Co-offering HIV and COVID self-tests to members of Indigenous, African, Caribbean, and Black communities: The GetaKit Study

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Abstract

Background: Co-offering of HIV and COVID-19 self-tests is an innovative approach to increase testing uptake among equity deserving groups. In the case of GetaKit.ca, combining the two tests in a single order can lead to identifying undiagnosed infections and ultimately improving public health outcomes. The platform's modification to offer these tests to Indigenous and African, Caribbean, and Black communities was a necessary step in addressing health inequities that have long existed in these communities.

Purpose: Our goal was to evaluate the outcomes of co-offering HIV and COVID self-tests through GetaKit.ca.

Methodology: Persons registered on the platform completed a risk self-assessment and were offered an HIV and/or COVID self-test based on their risk level. The study ran from September 14, 2021, to December 19, 2021, and via targeted outreach from January 1, 2022, to April 19, 2022.

Results: The study resulted in 238 co-orders from 215 persons, with 77 persons of African, Caribbean, or Black ethnicities accepting a co-offer for an HIV and COVID self-test. This led to 75 orders for COVID self-tests and 6 co-orders for HIV self-tests that may not have otherwise occurred. Among Indigenous participants, 119 individuals created 167 orders, and 10% accepted a co-offer. This resulted in 12 Indigenous Peoples accepting an HIV self-test when HIV testing was not their initial goal.

Conclusions: Our study shows that co-offering HIV and COVID self-tests in a single order can lead to a small but important uptake in testing for marginalized communities. Our approach identified undiagnosed HIV and COVID infections and provided access to testing that may not have occurred otherwise.

Disclosures

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Introduction

In Canada, the SARS-CoV-2 pandemic, which started in 2019 (henceforth: COVID), and the ongoing HIV epidemic had a few interrelated elements. For one, the COVID pandemic shuttered or greatly reduced access to many in-person healthcare services, including to HIV testing, which decreased by 29% in Ontario in 2020 (OHESI, 2021). Furthermore, while stay-at-home orders were intended to promote physical distancing to reduce COVID transmission, they simultaneously should have helped decrease HIV transmission by limiting sexual contact between new partners. Moreover, through widespread public health data collection about the ethnicity of persons who were being diagnosed with COVID (Lapointe-Shaw et al., 2020; OHESI, 2022a; PHAC, 2022b), it quickly became apparent that HIV and COVID disproportionately affected some of the same groups, namely persons of African, Caribbean, or Black (ACB) ethnicities and Indigenous Peoples (OHESI, 2022a).

As frontline nurses who have worked in the field of HIV and sexually transmitted infection testing for over 35 years combined (O'Byrne and Orser), plus policy and implementation workers (Musten and Lindsay), we witnessed firsthand the challenges and struggles of restricted access to HIV testing specifically and to the healthcare system more broadly during the COVID pandemic. As one effort to address this limited access to HIV testing, we developed the idea of GetaKit.ca, through which persons could register, complete an online risk assessment, and, if eligible, obtain a free HIV self-test via mailout delivery or curbside pickup. As a next step, we obtained funding for GetaKit.ca so that users did not need to pay or have health insurance to access it. That is, we built GetaKit.ca to provide free HIV self-tests to persons who were eligible based on geo-location (Ontario) and due to the presence of HIV risk factors (sexual contact and/or drug use).

Access to free HIV self-tests via GetaKit.ca was determined based on the automated online risk assessment algorithm that we built, which used person's reported demographic information, geo-location, HIV risk practices (sexual / drug use behaviour), and prior HIV testing and results to calculate a risk score to determine if HIV testing is indicated (O'Byrne et al., 2021). The goal was to create an access point for persons not only who belonged to groups with higher rates of HIV, but also who had risk factors for HIV acquisition. We adopted this approach to avoid inadvertently promoting the stigma that one's identity (e.g., being an ACB or Indigenous Person, or being gay) inherently put someone at risk for HIV. Instead, our focus was to provide testing to persons with risk practices who were within higher HIV prevalence networks.

