

Original mixed methods research

Mandatory HIV screening, migration and HIV stigma in Canada: exploring the experiences of sub-Saharan African immigrants living with HIV in western Canada

Aniela dela Cruz, PhD (1); San Patten, MSc (2); Inusa Abdulmalik, MSc (3); Jean Harrowing, PhD (4); Marc Hall, MSc (1); Arfan R. Afzal, PhD (1); Tsion Demeke Abate, MEd (5); Andrea Carter, BNM (6); Peggy Spies, MPA (5); Sipiwe Mapfumo, MSc (6); Vera Caine, PhD (3)

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Abstract

Introduction: In this mixed-methods pilot study, we examined the intersections of the current Canadian immigration policy, mandatory HIV screening during the Immigration Medical Exam (IME) and enacted and internalized stigma for HIV-positive immigrants from sub-Saharan Africa (SSA) in a western Canadian province. We focus on qualitative findings from this study.

Methods: Using the Internalized HIV Stigma Scale (IHSS), we collected data from eight immigrants from SSA living with HIV in a western Canadian province. We then conducted semistructured interviews with seven of the eight participants. Due to the small sample size, survey data were summarized using descriptive analysis. Qualitative data were analyzed through constant comparative analysis.

Results: The following key themes emerged from analysis of qualitative data: experiences of HIV-related emotional distress during the IME; varied experiences of HIV testing during the IME; and inconsistent patterns of linkage to medical care, psychosocial supports and engagement in the HIV care cascade.

Conclusion: Findings from this pilot study cannot be generalized to the broader population of immigrants living with HIV in Canada. However, we found that the experiences of internalized HIV stigma and enacted stigma during the IME potentially influence the long-term engagement in the HIV care cascade during the process of migration and settlement in Canada. Further study in this population is recommended to examine the intersections of current mandatory HIV screening process during the Canadian immigration process, migration, settlement, culture, stigma and engagement in the HIV care cascade.

Keywords: HIV/AIDS, immigrants, sub-Saharan Africa, Canada, migration, immigration, HIV care cascade, Immigration Medical Exam

Highlights

- People from HIV-endemic countries, including most sub-Saharan African countries, are overrepresented in national HIV surveillance data in Canada.
- This pilot study contributes new knowledge about the experiences of sub-Saharan African immigrants living with HIV in one western Canadian province.
- This study provides new insights on intersections of culture, social determinants, HIV, stigma and potential impacts on the HIV care cascade and mental wellness during migration to and settlement in Canada.
- Further research is needed, including intervention research, to reduce stigma within the Canadian Immigration Medical Examination (IME) process and ensure better engagement in the HIV care cascade should be explored.

Introduction

Approximately 63 110 people are living with HIV in Canada.^{1,2} Despite that people from HIV-endemic countries, including most sub-Saharan African (SSA) countries, are overrepresented in national HIV

Author references:

1. University of Calgary, Calgary, Alberta, Canada
2. San Patten and Associates, Halifax, Nova Scotia, Canada
3. University of Alberta, Edmonton, Alberta, Canada
4. University of Lethbridge, Lethbridge, Alberta, Canada
5. HIV Edmonton, Edmonton, Alberta, Canada
6. HIV Community Link, Calgary, Alberta, Canada

Correspondence: Aniela M. dela Cruz, Faculty of Nursing, University of Calgary, PF2230, 2500 University Drive N.W., Calgary, AB T2N 1N4; Tel: 403-210-7484; Email: aniela.delacruz@ucalgary.ca

surveillance data,^{1,2} very little is known about the experiences of SSA immigrants living with HIV in Canada. Although several population-based studies have been conducted in central Canada, information about SSA immigrants living with HIV in western Canada is limited, despite an increasing number of new cases of HIV among immigrants from countries where HIV is endemic.³

Most immigrants must complete an immigration medical examination (IME) as part of the application process to immigrate to Canada. Mandatory HIV screening was introduced in 2002. All IMEs are conducted by panel physicians designated by the Canadian federal government. Panel physicians are practising physicians living in Canada or non-Canadian nationals living in other countries.⁴

