BMJ Open

HIV prevention and treatment interventions for black men who have sex with men in Canada: a protocol for a scoping systematic review

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ABSTRACT
Introduction Globally, rates of HIV are disproportionately high among black men who have sex with men (MSM). In Canada, race, gender and sexuality have been investigated as separate factors that influence quality of care within and progression along the HIV care continuum. Traditional compartmental approaches to synthesising the HIV care continuum literature do not sufficiently account for intersectional experiences and marginalisation of Black MSM (BMSM). Moreover, there is limited research outlining access to and quality of care as specific barriers to progression along the care continuum among BMSM in Canada.

Objectives The primary objective of this scoping review is to assess the state of the science regarding the influence of access to and quality of HIV care continuum outcomes for BMSM in Canada.

Methods and analysis We will conduct a systematic search of published literature of quantitative and qualitative studies published on Canadian BMSM’s healthcare and HIV status. The searches will be conducted through MEDLINE, Excerpta Medica Database, Cumulative Index to Nursing and Allied Health Literature, the Cochrane Library, the NHUS Economic Development Database, Global Health, APA PsycInfo, PubMed and Web of Science.

Eligibility criteria Eligible studies will include data on black MSM living with or without HIV in Canada and must be published after 1983 in either English or French. Screening and data extraction will be conducted in duplicate. Any discrepancies that arise will be resolved by consulting a third author. The findings will subsequently be reported according to the Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews.

Ethics and dissemination Ethics approval is not required as secondary published data will be used. Our findings will be disseminated as peer-reviewed manuscripts, at conferences, student rounds and could be of interest to government health agencies and HIV/AIDS service organisations.

INTRODUCTION
A universal healthcare system aims to improve the accessibility of health-related services, but many people from marginalised communities still remain at high risk for poor health outcomes.1,2 Moreover, it has been established that racial assignment and sexuality are significant influencing factors for HIV infection.3 In Canada, black (defined as recent (within past 400 years) descendants of Africa, including African Diaspora communities in Canada and the Caribbean) people account for 3.5% of the population but contribute to 25.3% of new HIV diagnoses.4 Similarly, documentation of HIV cases in Canada shows that a majority of HIV exposure occurs through penile–rectal sexual intercourse between men.4 Black men who have sex with men (Black MSM) exist at the intersection of being members of both of the groups that have higher epidemiological risk for acquiring HIV infections. As a consequence of the systemic social marginalisation of these groups in the current healthcare system, this group experiences gaps in care that leads to a drastic rise in risk for HIV infections.5

Black MSM face many institutional barriers to accessing healthcare services despite their overrepresentation in HIV incidence and prevalence. There are many HIV-related health promotion efforts and interventions...
focused on either the black communities or for gay, bisexual and other MSM to reduce their disproportionately higher HIV incidence rates. Ultimately, for Black MSM, the intersections of anti-Black racism and the sexual minority stigma in healthcare systems create oppressive environment where they are at risk for experiencing discrimination, inequitable care and psychological trauma. These environmental conditions within healthcare facilities serve as powerful disincentives (barriers) for Black MSM to engage or maintain engagement in healthcare services. These intersecting stigmas impose a distinctive oppressive load onto Black MSM that is stressful, chronic and associated with increased unemployment, housing instability, stress-related mental health issues, HIV-risk behaviour and poor overall health and psychosocial health. Nonetheless, there is an abundance of evidence showing that HIV inequities can be addressed through multilevel interventions that improve healthcare accessibility and quality for black MSM.

The HIV care continuum or cascade describes the process through which people living with HIV receive their diagnoses and maintain viral suppression and include the following: HIV diagnosis, linkage and retention to care, receipt of antiretroviral therapy (ART) and achievement of viral suppression. In Canada, race, gender and sexuality have been investigated as separate factors that influence quality of care within and progression along the HIV care continuum. The individual-level experience that black MSM have in the context of healthcare systems is a unified intersectional experience (race, gender and sexuality), not a three-component compartmentalised experience (race or gender or sexuality). Traditional compartmental approaches to synthesising the HIV care continuum literature do not sufficiently account for intersectional experiences and marginalisation of black MSM. The dearth of information specific to black MSM in major Canadian public health institutions expose this compartmental approach in monitoring HIV transmission. Canadian federal and provincial agencies do not collect HIV data specific to black MSM, which complicates the assessment of their HIV care in Canada. HIV epidemiology for black MSM cannot be clearly elucidated from HIV data categorised exclusively by either exposure category, race or gender. However, the disproportionate increase in HIV diagnoses for Black Canadians and MSM suggest a differential impact for black MSM. Moreover, there is limited research outlining access and quality of care as specific barriers to progression along the care continuum among black MSM in Canada. The availability of HIV interventions specific to either the black community or MSM reveal the aforementioned compartmental approaches, as there is minimal information about HIV care for those who are both Black and MSM. This implores urgent research and investigation into HIV epidemiological data and access to HIV prevention and treatment interventions for Black MSM in Canada.