After creating this initial idea and the basic automated algorithm for GetaKit.ca, we worked with several AIDS service organizations, specifically, the AIDS Committee of Ottawa, Max Ottawa, the Black Coalition for AIDS Prevention (BlackCAP), and 2-Spirited People of the 1st Nations (2-Spirits). Through these partnerships, we created the wording of questions (to ensure sensitivity and accuracy), we developed promotional materials to raise awareness and increase uptake and use, and we tailored the navigation and layout of the website to maximize user experience. 2-Spirits also created small medicine bundles, which we included in the mailout of HIV self-tests to persons who identified as Indigenous.

With the advent of COVID self-tests, we again worked with the foregoing community agencies and groups to create a new website, GetaKit.ca/COVID, through which persons could order free COVID self-tests without requiring health insurance or payment. On this dedicated COVID website, we added a new self-assessment and risk calculation, which obtained data on demographics, geo-location, presence of symptoms, potential COVID exposures, the use of personal protective equipment, and vaccine status. The GetaKit.ca/COVID system used this information to calculate a risk score and to recommend that persons (1) should obtain emergency care, (2) seek in-person testing, (3) obtain a COVID self-test, or (4) do not qualify. Eligible persons were mailed up to two COVID self-tests per assessment (O'Byrne et al., 2022). Persons who were recommended emergency care or in-person testing were given linkages to local resources on where and how to obtain such services; they were also given the reasons why they should access clinical care.

In expanding and launching this new aspect of GetaKit, we noted that there were two silos (i.e., an HIV risk assessment silo and a COVID risk assessment silo), which provided access to either an HIV self-test through GetaKit.ca or a COVID self-test through GetaKit.ca/COVID. As we considered the high rates of both HIV and COVID among ACB and Indigenous populations, plus the many social and physical barriers to healthcare for these groups, we posited that persons who were ACB or Indigenous could benefit from a single access point to both tests. That is, we thought it might be beneficial to enable ACB and Indigenous Peoples to obtain both HIV and COVID self-tests in one order, and to do so whether the person had initially sought an HIV or a COVID self-test.

To manage this unplanned *post hoc* modification, which arose during the rapidity of COVID self-test deployment during the pandemic, we met with our community partners at BlackCAP and 2-Spirits to discuss the idea of co-offering HIV and COVID self-tests to ACB and Indigenous communities. We moreover discussed the criteria for such co-offers, considering if HIV and COVID self-test co-offers should be automatic based on ethnicity, or if they should be reserved for specific conditions. Based on the higher rates of HIV and COVID infections and systemic barriers to accessing healthcare for ACB and Indigenous Peoples, the community recommendation was to automatically co-offer both tests to anyone who identified as a member of either of these two groups. As such, we integrated the risk calculations such that the GetaKit algorithm would recommend HIV testing to ACB and Indigenous Peoples who sought COVID testing and vice versa. This meant that anyone who identified as ACB or Indigenous who sought an HIV self-test through GetaKit.ca or a COVID self-test through GetaKit.ca/COVID was automatically co-offered the other self-test in the same order.

In this paper, we give an overview the GetaKit COVID study and provide details about the ACB and Indigenous Peoples to whom we co-offered HIV and COVID self-tests. These findings add some nascent empirical data about bundling self-tests for members of these communities.

Background

The disproportionate rates of infectious diseases, such as HIV and COVID, among Indigenous and ACB Peoples are rooted in both contextual and structural components. From a contextual perspective, while Indigenous and ACB Peoples represent 5% of the overall population in Canada, HIV incidence in these groups is estimated to be approximately 18.2% and 21.7% (respectively) – rates that are 2-3 times the national average (Etowa et al., 2022; PHAC, 2022b). In Ontario, many new HIV diagnoses among Indigenous Peoples occur among persons who use injection drugs and men who have sex with men (OHESI, 2022a). Among ACB persons, many new HIV diagnoses in males are among men who have sex with men, while for females, all HIV diagnoses are related to heterosexual sexual exposures (OHESI, 2022a). Elevated rates of COVID infections in these groups (compared to the entire population) were also noted during the pandemic, with many transmissions occurring in persons with underlying health conditions, living in multigenerational households, and Indigenous groups living in rural and remote areas or on reserves (Statistics Canada, 2020).