In Goffman's seminal work,⁵ stigma refers to the complex concept of deviance and societal perceptions of people perceived to differ from societal norms. HIV-related stigma has been conceptualized in different ways in the literature.⁶ *Internalized stigma* is defined as "the acceptance among people living with HIV of negative beliefs and feelings associated with HIV about themselves."^{6,p4} *Enacted stigma* is defined as "acts of discrimination, such as exclusion, or physical or emotional abuse towards an individual's real or perceived identity or membership to a stigmatized group."^{7,p.1} Internalized HIV stigma is associated with poor HIV medication adherence, poor engagement in the HIV care cascade and poor health and social outcomes.⁸⁻¹³

The immigrant population in Canada may face extraordinary barriers to achieving positive health and social outcomes compared to the non-immigrant Canadian population,^{14,15} resulting in health inequalities. It is especially important to understand internalized HIV stigma among immigrants living with HIV, as immigration policies, migration and settlement experiences may affect their engagement in the HIV care cascade. Very little research exists on immigration applicants' experiences during the IME, HIV stigma, migration, settlement and access to specialized health services for HIV. More specifically, there is limited research on experiences of stigma during the IME's mandatory HIV screening. Also limited is research on how that stigma influences

engagement in the HIV care cascade during migration to and settlement in Canada.

Objectives

Our research question was: How do SSA immigrants living with HIV in a western Canadian province internalize and experience HIV-related stigma encountered during the IME?

The objectives of this exploratory pilot study were (1) to measure HIV-related stigma among SSA immigrants living with HIV, using the Internalized HIV Stigma Scale (IHSS)¹⁶; and (2) to explore how SSA immigrants living with HIV experienced HIV-related stigma during the IME.

We examine our study results through the theoretical lens of intersectionality¹⁷ and critical social theory.¹⁸ We gathered insights on how mandatory HIV screening of immigration applicants, their legal status, stigma and culture influence health and social disparities in this population.

Methods

In this mixed-method pilot study, we collected quantitative data including sociodemographic and clinical data as well as data from the IHSS.¹⁶ Qualitative data were collected through semistructured interviews. Using purposive sampling, we collaborated with community-based organizations and HIV clinics to recruit participants. Given the exploratory nature of this study, we were not aiming for a sample size with adequate power to detect statistically significant differences.

We used the following inclusion criteria: 18 years of age or older; a confirmed positive diagnosis of HIV; completion of mandatory HIV screening as part of the Canadian IME (this applies to immigrants who arrived in Canada after 2002); and ability to understand and speak English. Each interview lasted approximately one hour. An honorarium of \$25.00 was provided. Offering this small honorarium (66% over the minimum hourly wage in this province) honours the expertise that community members bring, particularly experiential people, and shows the value of people engaged in community-based research.

Ethics approval was obtained from three university-based research ethics boards: University of Calgary (REB15-0471),

University of Alberta (PR000056579) and the University of Lethbridge (HSRC2015-035).

The IHSS is the first documented multidimensional measure of internalized HIV-related stigma related to treatment and other aspects of the disease among sociodemographically diverse people living with HIV in North America. It is a 28-item measure of internalized HIV stigma composed of four subscales (stereotypes, disclosure of HIV concerns, social relationships and self-acceptance).¹⁶

Because of the small sample size in this pilot study ($N = 8$), we retained quantitative data for descriptive analysis only. The qualitative component of this study yielded rich data and is the focus of the findings reported here.

Members of the research team interviewed study participants using a semistructured interview guide. The interview guide included questions on HIV stigma; HIV testing during the immigration process; the experience of stigma; and engagement in the HIV care cascade during the IME, migration and settlement. Interviews were audiorecorded and transcribed verbatim.