There have not been any comprehensive assessments of the state of HIV care for black MSM across Canada. The objective of this scoping review is first to assess the state of the science regarding the influence, access to, and quality of HIV prevention and treatment on HIV care continuum outcomes for black MSM in Canada and then to describe the range and impact of interventions designed to improve access to care and quality of care. Specifically, this review will explore the effects of Canadian black MSM’s intersectional identities on their HIV prevention, treatment and service access. It will also assess the barriers and facilitators to HIV care for black MSM as well as explore the underlying mechanisms that influence their retention and adherence to HIV prevention and treatment interventions. Furthermore, this scoping, systematic review will investigate the existence, availability and quality of HIV healthcare services for black MSM in Canada. In addition, it will explore how these services and interventions are advertised and cater to black MSM. Overall, this study aims to elucidate and clarify the state of research and healthcare services for black MSM in Canada.

METHODS AND ANALYSES

Peterson et al outlined a scoping review approach that is appropriate for policy change, education and research purposes. Standard systematic reviews and scoping reviews are different; scoping reviews investigate broad topics as opposed to a specific well-defined question. In the context of this paper, this review will assess HIV care for black MSM living in Canada.

Patients and public involvement

Patients with Black MSM will not directly be involved in this study.

Ethics and dissemination

Ethics approval will not be required since there will not be human participants involved in the study and only secondary published data will be used. The findings from this study will be disseminated through peer-reviewed manuscript, presentations at conferences, student rounds and can inform policy at government health agencies and local HIV/AIDS service organisations.

Criteria for including studies

Types of studies

Experimental (randomised or nonrandomised), observational (longitudinal, cross-sectional), qualitative and mixed methods studies as well as evidence synthesises will be considered for this review.

Inclusion and exclusion criteria

For a study to be eligible, it must include data on self-identified black MSM living with or without HIV in Canada and studies on HIV prevention and care in black Canadian MSM. Studies that are conducted before 1983 will be excluded, as this was the year that Canada formed its own national task force on AIDS. In addition, studies that are not available in either the French or English
language will be excluded because we would not have the capacity to translate them.

Outcomes
The primary outcomes of this scoping, systematic review:
► We will evaluate data that focus on levels of HIV diagnosis, linkage and retention in care, receipt of ART, adherence to medication and achievement of viral suppression.
► We will assess factors that determine and the overall access to care and quality of care for black MSM in the context of the Canadian healthcare system.
The secondary outcomes of interest:
► We will investigate health promotion for black MSM (eg, the availability of targeted interventions for black MSM, their proximity to these healthcare centres, methods of information dissemination about any interventions, quality of care, measure of racism, stigma and discrimination).
► We will explore the quality of care in the context of racism, sexual minority stigma and discrimination as well as patient satisfaction (ie, investigate the experiences of black MSM in healthcare facilities and how their intersectional identities influence their care).
► We will research unilevel and multilevel interventions that are designed to improve quality of life for black MSM through addressing factors such as housing and employment security.

Search strategy for identification of studies
We will conduct a comprehensive search of the literature published using the Health Sciences Library at St. Michael’s Hospital, Unity Health Toronto, Toronto, ON and will be done by a health sciences librarian. Our search terms are listed in box 1, which include terms such as HIV, black, African, Caribbean, quality of healthcare, prejudice and a multitude of Canadian cities.

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 conference posters. Furthermore, experts, authors and relevant organisation such as African and Caribbean Council on HIV/AIDS in Ontario, Black Coalition for AIDS Prevention, Africans in Partnership Against AIDS, Committee for Accessible AIDS Treatment, Taibu Community Health Centre, Ontario HIV Treatment Network and CATIE will be contacted.