While the first step in linkage to HIV treatment and COVID care is screening, there are many structural factors that impede access to testing among Indigenous and ACB Peoples. First and foremost is mistrust of the healthcare system and its providers, stemming from experiences of systemic racism, discrimination, and a lack of collaboration on provision of culturally safe care that acknowledges Indigenous and ACB cultures, beliefs, and holistic practices that allow for self-determination of healthcare needs (Etowa et al., 2022; Negin et al., 2015). Other structural factors to accessing HIV and COVID testing relate to socioeconomic determinants, such as poverty, inadequate housing, underemployment or precarious employment, experiences of domestic violence, geographic proximity to culturally safe healthcare services, as well as a lack of funding for comprehensive health services in rural or remote areas, leading those with health complications to be displaced from their home and communities to receive such care (Etowa & Hyman, 2021; Etowa et al., 2022; Huyser et al., 2022; Negin et al., 2015).

These structural impediments to infectious diseases screening and care can result in delayed HIV diagnoses and reduced health outcomes among ACB and Indigenous Peoples living with HIV (Gardezi et al., 2008; Jongbloed et al., 2019). These same factors also contribute to delayed COVID diagnoses and assessments, resulting in increased incidence of chronic respiratory illness, hospital admissions, and COVID-related mortalities and fatalities (Etowa & Hyman, 2021; Statistics Canada, 2020; Statistics Canada, 2022). Combined, these structural and historical factors create barriers to testing and care – and yield elevated rates of HIV and COVID among ACB persons and Indigenous Peoples.

Methods

The GetaKit Study

GetaKit was a prospective observational study that offered free HIV self-tests to people in Ontario, Canada through mailout delivery or curbside pickup at local AIDS service organizations. GetaKit started offering HIV self-tests on July 20, 2020; COVID self-tests were offered online between September 14, 2021 and December 19, 2021 and via targeted outreach events for ACB and

Indigenous persons from January 1, 2022 to April 19, 2022. For test devices, for HIV, we distributed the bioLytical INSTI® self-test; for COVID, we distributed the Lucira Check-It® COVID self-test. Both tests had received Health Canada approval.

The Ontario HIV Treatment Network (OHTN) and the Ministry of Health funded this study (EFP-2020-DC1). Health Canada purchased and imported the Lucira Check-It® COVID self-tests. These funders did not provide input on data collection or analysis and did not influence this analysis, write up, or publication. The Research Ethics Board at the University of Ottawa approved this study (H-12-20-6450), and all persons who accessed GetaKit.ca provided informed consent to (1) obtain a self-test and (2) to have their information included in research.

Data Collection

Community awareness of GetaKit.ca and GetaKit.ca/COVID for HIV and COVID self-tests occurred through social media, Ontario-based newspapers and radio interviews, advertisements on dating applications, and promotion by staff from affiliated AIDS service organizations (e.g., BlackCAP and 2-Spirits). Persons who were interested in obtaining a HIV and/or COVID self-test would, first, register for an account on either GetaKit.ca or GetaKit.ca/COVID by submitting personal information (i.e., first/last name, date of birth, contact information, mailing address), and, second, complete a self-assessment to determine their eligibility for receiving an HIV self-test and/or COVID self-test(s). To be eligible, persons had to reside in Ontario, be 16 years of age or older, and have risk factors for either HIV or COVID acquisition. The online self-assessment included demographic questions (e.g., age, sex, gender, ethnicity), as well as questions assessing potential HIV and COVID risks. For the HIV website, persons were asked about sexual and drug use practices, STI diagnosis history, and STI/HIV testing history. For the COVID website, persons were asked about symptoms, potential exposures, and vaccination status. The screening algorithm would determine eligibility for self-testing based on responses. Persons who were deemed ineligible were directed to seek in-person care.

During the period of offering COVID tests, we modified the screening algorithm so that ACB and Indigenous Peoples who accessed our websites could order both self-tests, regardless of whether they initially sought to obtain an HIV or COVID self-test (O'Byrne et al., 2021; O'Byrne et al., 2022). Persons could self-select to opt out of the additional test that was being offered; they could also return to re-order the test they had declined at any point. These co-offers were provided according to the following logic: Persons who identified as ACB or Indigenous were automatically offered both an HIV and COVID self-test; all other persons were only offered both tests when clinically indicated (e.g., if the person reported symptoms suggestive of HIV or COVID but did not report being in contact with someone who had been diagnosed with either HIV or COVID). In this way, we sought to co-offer these tests both to members of groups with higher rates of, and risk factors for, HIV and COVID (i.e., ACB and Indigenous Peoples) and to persons with symptoms that could be either HIV or COVID (e.g., flu-like illness).