We analyzed the qualitative data using approaches described by Corbin and Strauss.²⁰ Although we did not base this study on a grounded theory research method, the research team analyzed qualitative data in an iterative process of data analysis and data collection. Concepts related to HIV stigma were identified by the researchers working as a team. The concepts were grouped together under broader categories related to HIV stigma and the Canadian (IME) process, and then assessed, through constant comparative analysis, for patterns or themes of similarities and/or differences.^{19,20} The research team engaged primarily in open coding^{19,20} in analyzing data, with a primary focus on examining events, actions and interactions.

Results

Sample characteristics

HIV in the SSA immigrant community in Canada is a highly stigmatized and sensitive subject,^{21,22} and the research team anticipated and experienced challenges in recruiting participants from the community. Working with community stakeholders and collaborators, such as HIV clinics and AIDS service organizations, and as a

result of multiple efforts, we were able to recruit eight participants who completed the IHSS survey; seven consented to an in-depth individual follow-up interview with a researcher. The legal status of participants varied: some were living in Canada as refugee claimants, some as government-assisted refugees and some as permanent residents under sponsorship*.

Table 1 summarizes the key characteristics of participants.

Due to the small sample size ($N = 8$), quantitative findings were descriptively analyzed to provide contextual information alongside the qualitative findings. Table 2 shows the number of participants who experience stigma “most” or “all of the time” in each IHSS domain. We found that most participants (5/8) had high internalized stigma associated with their positive HIV status in the domain of self-acceptance.

The Immigration Medical Examination process experience of immigrants living with HIV

The following key thematic categories emerged from our qualitative analysis of interview data:

- experiences of HIV-related emotional distress during the IME;
- varied experiences of HIV testing during the IME;
- inconsistent patterns of linkage to medical care, psychosocial supports; and
- engagement in the HIV care cascade.

Experiences of HIV-related emotional distress during the IME

Some of the participants, particularly those who were refugee claimants at the time of the interview, expressed significant worry and fear that their HIV status would jeopardize their ability to migrate to or legally remain in Canada. One participant noted that many of his fellow expatriates had gained permanent residency and had even become Canadian citizens, while he had been waiting for a long time. This individual believed his

TABLE 1
Characteristics of study participants ($N = 8$)

Variables	Frequency, <i>n</i>
Sex	
Male	4
Female	4
Immigrated to Canada	
Before 2010	1
In 2010–2014	5
After 2014	2
Annual income, \$	
< 10 000	2
10 000–25 000	3
25 000–40 000	2
> 40 000	1
Education completed, years	
5–8	1
9–10	0
11–13	2
≥ 14	5
Relationship status	
In a relationship with one person	4
Not in a relationship	4
Sexual behaviour	
I am a man who has sex with women	4
I am a woman who has sex with men	3
Other	1
HIV test was done during Canadian IME	
Yes	8
Found out for the first time about HIV-positive status at Canadian IME	
Yes	3
No	5
Diagnosed with AIDS	
Yes	5
No	3
Taking medication for HIV	
Yes	8
Knowledge about the last CD4 count	
Yes	3
No	3
Missing	2

Abbreviation: IME, Immigration Medical Exam.

HIV-positive status contributed to the delays of his immigration application process:

I say this HIV brought my trouble, yeah, I was always living positive but

when I see, like HIV has affected my being a Canadian permanent resident and a citizen, really that's when I get stressed... Maybe [my HIV] delay my immigration... (P100)

* Refugee claimants may apply to immigrate to Canada via private sponsorship. The sponsor is typically a group of Canadian citizens willing to sponsor and support the refugee applicant during the application and settlement process, as per current policy (<https://www.canada.ca/en/immigration-refugees-citizenship/corporate/publications-manuals/guide-private-sponsorship-refugees-program.html>).

TABLE 2
Number of participants reporting internalized HIV stigma experienced “most” or “all of the time” for each IHSS domain (N = 8)

Domain	n
Stereotype	3
Disclosure concern	2
Social relationships	1
Self-acceptance	5

Source: Sayles et al.¹⁶

Abbreviations: IHSS, Internalized HIV Stigma Scale.

