

Utilization of Indigenous cultural and health services among OCS participants

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Abstract

Indigenous culture, identity, and ceremony increase involvement throughout the HIV care cascade. There is currently a lack of studies focused on access to cultural services among Indigenous Peoples living with HIV. This study aims to explore the connections between Indigenous Peoples living with HIV/AIDS, their connection to cultural and health services, and the impact it may have on their overall health and wellbeing. Data for the current study come from the Ontario HIV Treatment Network Cohort Study (OCS), an open dynamic cohort of people receiving HIV care in Ontario, Canada. Seventy-seven Indigenous participants who completed a baseline questionnaire between January 1, 2020 and December 31, 2021 were included in the current analyses. The measures used in this study are based on feedback gained from Indigenous Peoples and Indigenous AIDS Service Organizations (ASOs) based on their perceptions of current needs and gaps within the province of Ontario. Results showed that 52% of Indigenous Peoples living with HIV/AIDS who took part in the Ontario HIV Treatment Network Cohort Study in the past 24 months reported accessing cultural services. Those who had worse self-perceived health outcomes were more likely to report that they were accessing some form of cultural health services, suggesting that those who are accessing Indigenous services are the ones who may be most in need of them. Significant barriers existed for many participants (38%) who could not access services even though they wanted to. Identifying these barriers and removing them may be an important step forward in reaching and maintaining viral suppression.

Keywords: HIV, AIDS, culture, healthcare, access, Indigenous Peoples, Canada

Introduction

Colonialism has resulted in disparities in the social determinants of health, and subsequent health outcomes between non-Indigenous and Indigenous Peoples in Canada (Adelson, 2005; Reading

& Wien, 2009). Colonial policies such as the Indian Act aimed to assimilate Indigenous Peoples through numerous means including residential schools, banning ceremonies, and creating dependency on the federal government (Mashford-Pringle, 2011; Waldram, Herring, & Young, 2006). These policies have also resulted in a loss of connection to culture, traditional practices, and intergenerational transfer of knowledge (Truth and Reconciliation Commission of Canada, 2015), all of which have contributed to and exacerbated the health disparities Indigenous Peoples face including a disproportionate burden of new HIV infections.

Culture is one of Health Canada's twelve determinants of health (Government of Canada, n.d.) and cultural continuity is an intermediate determinant of Indigenous health according to Reading and Wien (2009). Culture can be defined as 'the set of distinctive spiritual, material, intellectual and emotional features of society or a social group' and include language, norms, and values (Barkan, (2014); UNESCO, 2009). There is a clear link between different components of culture and health among Indigenous Peoples (Chandler & Lalonde, 1998; Hill, 2009; McIvor, Napoleon, & Dickie, 2009; Oster, Grier, Lightning, Mayan, & Toth, 2014).

Indigenous Peoples in Canada are disproportionately affected by Human Immunodeficiency Virus (HIV), making up 14% of new HIV infections and 10% of people living with HIV in 2018 despite accounting for only 9.7% of the total population as of 2023 (Public Health Agency of Canada, 2020; Statistics Canada, 2023). In the province of Ontario, 4.9% of all first-time HIV diagnoses in 2019 were among Indigenous Peoples despite accounting for only 3% of the Ontario population (Government of Canada, 2020; Ontario HIV Epidemiology and Surveillance Initiative, 2021b).

Currently, there are a lack of culturally relevant HIV programs and services in Indigenous communities in Canada, with barriers including limited access, confidentiality, language, and discrimination (HIV Legal Network, 2017; Rachlis, 2018). Poor service access creates barriers at all steps of the HIV care cascade (Hillier, Winkler, & Lavallée, 2020) which begins at HIV diagnosis and ends with access and adherence to antiretroviral therapy (Ontario HIV Epidemiology and Surveillance Initiative, 2021a). However, Indigenous culture, identity, and ceremony increase involvement throughout the care cascade (Jongbloed et al., 2019; Ontario HIV Treatment Network, 2019).

The objective of the current study is to examine the utilization of and barriers to accessing Indigenous cultural and health services among Indigenous people living with HIV participating in the Ontario HIV Treatment Network Cohort Study (OCS). It will also examine whether there are differences in utilization of Indigenous cultural and health services by key sociodemographic and health characteristics.