Test results for HIV and COVID self-tests were obtained from persons who reported these via one of the GetaKit.ca websites. Immediately after people reported their self-test results, post-test counselling would appear on the website, which included linkage to care information about

confirmatory testing, public health recommendations, and services for emergency physical or mental crises. They would also be guided to resources selected by BlackCAP and 2-Spirits, including the contact information for their lead educator for direct contact with these community support agencies. For those who did not report a result, we also completed two reminder calls and emails after their order to elicit this information, but results reporting was not required. Beyond the automated post-test counselling, telephone follow-up was completed by nurses to any person who reported a positive HIV or COVID result. These persons were given the option to speak with the nurse who had called or to follow-up with staff from either BlackCAP or 2-Spirits, or from other local agencies. Those who spoke with the nurse were immediately offered counselling related to the diagnosis, public health recommendations (including contact tracing), linkage to healthcare follow-up or HIV care, and community support resources, including direct support from either BlackCAP or 2-Spirits.

Data Analysis

For this study, we extracted data from GetaKit.ca for all HIV and COVID orders fulfilled between September 14, 2021 to April 19, 2022. Persons who were ineligible to receive a self-test (due to requiring emergency care or in-person testing) and persons' whose orders were cancelled or not successfully delivered were excluded from analysis. Reported sex was aggregated to minimize small cell sizes and reported city of residence was categorized into population centre sizes. These data were exported from an MS Excel file into SPSS V.26 for analysis. For our analysis, we looked at the total number of (1) orders made by persons who self-identified as ACB or Indigenous during the study period, (2) persons who made an HIV and COVID co-order, and (3) co-orders made by persons who identified as ACB or Indigenous.

Descriptive analysis was conducted on the entire dataset to produce frequencies and contingency tables, then, filtering for persons who had ordered self-tests who self-identified as ACB or Indigenous, descriptive findings were stratified and analysed in contingency tables to show the differences between those who did and did not opt to receive both self-tests. Missing data were handled using listwise deletion. The findings were reported in narrative form and in tabular form. The data were presented in frequencies, counts, and mean with standard deviation (for numeric values). Small cell sizes (<5) were excluded from the findings to preserve privacy.

Results

From September 14, 2021 to April 19, 2022, a total of 1438 orders for HIV self-tests and 4161 orders for COVID self-tests were placed through the GetaKit.ca and GetaKit.ca/COVID websites, respectively, yielding 5599 total orders. For the HIV self-tests, 17% (n=240/1438) of orders were from persons who identified as ACB and 3% (n=41/1438) from persons who identified as Indigenous. For the COVID self-tests, 4% (n=164/4161) of orders were from persons who identified as ACB and 3% (n=128/4161) from persons who identified as Indigenous (Table 1).

From this larger sample of 5599 persons, 215 unique individuals made 238 co-orders for 238 HIV self-tests and 338 COVID self-tests during the study period, with 92% (n=218/238) of these co-orders having come through the HIV website. Overall, 95% (n=225/238) of co-orders were made

by persons who reported living in urban centres with >100,000 people. The average age of persons who made co-orders (n=238) was 32 years old (range: 17-63). For ethnicity, 34% (n=80/238) of persons who co-ordered self-tests identified as ACB, 7% (n=17/238) as Indigenous, 26% (n=62/238) as White, 13% (n=30/238) as Southeast Asian, 3% (n=8/238) as Latin American, 6% (n=15/238) as Middle Eastern, 7% (n=16/238) as South Asian, and 4% (n=9/238) preferred not to answer. For gender, 66% (n=158/238) identified as male, 25% (n=59/238) as female, and 6% (n=14/238) as non-binary, gender non-conforming, or 2-Spirited. (Table 1)s

Of the total number of unique persons who made co-orders, 84% (n=180/215) reported their HIV self-test result back to GetaKit.ca and 80% (n=173/215) reported one or more of their COVID self-test results. Two persons were diagnosed with HIV, both of whom had initially presented to GetaKit.ca seeking HIV testing and who reported having negative COVID self-test results. Another six persons reported a positive COVID self-test result, of whom 83% (n=5/6) had registered via the HIV website and accepted a COVID self-test when offered; all six of these persons reported a negative HIV self-test result. These diagnoses thus represent total positivity rates of 0.8% for HIV orders, 2.6% for COVID orders, and 3.7% for all co-orders. Everyone who reported a positive HIV or COVID self-test result received follow-up, as described above.