On being positively diagnosed for the first time during the IME, one participant described worrying about the effect on his family and the immigration process for himself and his children:

...Everything gone, all the happiness, the excitement, the hope I had to come to Canada, it's all gone at once...when the doctor told me my results, you are HIV positive, but your HIV does not affect your immigration process... I felt it might affect me, I still didn't believe [the immigration doctor]... that's why I had the feeling... not only for me but for my family, for my kids... that is like [a] penalty for my kids... [I was] very much worried...(P104)

Another participant described worrying about his children after learning of his positive diagnosis:

I think in my life I have never been so stressed. This is the first time of knowing what stress is... I have a family, my children...at the same time they are suffering because of [this HIV]... (P100)

One participant was scared that his sponsor hosts would no longer want to support his immigration once they found out that he was HIV positive:

... the Canadian government, they have the responsibility of protecting Canadian citizens. So [the IME physician] say[s] that I have to tell my host that... situation and it was up to [the sponsor host] to decide if he wanted me to come anyway or that he didn't want to. I was scared... I don't know what is going to happen. I don't know if I'm going to be sick, I don't know if [the host] is going to want me [and my child] to stay [with them]... (P107)

One participant described the jarring dissonance of the news of being accepted as

an immigrant to Canada while learning of his positive HIV diagnosis:

...when [the immigration doctor] told me that I was HIV positive ... I couldn't talk to her, I was shaking, you know like that shaking, I was so angry. You know everything gone ... to get that visa to come to Canada was... it's something special you know for Africans, for us, [...]. I waited for 10-something years, you know, to get out ... After I was told my [HIV] results... I did not have any interest to look at anything. My wife was asking why [I] don't look happy [asking]... what's wrong with you? (P104)

Three participants spoke of the trauma of receiving a positive diagnosis for HIV for the first time during their IME. Some ideated suicide after learning of their diagnosis:

I was just asking ... how I can kill myself? That's what I was thinking. Yeah. I think there was some time it came in my mind. That's what I was thinking. I'm alone. I'm just lonely... I was crying because I was just in the room and I'm so lonely... sometimes I was trying... I can kill myself. (P106)

Another participant described their despair upon first learning of their positive diagnosis:

... Like feeling that I'm not worth living, maybe I should die... I really got stressed and I had never been stressed... (P100)

Varied experiences of HIV testing during the IME

Participants were asked to describe the HIV testing during the IME. Participants discussed the extent to which they gave informed consent for HIV screening. Four of the participants were not told that the IME would include a mandatory HIV test. Participants stated that neither pre-HIV

test counselling services nor information about the IME process were provided. Participants described feeling desperate to leave their countries and being willing to fulfill any medical requirements, without questioning what was being asked of them.

Five participants knew of their HIV status prior to the IME. One of the participants who first learned they were HIV-positive through the IME process described the news as devastating:

I went to see the doctor with my family and my wife and my kids ... and then finally [the immigration doctor] let my kids and my wife out but she asked me to stay, and when we were alone she told me that I was HIV positive ... all the happiness, the excitement, the hope I had to come to Canada, it's all gone at once in that one minute. (P104)

Participants' interactions with the panel physicians differed based on whether the IME took place in Canada or overseas. Of the seven participants who agreed to be interviewed, three underwent the IME in Canada whereas four had the examination prior to coming to Canada (in Botswana, Sudan, Uganda and Zimbabwe). Most of the participants who completed their IME in Canada felt the panel physician and associated health professionals provided compassionate, empathetic and respectful care. In contrast, participants who completed their IME overseas identified more concerns and problems to do with privacy and confidentiality, as well as the feeling of being judged by the IME physician. One participant noted:

The problem was the way you get your results. They are not really... comfortable in telling you. (P102)

One participant who completed the IME in Botswana felt significantly judged:

...the one who was doing my test was like, he is scared of me. You know, I was like a dirty person. I was ... like you're a dead person. (P106)