Context

In Ontario, Indigenous culture has started and continues to be integrated into western health programs and services. The Ministry of Health and Long-Term Care (2018) *Relationship with Indigenous Communities Guideline, 2018*, which is targeted at boards of health in public health units, outlined principles for establishing respectful relationships with Indigenous communities.

Key principles include acknowledging the diversity of cultures and languages between and within different Indigenous communities and understanding that the process of developing relationships would differ between Indigenous groups. It is also mentioned that engaging with Indigenous communities would allow for the development of culturally appropriate services that are more likely to be used by Indigenous Peoples. A review of Indigenous ceremonial policies and practices in healthcare and non-healthcare institutions within the Toronto Central region found that institutions either had their own policies or followed the Ontario Human Rights Code which allowed ceremonies to be practiced (Anderson & Migwans, n.d.). However, hospitals in Toronto had varied access to Indigenous ceremonies with multiple barriers present including a lack of institutional policies and safe spaces despite legislation that allowed Indigenous ceremonies to be practiced in the province (Anderson & Migwans, 2014). Additionally, we also see integration of Indigenous culture in health services within Cancer Care Ontario (CCO) which provides access to Indigenous Patient Navigators when an Indigenous person is diagnosed with cancer (Cancer Care Ontario & ICES, 2017). There are ten Indigenous Patient Navigators throughout the province that provide culturally appropriate support to individuals and their families throughout care and address their cultural and spiritual needs (Cancer Care Ontario & ICES, 2017). Additionally, the objectives of CCO's *First Nations, Inuit, Métis & Urban Indigenous Cancer Strategy 2019–2023* include increasing culturally safe care and an understanding of Indigenous knowledge and practices (Cancer Care Ontario, 2023).

Within the HIV sector in Ontario, there are few Indigenous-specific AIDS service organizations (ASOs) and limited options from others ASOs who provide culturally relevant HIV services. The Ontario Aboriginal HIV/AIDS Strategy offers cultural programming at its five sites across the province. Current services include ribbon shirt and ribbon skirt workshops that incorporate HIV education and cultural teachings; monthly sacred fires; provision of traditional medicines and smudge kits; HIV beading workshops with an education component; and opportunities to meet with an Elder (OAHAS, 2022). Similarly, the 2-Spirited People of the st Nations offer traditional counselling, access to ceremonies and teaching for their members, and the coordination of a 2-Spirit Powwow.

Methods

2.1 Data source

Data for the current study come from the OCS, an open dynamic cohort of people receiving HIV care in Ontario, Canada. The OCS is a community-based cohort study, established in 1996 which follows people living with HIV. The study has been used to inform government policy with the aim of supporting people living with HIV. The OCS houses a rich collection of data which has been accumulated over the years since its establishment, which includes race and ethnicity demographics. Further details of the cohort have been described elsewhere (Rourke et al., 2013).

2.2. Study Sample

Data for the current study come from 77 Indigenous OCS participants who completed the annual OCS questionnaire between January 1, 2020 and December 31, 2021. Details of the OCS are discussed elsewhere (Rourke et al., 2013). In brief, OCS Participants are recruited from 15 HIV clinics across the province of Ontario. Eligibility criteria included: (1) 16 years of age or older;

(2) diagnosis of HIV infection; (3) resident of Ontario; (4) able to speak English or French; and (5) able to provide informed consent. Clinical data are obtained from participants' medical records. Viral load data are further augmented through linkage with databases at Public Health Ontario, which conducts all serological and viral and bacteriological tests in the province. Demographic, socioeconomic, psychosocial, behavioural, and health-related quality of life data are collected through annual interviewer-administered questionnaires. Participants are compensated \$70 and \$50 for baseline and follow-up questionnaires, respectively. The OCS was approved by the Ethics Review Boards of individual study sites and the University of Toronto. Informed consent was obtained from all participants.

2.3 Measures

The measures used in this particular study have been driven and informed by Indigenous communities. They were adapted and constructed on feedback gained from Indigenous Peoples and Indigenous ASOs based on their perceptions of current needs and gaps within the province of Ontario.

2.3.1. Utilization of Indigenous Cultural and Health Services

In January 2020, based on feedback from OCS Indigenous community partners, three (3) questions were included in the annual baseline OCS questionnaire to assess utilization of Indigenous cultural and health services. Participants who identified as Indigenous (First Nations, Inuit, Métis) were asked:

- a) Have you participated in any Indigenous ceremony such as Smudging, Sweats, Pipe, Sun Dance, Potlatch, or Powwows?
- b) Have you used traditional medicines or practices to maintain your health and wellbeing (e.g., Seeing a Traditional Healer/Medicine person, Elder, Smudging)?
- c) Have you taken part in gatherings with Elders or Knowledge Keepers?

