate to the review questions and objectives.	
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of what is already known. Explain why the review questions/objectives lend themselves to a scoping review approach.	
Objectives	4	Provide an explicit statement of the questions and objectives being addressed with reference to their key elements (e.g., population or participants, concepts, and context) or other relevant key elements used to conceptualize the review questions and/or objectives.	
METHODS			
Protocol and registration	5	Indicate whether a review protocol exists; state if and where it can be accessed (e.g., a Web address); and if available, provide registration information, including the registration number.	
Eligibility criteria	6	Specify characteristics of the sources of evidence used as eligibility criteria (e.g., years considered, language, and publication status), and provide a rationale.	
Information sources*	7	Describe all information sources in the search (e.g., databases with dates of coverage and contact with authors to identify additional sources), as well as the date the most recent search was executed.	
Search	8	Present the full electronic search strategy for at least 1 database, including any limits used, such that it could be repeated.	
Selection of sources of evidence†	9	State the process for selecting sources of evidence (i.e., screening and eligibility) included in the scoping review.	
Data charting process‡	10	Describe the methods of charting data from the included sources of evidence (e.g., calibrated forms or forms that have been tested by the team before their use, and whether data charting was done independently or in duplicate) and any processes for obtaining and confirming data from investigators.	
Data items	11	List and define all variables for which data were sought and any assumptions and simplifications made.	
Critical appraisal of individual sources of evidence§	12	If done, provide a rationale for conducting a critical appraisal of included sources of evidence; describe the methods used and how this information was used in any data synthesis (if appropriate).	
Synthesis of results	13	Describe the methods of handling and summarizing the data that were charted.	



SECTION	ITEM	PRISMA-ScR CHECKLIST ITEM	REPORTED ON PAGE #
RESULTS			
Selection of sources of evidence	14	Give numbers of sources of evidence screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally using a flow diagram.	
Characteristics of sources of evidence	15	For each source of evidence, present characteristics for which data were charted and provide the citations.	
Critical appraisal within sources of evidence	16	If done, present data on critical appraisal of included sources of evidence (see item 12).	
Results of individual sources of evidence	17	For each included source of evidence, present the relevant data that were charted that relate to the review questions and objectives.	
Synthesis of results	18	Summarize and/or present the charting results as they relate to the review questions and objectives.	
DISCUSSION			
Summary of evidence	19	Summarize the main results (including an overview of concepts, themes, and types of evidence available), link to the review questions and objectives, and consider the relevance to key groups.	
Limitations	20	Discuss the limitations of the scoping review process.	
Conclusions	21	Provide a general interpretation of the results with respect to the review questions and objectives, as well as potential implications and/or next steps.	
FUNDING			
Funding	22	Describe sources of funding for the included sources of evidence, as well as sources of funding for the scoping review. Describe the role of the funders of the scoping review.	

JBI = Joanna Briggs Institute; PRISMA-ScR = Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews.

* Where *sources of evidence* (see second footnote) are compiled from, such as bibliographic databases, social media platforms, and Web sites.

† A more inclusive/heterogeneous term used to account for the different types of evidence or data sources (e.g., quantitative and/or qualitative research, expert opinion, and policy documents) that may be eligible in a scoping review as opposed to only studies. This is not to be confused with *information sources* (see first footnote).

‡ The frameworks by Arksey and O'Malley (6) and Levac and colleagues (7) and the JBI guidance (4, 5) refer to the process of data extraction in a scoping review as data charting.

§ The process of systematically examining research evidence to assess its validity, results, and relevance before using it to inform a decision. This term is used for items 12 and 19 instead of "risk of bias" (which is more applicable to systematic reviews of interventions) to include and acknowledge the various sources of evidence that may be used in a scoping review (e.g., quantitative and/or qualitative research, expert opinion, and policy document).

From: Tricco AC, Lillie E, Zarin W, O'Brien KK, Colquhoun H, Levac D, et al. PRISMA Extension for Scoping Reviews (PRISMA-ScR): Checklist and Explanation. *Ann Intern Med.* 2018;169:467–473. doi: [10.7326/M18-0850](https://doi.org/10.7326/M18-0850).