Screening
In order to ensure study screening and selection and avoid repetition of citations prior to reviewing the abstract, we will deduplicate the studies in advance and use Rayyan QCRI to import citations accumulated using this search strategy.24
Two reviewers will pilot test a form customised to reflect the aforementioned inclusion criteria. This data

Box 1 Proposed search strategies for Medline, CINAHL, Embase, APA PsychINFO and Scopus

All Medline <1946–April 2020>
Search strategy:
1. exp Acquired Immunodeficiency Syndrome/ (76118)
2. acquired immune deficiency syndrome*.af. (15537)
3. acquired immuno deficiency syndrome*.af. (133)
4. acquired immuno-deficiency syndrome*.af. (133)
5. AIDS.ti,ab,kf. (152233)
6. aids-related.ti,ab. (7810)
7. exp HIV Infections/ (279484)
8. “opportunistic infect*”.ti,ab,kf. (14775)
9. exp HIV/ (97832)
10. human immunodeficiency virus*.af. (97442)
11. HIV.ti,ab,kf. (310589)
12. human t cell.tw. (12631)
13. “immunodeficiency virus*”.tw. (90777)
14. Highly active antiretroviral therapy.af. (11372)
15. HAART.tw. (11838)
16. exp Seroconversion/ (511)
17. serconversion.ti,ab,kf.
18. exp HIV Seropositivity/ (22998)
19. seropositiv*.ti,ab,kf. (38084)
20. or/1–19 (485782)
21. exp African Americans/ (53039)
22. exp African Continental Ancestry Group/ (85512)
23. (Africa or African).ti,ab,kf. (228811)
24. Afro-Canadian.tw.
25. (Black or blacks).ti,ab,kf. (133358)
26. exp Caribbean Region/ (29809)
27. caribbean.ti,ab,kf. (14728)
28. west ind*.ti,ab,kf. (3764)
29. exp Minority Groups/ (13616)
30. minorit*.ti,ab,kf. (68746)
31. Minority Health/ (741)
32. (“person* of colour” or “person* of color”).ti,ab,kf. (139)
33. (“people of colour” or “people of color”).ti,ab,kf. (498)
34. (racialised or racialized).ti,ab,kf. (371)
35. “Emigrants and Immigrants*”. (11834)
36. exp “Migration and Immigration”/ (25071)
37. immigrant.ti,ab,kf. (13711)
38. immigrat*.ti,ab,kf. (13083)
39. Emigrant*.ti,ab,kf. (1481)
40. ((first or second or third) adj5 generation).ti,ab,kf. (59505)
41. migrant*.ti,ab,kf. (19345)
42. (landed adj5 status).tw.
43. (landed adj5 person*).tw.
44. exp Refugees/ (9976)
45. refugee.ti,ab,kf. (5977)
46. asylum.tw. (3358)
47. or/21–46 (585619)
48. new Canadian.tw. (170)
49. (Canada* or Canadian* or Alberta* or Calgary* or Edmonton* or “British Columbia*” or “Vancouver* or Victoria* or Manitoba* or Winnipeg* or “New Brunswick*” or Fredericton* or Moncton* or Newfoundland* or “New Foundland*” or “Labrador*” or “St.John*” or “Saint John*” or “Northwest Territor*” or “Yellowknife*” or “Nova Scotia*” or Halifax* or Dalhousie* or Nunavut* or “Igualit*” or Ontario* or McMcMaster* or Kingston* or Sudbury* or “Prince Edward Island*” or Charlottetown* or Quebec* or
Montreal* or McGill* or Laval* or Sherbrooke* or Nunavik* or Kuujjuaq* or Inuksuit* or Puvirnituq* or Saskatchewan* or Saskatoon* or Yukon* or Whitehorse*), ti,ab,in,jw,cp. or exp Canada/ (1398042)
50. 48 or 49 (1398042)
51. exp attitude to health/ (410606)
52. (access adj3 care), ti,ab,kf. (29646)
53. (access adj3 health*), ti,ab,kf. (25710)
54. (access adj3 service), ti,ab,kf. (1945)
55. (access adj3 treatment), ti,ab,kf. (6284)
56. (accessibility adj3 care), ti,ab,kf. (1252)
57. (accessibility adj3 health*), ti,ab,kf. (2085)
58. (accessibility adj3 service), ti,ab,kf. (1760)
59. (accessibility adj3 treatment), ti,ab,kf. (389)
60. black health.af. (81)
61. (health* adj3 seek*), ti,ab,kf. (10743)
62. Health Services/ or Community Health Services/ (55788)
63. ((health care or healthcare) and utilization), ti,ab,kf. (31660)
64. patient compliance, ti,ab,kf. (9488)
65. patient participation, ti,ab,kf. (2740)
66. patient acceptance, ti,ab,kf. (2386)
67. exp Delivery of Health Care/ (1061779)
68. Quality of Health Care/ (72048)
69. Cultural* Competent, ti,ab,kf. (2274)
70. Cultural* Competency, ti,ab,kf. (8630)
71. (Disparity or Disparities), ti,ab,kf. (60244)
72. Health Status Disparities/ (14973)
73. equit*.ti,ab,kf. (23858)
74. inequit*.ti,ab,kf. (9821)
75. exp sociological factors/ (650969)
76. homophobia/ (7815)
77. internali?ed, ti,ab,kf. (21074)
78. (racial or racism).tw. (41934)
79. prejudic*, ti,ab,kf. (6522)
80. exp prejudice/ (239385)
81. exp attitude to health/ (410606)
82. exp minority group/ (14974)
83. minorit*, ti,ab,kf. (93227)
84. social*ti,ab,kf. (537293)
85. social stigma/ (7815)
86. stigma, ti,ab,kf. (23114)
87. or/51–84 (2105502)
88. 20 and 47 and 50 and 87 (1280)
89. Male/ (8471875)
90. exp men/ (4607)
91. boy*, ti,ab,kf. (151836)
92. gay, ti,ab,kf. (11064)
93. male, ti,ab,kf. (848263)
94. trans, ti,ab,kf. (123417)
95. limit 88 to male (658)
96. 89 or 90 or 91 or 92 or 93 or 94 or 95 (8761351)
97. 88 and 96 (720)
98. remove duplicates from 97 (717)