With response options of “Never”, “More than five years ago”, “In the past two years”, or “Not Applicable”.

Based on responses to these three questions, participants who indicated accessing any of the three services in the past two years were classified as having utilized Indigenous cultural and health services.

Participants were also asked how often they experienced challenges in accessing Indigenous cultural and health services with response options of “Never”, “Sometimes”, “Most of the time”, or “Always”. Participants who responded “Most of the time” or “Always” to these three services were further asked to indicate the types of challenges they experienced. Response options included “I do not know where to access them”, “Too far to travel”, “I can't find ceremonies that are relevant to my people/Nation”, “I do not know enough about them”, “Not available”, “Don't have time”, and “Past negative experiences with ceremony”.

2.3.2. Depressive Symptoms

Burden of depressive symptoms were assessed using the Patient Health Questionnaire (PHQ-9). The PHQ-9 is a validated tool to assess for the degree of depressive symptoms that have been impacting an individual's ability to function. Respondents were asked: "Over the past 2 weeks, how often have you been bothered by any of the following problems?"; and are given a list of the nine items with response options of "Not at all" (0); "Several days" (1); "More than half the days" (2); and "Nearly every day" (3). To reduce burden on participants, everyone was asked four of the nine (i.e., feeling nervous, anxious, or on edge; not being able to stop or control worrying; little interest or pleasure in doing things; and feeling down, depressed, or hopeless) questions. While people who indicated being bothered "several days"; "more than half the days"; or "nearly every day" to two of the four questions only (i.e., little interest or pleasure in doing things and feeling down, depressed, or hopeless) were further asked the remaining questions in the PHQ-9 scale. Thus, we used responses from the first four items only (i.e., feeling nervous, anxious, or on edge; not being able to stop or control worrying; little interest or pleasure in doing things; and feeling down, depressed, or hopeless) that constitute the PHQ-4 scale. The PHQ-4 has been used extensively in research and clinical settings, with a range of populations. (Kroenke, et al., 2010). We created a summary score by summing responses of the four items and then used previously established cut-off score of ≥ 3 (Kroenke, et al., 2009) to classify participants as experiencing depression or not.

2.3.3. Demographic, Socioeconomic, and Health Characteristics

Demographic and socioeconomic data collected included Indigenous identity, age, gender, sexual orientation, education, employment status, income, self-reported viral load, self-rated general health, and antiretroviral treatment. We categorized Indigenous identity as (First Nations vs. Metis vs. Inuit vs. Other/unknown), age (<30 vs 30-39 vs 40-49 vs. 50-59 vs ≥ 60), gender (women, heterosexual vs. women, lesbian/bisexual/other vs. men, heterosexual vs. men, gay/bisexual/other), education (less than high school completion vs. high school completion vs. trade/technical/some college vs. completed college/some university vs. completed university), employment (employed vs. unemployed, but able to work vs. retired/disability/student), and personal income (<\$20,000 vs. \$20,000-\$39,999 vs. \geq \$40,000).

2.4 Statistical Analyses

A total of 77 Indigenous OCS participants who completed the baseline OCS questionnaire between January 1, 2020 and December 31, 2021 were included in the current analyses. First, we summarized characteristics of participants using descriptive statistics (i.e., median and interquartile range for continuous variables and frequencies and percentages for categorical variables). Then, we compared characteristics of participants who utilized Indigenous cultural and health services in the past two years with participants who did not (never used them or accessed them more than two years ago) using chi-square tests and Fisher's exact test. All reported p-values are from two-tailed tests with $p < 0.05$ indicating statistical significance. Statistical analyses were performed using SAS software (SAS Institute Inc, Version 9.4).

Results

3.1. Sample Characteristics

Sociodemographic characteristics of the sample are presented in Table 1. Age of the sample ranged between 24 and 69 years with a median of 48 years and interquartile range of 36 to 56 years. Majority of participants were men (63.7%), identified as First Nations (61%), and received care in Northern or Southwestern Ontario (63.7%). Nearly half (46.8%) had not completed high school, 17% have high school completion, 27.3% had completed trade/technical/college education and 9.1% had completed university. Only 22% were employed at the time of the interview and more than two-thirds (67.5%) had a personal income of less than \$20,000. Almost all (95%) were on antiretroviral treatment and 63.7% rated their general health as “excellent”, “very good”, or “good”.