Participants received varying types of counselling after learning of their positive HIV diagnosis. One participant was so shocked to hear they were HIV positive, they could not clearly recall the counselling they received:

They tell me [HIV] is part of life... just take it easy...and then myself, my mind was not there... my first time to hear about [my HIV diagnosis]. I was like I'm crazy. I didn't hear what [the immigration doctor] was talking about... I didn't even hear. (P106)

Inconsistent patterns of linkage to medical care, psychosocial supports and engagement in the HIV care cascade

Participants reported a wide variety of follow-up referrals and linkage to care and supports following the IME HIV testing process. In addition, participants received inconsistent counselling on how to manage their HIV in Canada and disclosure of their HIV-positive status to others.

Only one participant described being told by the IME panel physician about how the health care system worked and how their HIV care should continue once they arrived in Canada:

The [immigration doctor explained] the system in Canada... once they know you are HIV positive, they contact you as soon as possible so that they start taking care of you... they open your file, they make sure they get you HIV specialist, a family doctor... all of those things they told me. (P101)

One participant knew her HIV-positive status and was on treatment at the time of her IME. After she told the panel physician about this, the physician neither enquired about her level of engagement in the HIV care cascade nor advised her about Canadian laws regarding HIV nondisclosure. The participant noted that the panel physician in her home country provided only a short-term prescription of HIV medications and offered no advice about how to continue treatment once she arrived in Canada:

... Yeah I got medicine for two months so that I could at least take it while waiting to see, to wait for the doctor here in Canada... That's the only thing they gave me. (P105)

Another participant also reported that the panel physician did not tell her about the health care system in Canada, the laws pertaining to HIV nondisclosure or how to access HIV care in Canada. Her aunt in Canada was the one who facilitated her linkage to specialized HIV care:

When I came, my aunt knew about my situation, so she's the one who actually [...] sought [out] this clinic and talked to them and she told them, 'Oh, I've got my cousin. She is new to this country and she needs help in this and that and that.' That's how I got to know to go there, yes, it was only through my aunt, yes. (P102)

Several participants did receive advice about disclosure of their HIV-positive status to their partners. Only one participant described being given specific advice about HIV nondisclosure laws in Canada:

The [immigration] doctor told me if I have someone I must tell everything about myself [including about the HIV status]... It is difficult for me to say... [so] I just keep to myself. (P106)

Five participants reported that they did not begin HIV treatment until they had arrived in Canada. One participant was told by the diagnosing panel physician in Botswana that he was "still okay" because his "CD4 count was above 200." A participant whose CD4 count was above 200 reported that he was not eligible to access affordable antiretroviral therapy (ART) in Uganda. A friend reassured this participant that HIV treatment would be provided free of charge in Canada:

This is a country where they have very nice treatment and it will be given to you free, so don't get worried of anything. You will be taken care of. (P100)

Discussion

Findings from this pilot study reveal important insights into the experiences of SSA immigration applicants living with HIV in a western Canadian province. These findings speak to the intersections between current Canadian immigration policy, including mandatory HIV screening during the IME; adequate and appropriate pre- and post-HIV-test counselling, including engagement with the HIV care cascade; HIV-related stigma, including internalized HIV stigma among immigration applicants and enacted stigma in the immigration system; and disparities in HIV care cascade engagement.

Most immigration applicants who wish to migrate to and settle in Canada must complete an IME conducted by a registered panel physician in Canada or overseas.

The IME involves screening and assessment of physical and mental health; HIV screening is mandatory. The "regulated exceptionalism in the form of mandatory immigration HIV testing policy"^{23,p.128} during the IME and the ethical implications of such a public policy have been discussed elsewhere.^{23,24} HIV testing as part of the IME became mandatory in 2002; it remains the only test added to the IME in the past 50 years.^{23,24} HIV screening in the context of the IME is done to mitigate risk to the public health of Canadians and the demand on the Canadian health and social care systems. According to the *Immigration and Refugee Protection Act*,²⁵ an immigration applicant may be not admitted to Canada if they are deemed to be a potential risk to the public health and safety of Canadians or a potential burden on the Canadian health care system.