Acceptance among ACB Persons

A total of 405 persons who identified as ACB accessed the GetaKit.ca and GetaKit.ca/COVID websites during the study period and were eligible for HIV and COVID self-tests. Overall, 77 unique ACB persons made 80 orders, thus yielding an acceptance rate of 19% (n=77/405) for co-offers. Of those who accepted a co-offer, 92% (n=71/77) of unique ACB persons had initially presented to GetaKit.ca seeking HIV testing. This means that 8% (n=6/77) of ACB persons who accessed GetaKit.ca only received an HIV self-test because the online platform had automatically co-offered it to them when they were seeking COVID testing. The mean age of ACB persons who made co-orders was 32 years old (range:17-63 years old). As well, 56% (n=45/80) of ACB persons who accessed self-tests through this study were male, and all reported living in large population centres. The reporting rate was 80% for both HIV and COVID self-tests. Male ACB persons comprised 58% of those who reported results for HIV and COVID. (Table 2).

Acceptance among Indigenous Peoples

During the study period, a total of 119 unique persons who identified as Indigenous placed 169 orders for self-tests; 72% (n=121/169) identified as women and 22% (n=38/169) identified as male. The mean age for the persons who placed these orders was 31 years old (range: 20-49). For geographical distribution, over three-quarters of persons who identified as Indigenous reported residing in large population centres and, for living arrangements, 13% (n=22/169) reported living alone, 15% (n=26/169) reported living with one other person, and 69% (n=117/169) reported living with two or more other people. For presentation at the time of testing, 12% (n=22/169) of persons who identified as Indigenous reported having symptoms suggestive of COVID and/or HIV. Lastly, as noted above, 76% (n=128/169) of these orders were placed through the GetaKit.ca/COVID website, and, among Indigenous Persons who sought COVID self-tests (n=128), 91% (n=117/128) reported being fully vaccinated against COVID. (Table 3).

From these 169 co-offers to persons who identified as Indigenous, 10% (n=17/169) accepted both HIV and COVID self-tests, and, among those who accepted a co-order, 71% (n=12/17) had initially presented to GetaKit.ca/COVID. Stated differently, 10% (n=12/119) of Indigenous Persons who obtained self-tests through this study only received an HIV self-test because the GetaKit.ca algorithms automatically co-offered it to them when they were seeking COVID self-testing. Among Indigenous persons who made these co-orders, 53% (n=9/17) identified as female. We found that more HIV and COVID self-tests were ordered by female compared to male Indigenous Persons. For Indigenous Persons who co-ordered self-tests from GetaKit, 63% (n=10/17) reported their HIV self-test result and 81% (n=13/17) reported their COVID self-test result. (Table 3).

Discussion

During the COVID pandemic, access to HIV testing was restricted, although HIV transmission continued (OHESI, 2022). As well, despite instructions for everyone to engage in physical distancing, this was not always the case and many persons continued to engage in sexual contact with new partners (Gilbert et al., 2021; Gleason et al., 2021). As a result, new HIV diagnoses continued to occur in Ontario throughout the COVID pandemic, albeit at a lower rate than was seen pre-COVID (OHESI, 2022a). To address this situation, we, in collaboration with AIDS service organizations, developed GetaKit.ca and GetaKit.ca/COVID to test a novel method of providing access to HIV and COVID self-tests. Subsequently, in discussion with our partners, we modified the GetaKit platform such that it would co-offer HIV and COVID self-tests to ACB and Indigenous Peoples. Our findings raise some interesting points of discussion related to the use of web-based platforms to co-offer tests to persons or groups with elevated burdens of infection.