Table 1 **Sample characteristics (N=77)**

Characteristics	N	(%)
Age at interview		
Median [range]	48	[24-69]
Age group		
<30	6	(7.8)
30-39	18	(23.4)
40-49	20	(26.0)
50-59	22	(28.6)
≥60	11	(14.3)
Gender/sex		
Women, lesbian/bisexual/other	8	(10.4)
Women, heterosexual	20	(26.0)
Men, gay/bisexual/other	23	(29.9)
Men, heterosexual	26	(33.8)
Indigenous group		
First Nations	47	(61.0)
Metis	14	(18.2)

Other/Unknown	16	(20.8)
Region of Ontario		
Eastern Ontario	8	(10.4)
Greater Toronto Area	20	(26.0)
Northern Ontario	28	(36.4)
Western Ontario	21	(27.3)
Education level		
Less than high school completion	36	(46.8)
Completed high school	13	(16.9)
Trade/technical/some college	9	(11.7)
Completed college/some university	12	(15.6)
Completed university	7	(9.1)
Employment status		
Employed	17	(22.1)
Unemployed, but able to work	13	(16.9)
Disability/retired/student	47	(61.0)
Personal income (per year)		
<\$20,000	52	(67.5)
\$20,000 - \$39,999	12	(15.6)
≥\$40,000	11	(14.3)
On antiretroviral treatment		
Yes	73	(94.8)
No/Unknown	4	(5.2)

Self-reported viral load

<40 copies/mL	50	(64.9)
≥40 copies/mL	5	(6.5)
Unknown	22	(28.6)

Self-rated general health

Excellent/Very good	27	(35.1)
Good	22	(28.6)
Fair/Poor	22	(28.6)
Unknown	6	(7.8)

3.2. Utilization of Indigenous Cultural and Health Services

Of the 77 participants, about half (50.6%) reported accessing Indigenous cultural and health services in the past two years (Figure 1). Four out of ten (41.6%) participated in an Indigenous ceremony, 39.0% used traditional medicines or practices, and 32.5% had taken part in gatherings with Elders or Knowledge Keepers. Thirty participants (38.9%) indicated that they experienced barriers in accessing Indigenous cultural and health services (Figure 2). The reported barriers included long travel distance, lack of knowledge where to access services, insufficient knowledge about the services, unavailability of services in the area, and lack of time.

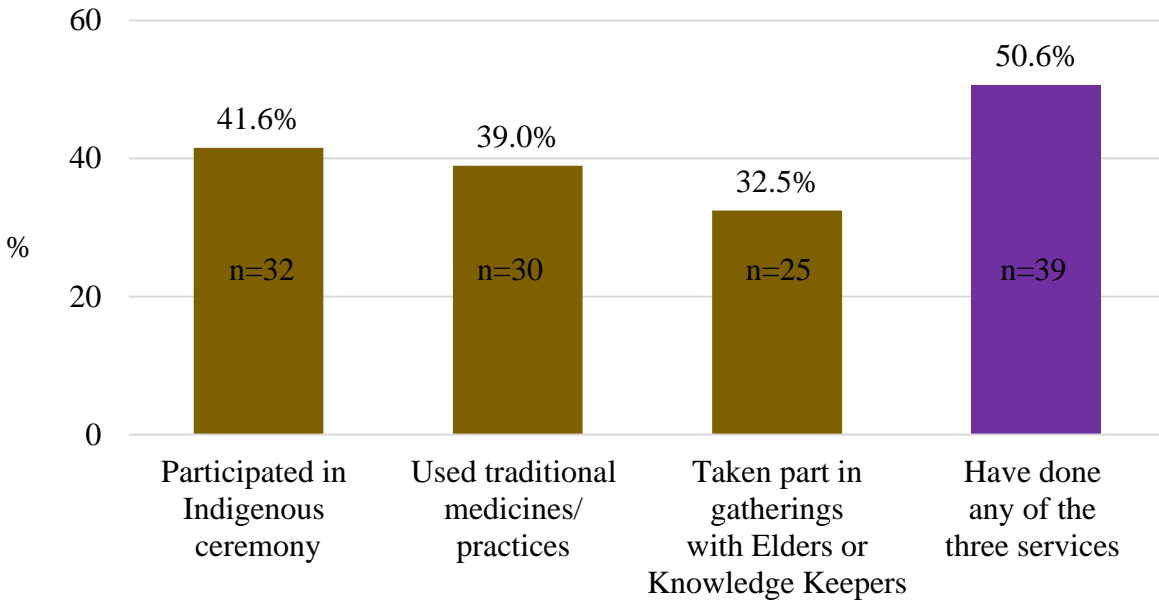


Figure 1. **Access to Indigenous cultural and health services in the past two years (N=77)**