At times, the test confirms prior knowledge of an HIV diagnosis; at other times, it is the first diagnosis for immigrants, refugees and/or temporary foreign workers. It is important to consider the consequences of HIV screening among immigration applicants, particularly those who are vulnerable (e.g. refugees) or at significant risk of harm if returned to their countries of origin due to their positive HIV status. Many people living with HIV in SSA countries experience multiple vulnerabilities, including reliving past trauma,^{21,26} or have no access to HIV treatment.^{21,26}

Although the stated primary purpose of mandatory HIV screening during the IME is to determine public health risk or excessive demand on the health system, Canada needs to consider the human rights implication of conducting mandatory HIV screening during the immigration process. Though some immigration applicants (for example, family class or refugee applicants) who test positive for HIV may not be assessed as medically inadmissible,²⁷ others may be.

The IME panel physician should refer all applicants who test positive for HIV during the IME process to appropriate treatment and care. In our study, not all participants described appropriate care measures during the HIV testing process. They described genuine fear about their HIV-positive status and the impact that a positive diagnosis may have on their immigration application. This fear of living with HIV or starting ART resulted in

significant emotional distress at the time of diagnosis, with some participants ideating suicide. Participants reported lack of emotional support immediately after receiving their positive HIV diagnosis.

Finally, several participants reported delaying HIV treatment. While HIV treatment guidelines and initiation of ART are complex,²⁸ those participating in this study did not describe having in-depth discussions on HIV treatment and support options with the IME panel physician.

The Government of Canada provides panel physicians with information about key policies and procedures related to the IME, including mandatory HIV screening.⁴ The Public Health Agency of Canada outlines components of appropriate pre- and post-HIV test counselling.^{4,27,29} While guidelines are provided for age- and gender appropriate and culturally sensitive counselling prior to and after HIV testing, participants reported different experiences of counselling during the HIV testing portion of the IME. Further, based on current available information, we cannot determine the level of training provided for registered panel physicians to conduct the IME in Canada and overseas.

Adequate and appropriate counselling pre- and post HIV testing is critical to promote positive health and social outcomes for people living with HIV as well as for people at risk for acquiring HIV.^{30,31} Further, adequate counselling has been described as the gateway to the HIV care cascade, in which people are aware of and make informed choices with respect to HIV testing, diagnosis, medical treatment and ongoing care and support.^{30,31}

Pre-HIV test counselling is not time consuming.³¹ It includes telling the individual about their rights regarding HIV screening and about the process, potential outcomes and follow-up care and support. As much as possible, counselling should be in the immigration applicant's language. Current standards for pre-HIV test counselling include, at a minimum, a conversation with the patient regarding means of HIV transmission and prevention; a description of the testing procedure and confidentiality, reporting and record handling; meaning of HIV screening test results, including the possibility of false positive or false negative results; the need to inform anyone at risk of infection if the

test is positive; and the need for the patient's consent to undergo testing.

Our findings suggest that participants may not have received adequate or appropriate pre-HIV test counselling. Also significant is that more than half of the participants reported not being informed that an HIV test was a mandatory part of the IME. From a human rights-based approach to public health, individuals must be informed and be able to provide consent to HIV testing.³¹

Current Canadian IME guidelines indicate that post-HIV-test counselling is not mandatory for immigration applicants who test negative for HIV³¹ but is required for those who test positive. The post-HIV-test counselling should include referral to an HIV specialist for counselling, HIV viral load testing, CD4 counts and ART, when indicated.^{27,31} Further, panel physicians are required to complete a form that immigration applicants sign, acknowledging completion of post-HIV-test counselling.^{27,31} Several participants in our study did not receive adequate post-HIV-test counselling. For example, one participant reported not being told how to seek HIV treatment after the IME process or on arriving in Canada. This participant relied on relatives in Canada to access HIV specialized care. None of the interviewees recalled signing the form that acknowledged receipt of post-HIV-test counselling. This exposes a troublesome disconnection between the IME process and linkage to HIV care and support, particularly given Canada's stated policy commitments to the UNAIDS 90-90-90 treatment target to help end the global AIDS epidemic.³²