For one, this study is one of the first to generate real-world data about the test uptake and diagnostic outcomes associated with co-offering HIV and COVID self-tests to members of ACB and Indigenous communities – both of whom have ongoing disparities for HIV and COVID. From this, we found that our co-offer approach led to 238 orders of both self-tests, of which 41% (n=97) were from ACB or Indigenous Peoples: n=80 were from persons who identified as ACB and n=17 were from persons who identified as Indigenous. Notably, 2.5% of all HIV self-test orders among ACB persons during the study period were from persons who had initially sought a COVID self-test and agreed to receive an HIV self-test, whereas 10% of HIV self-test orders among Indigenous Persons during the study period were from persons who had initially presented for COVID testing and then agreed to receive an HIV self-test as well. Although the overall uptake of both self-tests was low among persons who obtained self-tests from GetaKit (n=97), this group did account for 17% of the 574 ACB and Indigenous persons who ordered tests from GetaKit.ca during the study period – signalling that, for at least some persons, co-offers is acceptable.

For diagnostic outcomes, our web-based co-offers for testing also led to new diagnoses; six individuals tested positive for COVID and two for HIV. Both HIV diagnoses were in persons who had initially sought HIV testing, and nearly all (n=5/6) positive COVID diagnoses were in persons who had not sought such testing initially. In these cases, while persons who accessed GetaKit.ca had intended to order only one type of self-test, they opted to receive another that was recommended, resulting in new diagnoses. The study therefore yielded positivity rates of 0.8% for

HIV, which is comparable to the Ontario 2019 HIV positivity rate of 0.1% (OHESI, 2022a) and HIV self-testing positivity rates in international studies of 0.3-6.14% (Carballo-Diéguez et al., 2020; Huang et al., 2016; Johnson et al., 2022; Marlin et al., 2014). We also obtained a positivity rate of 1.8-2.6% for COVID self-tests, which aligned with COVID positivity rates from local testing centres at the time of this study (Public Health Ontario [PHO], 2022).

Our study results thus suggest that offering multiple types of at-home tests, as we did through GetaKit.ca, could be one strategy to improve access for equity deserving communities (Sharma et al., 2022a, 2022b; Tobin et al., 2018). Although the literature about the effects of combining multiple health screening interventions is limited, one study found that Indigenous women preferred this approach because it minimized the number of exposures to structural racism that they might encounter, while it also reduced their reliance on healthcare systems based in western medicine and ideals (Heidebrecht et al., 2022). Similar sentiments regarding actual or anticipated racism in healthcare have been well-documented among other gender and sexual minority ACB and Indigenous Peoples, which is noted to be a barrier to accessing HIV prevention, testing, and treatment services (Etowa et al., 2022; Negin et al., 2015). As an outcome, ACB and Indigenous Peoples are less likely to know their HIV status or to engage in HIV care, which can lead to sequelae, such as chronic or opportunistic HIV infections and onward transmission (Etowa et al., 2022; Orser et al., 2022; Jongbloed et al., 2019; Spatz Friedman et al., 2017).

GetaKit.ca thus offers some nascent empirical data on engagement with ACB and Indigenous communities, which highlight some benefits of having an online platform through which persons can opt-in to testing without having to disclose risk practices in-person to healthcare providers who may have little to no understanding of their lived experiences. In other words, this approach may be one strategy to create opportunities for testing and care, while minimizing exposures to structural and individual racism. This point is supported by research on web-based healthcare assessments, which identified higher engagement in HIV/STI care among ethnic, racial, and sexual minority groups when services were administered online compared to in person (Markham et al., 2022; Patel et al., 2016; Spence et al., 2020). Moreover, the use of self-testing can increase persons' control over when, where, and with whom they complete HIV (or other health) screening. Because individuals perform self-testing on themselves, thereby retaining their own bodily samples, self-testing may also diminish concerns about what western healthcare systems and providers may do with their biologic samples (remember the Tuskegee experiments) (Rusert, 2009). While such a proof-of-concept for co-offering testing has arisen from GetaKit.ca, more research is now required about how to engage community members and about how to improve the provision of culturally competent care in self-testing initiatives.