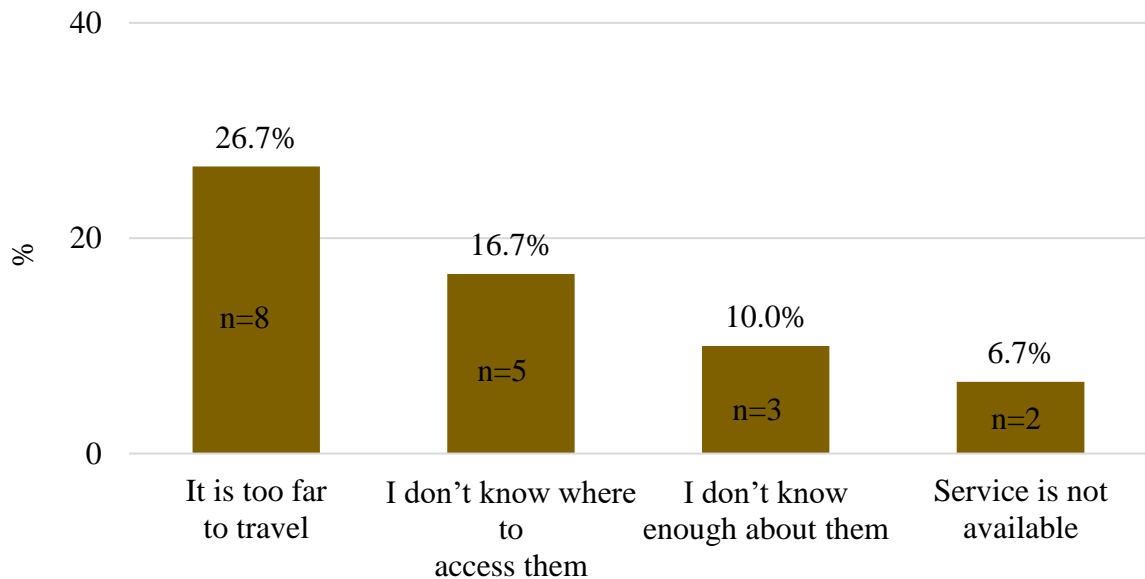


Figure 2. **Barriers experienced in accessing Indigenous cultural and health services (N=30)**

3.3. Utilization of Indigenous Cultural and Health Services by sociodemographic and health characteristics

Utilization of Indigenous cultural and health services in the past two years varied by age of participants, with higher access among people 45 years or younger than people with age of greater than 45 years (Table 2). However, the difference between these age groups was not

statistically significant ($p=0.152$). Women reported significantly higher utilization of Indigenous cultural and health services than men ($p=0.015$). Utilization did not vary by sexual orientation among women (75% among heterosexual women vs. 75% among lesbian/bisexual/other women) or men (34.6% among heterosexual men vs. 39.1% among men who identified as gay/bisexual/other).

Table 2. Access to Indigenous cultural and health services by characteristics of study