People living with HIV in Canada need to be informed of the medicolegal implications of HIV transmission without disclosure.³³ The criminalization of HIV nondisclosure is a complex issue.³³ The Supreme Court of Canada "has ruled that people living with HIV have an obligation to disclose their status to a sexual partner before sexual activity that poses a significant risk of serious bodily harm"^{33,p.3,34}. In the face of complexity regarding HIV nondisclosure laws in Canada, our study findings show that participants received minimal information about their legal obligation to disclose their HIV status to a sexual partner. In addition, participants reported receiving this information about their legal obligation in varying degrees of

detail. This too is of concern from a rights-based perspective. If people living with HIV are not aware of the laws of the country into which they are settling, they may be at risk for becoming entangled with the Canadian legal system.

The role of the panel physician during the IME has been previously questioned.^{23,24} We propose that the IME panel physician play a key role in engaging immigration applicants in the HIV care cascade during the premigration and migration process; provide information on how the immigration applicants could remain engaged in the HIV care cascade once in Canada; and inform the HIV-positive immigration applicant about the medicolegal implications of HIV nondisclosure.

Instead of being limited to HIV detection for the purpose of immigration policies, the panel physician could act as an important catalyst to ensure immigration applicants engage in the HIV care cascade during their migration to and settlement in Canada. The IME panel physician could also make sure that the individual understands the options for HIV care and support during the migration and settlement trajectory. Based on our findings, it was not clear how participants engaged or continued to engage in their HIV care from the time of their diagnosis to the referral to an HIV specialist.

The IHSS data reveal that study participants' experiences contributed significantly to internalized stigma associated with self-acceptance. Examining IHSS data alongside participants' shared experiences raises questions on the relationship between internalized HIV stigma and institutional structures such as policy, clinical practice guidelines for mandatory HIV screening during immigration, health care provider practices and people's social contexts of migration and settlement.

Participants also described a layered effect of internalized HIV stigma and emotional stress: stress related to transnational migration and settlement, that is, the immigration process, and stress associated with receiving a new HIV diagnosis or managing their HIV-related illness during migration to Canada. The emotional distress experienced by participants who receive a positive HIV diagnosis for the first time during the IME was significant. People have reported feeling trauma after

receiving a positive HIV diagnosis, and responses to such a diagnosis include shock, disbelief, depression, suicide ideation and anger.³⁵⁻³⁸

Participants described worrying and feeling stressed about how their positive HIV diagnosis would negatively affect their immigration application to Canada. Although refugee applicants cannot be denied admissibility based solely on a positive HIV diagnosis, internalized stigma was evident through the intense fear of deportation several applicants described.

Immigrants comprise a significant segment of Canadian society. It is important that Canada, as host country, ensures their health and social wellbeing, including those living with HIV. At approximately 20% of the total Canadian population, immigrants are vital in overall population growth in Canada; they also help address labour shortages, strengthen the national economy and contribute to demographic stability in the long term.^{39,40} Our findings suggest that immigrants living with HIV may face barriers to achieving optimal health and social outcomes due to internalized HIV stigma, enacted stigma and potential disengagement with the HIV care cascade during the process of migration and settlement. Health and social inequalities in this population may preclude individuals from participating fully and meaningfully in Canadian society.

Within the institutional structures of the IME, several participants reported enacted stigma. Our findings revealed missed opportunities during the physician–patient interaction to engage people in the HIV care cascade in nonjudgmental ways. Some participants reported receiving caring interaction with the IME physician, while others did not. Although IME panel physicians are general practitioners and not necessarily infectious disease specialists, they are a critical point of contact for Canadian immigration applicants. By proxy, the IME panel physicians are a first point of contact to the Canadian health and social system; they could play a key role in ensuring compassionate care during the IME and the engagement of HIV-positive immigration applicants in the HIV care cascade during premigration, migration and settlement.