CINAHL
S19, S15 AND S18, Search modes-Boolean/Phrase

Embase Classic+Embase <1947 to 2020 April 08>
Search strategy:
1. exp acquired immune deficiency syndrome/ (140242)
2. acquired immune deficiency syndrome*.af. (136968)
The following describes the study selection: to start, we will conduct a title and abstract screening. Once an article is seen as potentially relevant, we will retrieve and screen collection form will be generated and used by two independent reviewers. Fifty abstracts will be used as a sample to establish consistency of use and clarity of instrument. A Cohen’s kappa statistic will be estimated to measure inter-rater reliability and screening will begin when 60% agreement is achieved.25

The following describes the study selection: to start, we will conduct a title and abstract screening. Once an article is seen as potentially relevant, we will retrieve and screen
the full text in detail. This occurs prior to data extraction. In duplicate, JN and PD will conduct all screening, data extraction and quality assessment. Disagreements will be resolved by consensus. If consensus cannot be reached, a third author will arbitrate (SG).

**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 black MSM participants. For each outcome, measures of magnitude mean (SD) or per cent (95% CIs) and where possible measures of the effect of the outcome in black MSM versus men in other racialised groups (odds or risk ratios, mean differences, accompanied with 95% CIs) will also be extracted. 26

**Analyses and reporting**

Our findings will be reported according to the Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews 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**

Black MSM experience both rampant anti-Black racism and widespread stigma faced by MSM. 12 The discrimination faced by these groups and institutional oppression have shown to be associated with inadequate access to HIV-related care. 3, 14 29 Through this scoping, systematic review, we will investigate the effects of black MSM’s intersectional identities in HIV prevention, treatment and support service access in Canada. Moreover, we will assess the impact of interventions to improve quality of care and quality of life for black MSM. This review can be used in decision-making for health policy and promotion and can influence the services provided by healthcare facilities and community organisations that serve individuals from the Black and LGBT communities.

This scoping review is limited by the specificity to Canadian data, which reduce its relevance to other countries. However, the information in this study can be generalised to be tested in other black MSM populations given common structural barriers that affect HIV prevention and care across geopolitical contexts. 5 30 Limitations notwithstanding, the study will include an extensive search on current literature on an under-represented population in research and will greatly contribute to the research available in Canada.

**Contributors**

The study was conceived by JN, PD and LEN. All authors revised the research question and provided content to the design. Manuscript was written and edited by JN, PD, LM, SG, DW and LEN. Principal investigator of the study is LEN. All authors read and approved the final version of the manuscript.

**Funding**

This paper was made possible through the Ontario HIV Treatment Network Applied HIV Research Chair in HIV Program Science with African, Caribbean and Black Communities number AHRC-1066. This publication was also made possible through core services and support from the Yale University Center for Interdisciplinary Research on AIDS (CIRA), an NIH-funded program (F30 MH062294).

**Competing interests**

None declared.

**Patient and public involvement**

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

**Patient consent for publication**

Not required.

**Provenance and peer review**

Not commissioned; externally peer reviewed.

**Open access**

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