It is important to acknowledge, however, that self-testing is not a cure-all to healthcare access for members of equity deserving groups. Imposing testing still constitutes a potential imposition of hegemonic views about western health imperatives (i.e., that testing is *essential* and *appropriate* and something someone *ought to do*) (O'Byrne, 2022). As part of this, the small successes we observed regarding co-offers should also not distract us from the larger and much needed efforts to broadly dismantle racism, classism, homophobia, transphobia, and anti-Black and anti-Indigenous bigotry; but on the other hand, we must still provide short-term solutions to ongoing HIV transmission – and to the harms this infection can cause individuals and communities. While recognizing that the beneficial outcomes of GetaKit.ca that we reported in this paper may be a

symptom of broader social and structural issues, we must still work to provide immediate access to care and services – and online access to self-tests may be one such short-range strategy that we can consider adopting and expanding.

Our recommendation for this approach is to proceed as we did and engage with organizations that serve these communities to refine services. In our case, through these engagements, a perceived need for this service by these communities was clearly identified, and then through meaningful dialogue and feedback, members of these community agencies guided the development, implementation, and evaluation of our online algorithms and assessed possible interest in co-offering multiple self-tests. It is likely that this approach had a profoundly positive effect on uptake among ACB and Indigenous Peoples. Given the significance of our findings from this approach, it would be meaningful to conduct further research on this implementation topic to fully understand its impact and potential for broader application.

Limitations

Our results must be interpreted considering many limitations, the most evident of which was the approach to implementation. The inception of GetaKit and the idea to co-offer HIV and COVID self-tests were not mutually created. Instead, the idea to co-offer these self-tests was developed by the GetaKit team and then was proposed to community members. Indeed, governmental health agencies had obtained these self-tests and had sought to make them available to persons who needed them during the COVID pandemic. To mitigate the effects of this top-down approach, we engaged in open and ongoing dialogue with community members and agencies (e.g., with BlackCAP and 2-Spirits). Through these conversations, we tailored the GetaKit algorithm and website to maximize its cultural sensitivity and useability. We also engaged with community members regarding the idea of co-offers before adding this as a potential functionality within the website. While the uncertain and pressing nature of the COVID pandemic, including its effects on access to healthcare, meant that this approach may have been necessary, moving forward, co-creations of ideas and implementation strategies should be adopted.

Another issue was that GetaKit.ca required Internet access and multi-factor authentication, which may have restricted uptake among persons of lower socioeconomic status, including those who reside in more rural areas or on reserves. GetaKit.ca also required that people completed an online risk self-assessment, which may have deterred some persons from proceeding through the website. While there are advantages of an online platform to reduce health inequities, further conversations are required to balance the collection of information for research and surveillance purposes against mobilizing health equity (Black Health Equity Working Group, 2021; First Nations Information Governance Centre, n.d.). This is particularly important for members of groups who have experienced social and cultural genocide and discrimination by governments (Government of Canada, 2022). Reducing data collection (and self-assessments in this case) to the bare minimum may be one way to maximize uptake, but further direction is needed from the groups who would benefit from these services.

Conclusion

Through the GetaKit.ca study, members of ACB and Indigenous communities were able to complete an online risk self-assessment for HIV or COVID and then, when agreed to, could receive at-home self-tests for both infections. Through GetaKit.ca, we also ensured that, irrespective of test results, persons received evidence-based public health information from the website, by email, or by being linked to care by a GetaKit team member or a member of a community-based agencies with which we worked (e,g., BlackCAP and 2-Spirits). As a key outcome of this study, we were able to offer ACB and Indigenous Peoples in Ontario mailout and curbside self-tests to screen for HIV and COVID during the COVID pandemic. This led to the identification of eight previously undiagnosed infections in these equity deserving groups (six new COVID diagnoses and two new HIV diagnoses). Despite the limitations of our research, the real-world findings from this study contribute to research and clinical practice for ACB and Indigenous Peoples and suggest that co-offering multiple types of self-tests to members of these communities may help provide access to a myriad of services in one visit. This study adds to the field of self-testing and is a timely topic particularly to support ACB and Indigenous communities. The fact that we developed GetaKit.ca in partnership with members of these communities likely contributed to the outcomes we observed – but next steps now include determining how to expand service delivery to maximize uptake. The work has started but is far from being done.

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