Our findings indicate a need to further investigate the experiences of HIV-positive immigrants during the Canadian IME process

in relation to their engagement in the HIV care cascade.

Strengths, limitations and opportunities

There are several limitations to this exploratory pilot study. First, the sample size was small ($N = 8$) and only included immigrants from SSA countries. Therefore, findings of this study cannot be generalized to other immigrant populations living with HIV in Canada.

Second, all participants were recruited from one western Canadian province. Further studies should include participants who migrate to and settle across Canada. Though health care is publicly funded across Canada, health care systems, including service delivery, access to HIV care and support for newcomers, vary among Canadian provinces and territories. These variations may influence the experiences of internalized HIV stigma and of the HIV care cascade among immigrants living with HIV.

Third, the authors were not able to conduct a gender-based analysis of pilot data to allow examination of patterns of stigma among men, women or people who identify as transgender due to the small sample size.

Despite these limitations, the findings of this study act as a catalyst to further investigate the experiences of immigration applicants during mandatory HIV screening, internalized and enacted stigma during the IME, and how systemic factors can potentially affect health and social inequalities in immigrants living with HIV in the context of migration to and settlement in Canada. By understanding such social processes, we can develop ways to better support improved health and social outcomes of migrants to Canada living with HIV.

Finally, it is important to attend to the psychosocial and mental health needs of all people, including immigrants, living with HIV. Our findings show the critical importance of supporting the wellbeing of SSA immigrants living with HIV in Canada. Many migrants experience significant trauma as a result of displacement, armed conflict, violence and human rights violations.⁴¹ Our findings suggest that immigration applicants may require strengthened psychosocial support given the significant

potential effects on mental health and wellbeing that the intersections of past trauma, living with HIV, class and culture can have. Further study is needed to understand the mental health and wellbeing of immigrants living with HIV across regions in Canada.

Conclusion

Results of this study indicate disparities in the way that mandatory HIV screening is conducted by government-registered IME panel physicians located in Canada and overseas. Despite standard HIV screening guidelines for panel physicians, participants reported a range of experiences. Key themes that emerged included HIV-related emotional distress and varied experiences of HIV testing during the IME and inconsistent patterns of linkage to medical care, psychosocial supports and engagement in the HIV care cascade. This warrants further study as immigration applicants' engagement in the HIV care cascade could be compromised by inconsistent HIV test counselling procedures and resultant HIV stigma.

This study contributes to the information on the experiences of SSA immigrants living with HIV in Canada, particularly in western Canada. Availability of HIV care, treatment and support varies across provinces and territories. It is important to understand the social context of immigrants living with HIV, and how this may influence engagement in the HIV care cascade. Further study in this population is recommended to examine the intersections of current mandatory HIV screening process during the immigration process, migration, settlement, culture, stigma and engagement in the HIV care cascade.

Acknowledgements

We thank the participants who contributed to this pilot study, particularly for their courage in sharing difficult and painful experiences of living with HIV in their home countries and as newcomers in Canada. We also acknowledge the Faculty of Nursing, University of Calgary for funding this project through the Endowment Fund.

Conflicts of interest

There are no financial or other conflict of interest. None of the authors benefited as a result of this study.

Authors' contributions and statement

This is a community-based research project and all the authors collaborated in the development, writing, review and finalization of this manuscript. Several authors took the lead for certain sections of the manuscript. ADC, VC, SP and JH created the outline of the manuscript and developed the ideas presented with ongoing engagement and dialogue with co-authors for input and feedback. ADC, VC, SP, JH, MH and AA took the lead in the data analysis and synthesis of findings, with ongoing engagement and dialogue with co-authors for input and feedback.

The content and views expressed in this article are those of the authors and do not necessarily reflect those of the Government of Canada.

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