participants

Characteristics	<i>Used Indigenous cultural and health services (past 2 years)</i>				p-value*
	Yes (N=39)		No (N=38)		
	n	(%)	n	(%)	
Age at interview					0.152
<30	7	(58.3)	5	(41.7)	
36-45	15	(68.2)	7	(31.8)	
46-55	8	(36.4)	14	(63.6)	
≥55	9	(42.9)	12	(57.1)	
Gender/sexual orientation					0.015
Women, heterosexual	15	(75.0)	5	(25.0)	
Women, other	6	(75.0)	2	(25.0)	
Men, heterosexual	9	(34.6)	17	(65.4)	
Men, other	9	(39.1)	14	(63.6)	
Employment status					0.151
Working	6	(35.3)	11	(64.7)	
Unemployed/Retired/Disability	33	(55.0)	27	(45.0)	
Personal income (per year)					0.058
<\$20,000	30	(57.7)	22	(42.3)	
\$20,000-\$39,999	6	(50.0)	6	(50.0)	
≥\$40,000	3	(25.0)	9	(75.0)	
Education level					0.249
Less than high school	22	(61.1)	14	(38.9)	
Completed high school	4	(30.8)	9	(69.2)	
Some post-secondary education	9	(42.9)	12	(57.1)	
Completed university	4	(57.1)	3	(42.9)	
Region					0.946
Toronto	10	(50.0)	10	(50.0)	
Rest of Ontario	29	(50.9)	28	(49.1)	
Self-rated general health **					0.095
Excellent/Very good	10	(37.0)	17	(63.0)	
Good	11	(50.0)	11	(50.0)	
Fair/poor	15	(68.2)	7	(31.8)	
Self reported viral load					0.999
<40	22	(44.0)	28	(56.0)	
40+	2	(40.0)	3	(60.0)	
Unknown	15	(68.2)	7	(31.8)	
On ART					0.999
Yes	37	(50.7)	36	(49.3)	

Characteristics	Used Indigenous cultural and health services (past 2 years)				p-value*
	Yes (N=39)		No (N=38)		
	n	(%)	n	(%)	
No/Unknown	2	(50.0)	2	(50.0)	
Depressive symptoms (PHQ-4)					0.028
Depressed (PHQ-4 ≥ 3)	22	(64.7)	12	(35.3)	
Not depressed (PHQ-4 < 3)	17	(39.5)	26	(60.5)	

Note. Percent reported are row percent

* p-values are from chi-square or Fisher exact tests.

**Data missing for 6 participants

We found no significant variation ($p=0.249$) of utilization of Indigenous cultural and health services by level of education of participants. On the other hand, utilization of these services was lower among people who were employed than people who were unemployed/retired/on the Ontario Disability Support Program (35.3 % vs. 55.0%; $p=0.178$). Utilization of Indigenous cultural and health services in the past two years declined with increasing income, from 57.7% among people with an income of \$20,000/year to 18.2% among people with income of \$40,000 or greater. However, the difference across the income groups did not reach statistical significance ($p=0.058$).

Utilization of Indigenous cultural and health services also declined with better self-rated general health status: 68.2% among people who rated their health as “Fair” or “Poor”, 50.0% among people who rated their health as “good”, and 37.0% among people who rated their health as “excellent” or “very good”. The difference between the three groups, however, was not statistically significant ($p=0.095$). We also found that people with higher burden of depressive symptoms reported higher utilization of Indigenous cultural and health services than people with lower burden of depressive symptoms (64.7% vs. 39.5%, $p=0.028$). Among a subset of people who provided data on their HIV viral load ($n=55$), we found no significant difference in utilization of Indigenous cultural and health services by viral load level (44.0% among people with < 40 copies/mL vs. 40.0% among people with ≥ 40 copies/mL, $p=0.999$).

Discussion

HIV rates are persistent among Indigenous Peoples in Ontario, including additional challenges in accessing treatment and achieving viral suppression. We contend that Indigenous People living with HIV/AIDS (IPLHA) who are accessing Indigenous services are the ones who may be most in need of them at their specific time in their journey to wholistic health. We saw through the data that the utilization of cultural and health services declined with better self-rated general

health status which leads us to surmise that those with the greatest service needs and who report the worst self-perceived health are the ones who are more likely to access such services. However, the overall utilization of Indigenous cultural health services by IPLHA appears lower than that of other Indigenous Peoples. In Ontario, despite the disconnection from culture caused by colonialism, Our Health Counts Toronto found that 42% of Indigenous adults surveyed spoke an Indigenous language, 65% participated in traditional ceremonies, 49% used traditional medicines, and 77% felt connected to the land all, most, or some of the time (O'Brien et al., 2018). Similarly, Our Health Counts Thunder Bay found that 41% of Indigenous adults surveyed spoke an Indigenous language, 53% participated in traditional ceremonies, 40% used traditional medicines, and 82% felt connected to the land all, most, or some of the time (Anishnawbe Mushkiki, 2020). In this study, Indigenous participants who experienced greater mental and physical health challenges accessed the greatest number of cultural services.

The data also tells an important story about the need for interventions that eliminate barriers and increase access to Indigenous cultural services that will support HIV care and promote wellbeing, particularly for people with low income and experiencing mental health issues. A literature review conducted by McIvor et al. (2009) found that connection to the land, traditional medicine, traditional foods, spirituality, and language act as protective factors of health for Indigenous Peoples. However, they note there was a lack of urban perspectives and studies that focused on language and beliefs among the included articles. We saw with this study that there was greater access to services within the northern regions of Ontario, which may indicate a greater overall connection to these services based on geography. A study by Hillier et al. (2020) also noted significant barriers reported by IPLHA and ongoing gaps in access to cultural services. Their study provided numerous recommendations for improving access to and the delivery of culturally relevant services for those wishing to access such services as a way to achieve more complete wholistic health.

We also noted significant barriers faced by IPLHA that once removed/addressed may improve utilization of cultural services, including not knowing of services and connection to community. Hill (2009) found that a stronger cultural identity improved the mental health of Indigenous Peoples, and that traditional medicine and traditional knowledge can act as protective factors of health. Studies examining the effect of cultural continuity on health have also been conducted. Using land claims, self-government, education services, police and fire services, health services, and cultural facilities as measures of cultural continuity, Chandler and Lalonde (1998) found that the presence of each factor was associated with lower youth suicide rates among First Nations communities in British Columbia. Oster et al. (2014) conducted a mixed methods study examining the association between diabetes prevalence and cultural continuity in Alberta First Nations. Using language knowledge rate as a measure of cultural continuity, they found that those with higher cultural continuity had a lower diabetes prevalence after adjusting for socioeconomic factors. Participants of this study also stated that culture was linked to their health and that having 'a secure sense of culture leads to intact and healthy First Nations' (Oster et al., 2014, p. 4).

One interesting finding of this study is the greater access of services by Indigenous women. Indigenous women newly diagnosed with HIV in Ontario had thoughts of self-harm and suicide,

however, connection to family and culture were a significant protective factor against suicide (Hillier et al., 2021). We must be highly critical of heteropatriarchy, and the fact that Indigenous women have a disproportionate likelihood of being the victim of violence and report higher rates of HIV infection than Indigenous men (Browne et al., 2016). However, given the increasing rate of HIV infections in Indigenous men, it may be important to evaluate barriers to their participation in cultural services, especially when we could not find any specific cultural programming in the province for heterosexual Indigenous men living with HIV.

People who accessed services had equivalent HIV outcomes and are more likely to have HIV visits than their counterparts. Although the relationship between culture and positive health outcomes among Indigenous Peoples is evident, there is a lack of studies focused on access to cultural services among Indigenous Peoples living with HIV. Most of the service access studies are focused on primary health care access and barriers to access among Indigenous Peoples living with HIV. Additionally, race- and ethnicity-specific data is often incomplete (Public Health Agency of Canada, 2013) and there are numerous data quality issues for Indigenous-specific health data (Smylie & Firestone, 2015). Incorporation of and respect for Indigenous cultures are necessary when addressing HIV to make programs and services more culturally relevant (Nowgesic, 2010; Rachlis, 2018), and it is important to understand how these cultural services are being accessed and utilized to aid program development.

Limitations

Findings of our study should be interpreted in the context of the following limitations. First, OCS participants were recruited primarily from HIV clinics and hence may not be representative of all IPLHA in Ontario. Second, most of the HIV clinics are in urban centers and therefore, it is possible that IPLHA who live in rural areas or reserves may be underrepresented. Third, data for the current study were collected during the COVID-19 pandemic when there was interruption in in-person HIV care. Although OCS interviews were conducted both in-person and virtually (i.e., by phone or via zoom), it is possible that IPLHA who were not able to visit the clinic in-person or those who did not have access to the internet or phone may not be well represented in our sample. Finally, we performed descriptive or unadjusted statistical analyses and hence our results cannot be generalized to other Indigenous people living with HIV in Ontario or elsewhere.

Conclusion

Almost half (52%) of Indigenous Peoples living with HIV/AIDS who took part in the OCS study in the past 24 months reported accessing cultural services. Importantly, those who had worse self-perceived health outcomes were more likely to report that they were accessing some form of cultural health services. This is an important factor in ensuring that those with lower overall self-perceived health can improve their overall health outcomes and ensuring adherence to treatment and viral suppression. However, there remains clear and significant barriers for many participants (38%) who could not access services even though they wanted to. Identifying these barriers and removing them may be an important step forward in reaching and maintaining viral suppression. Overall, it is promising that we see both the wanting to or actual utilization of Indigenous cultural services in becoming wholistically healthy by IPLHA.

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