

Community-based interventions to increase HIV testing among Black women

Questions

What types of community-based interventions increase HIV testing among Black women?

Key take-home messages

- There are few studies that examine the effectiveness of community-based interventions on HIV testing among Black women.
- HIV testing interventions in high-income settings are usually conducted in combination with risk reduction counselling (1-5).
- Home-based voluntary counselling and testing may substantially increase awareness of HIV status (up to 70%) in previously undiagnosed women in sub-Saharan Africa (6), making this approach both feasible and effective (7).
- Adding mobile HIV counselling and testing to existing stand-alone services in sub-Saharan Africa appears to be cost-effective and a great way to expand testing coverage (8, 9).

The issue and why it's important

According to 2014 Canadian national estimates, one quarter of all people living with HIV are female (10) with 79% of new infections among attributed to heterosexual sex. Among women, the largest group of new HIV diagnoses (39%) were among those identified as Black (10). Many new HIV infections are caused by people that are unaware of their status. As a result, testing is extremely important to identify HIV infections early. Efforts to diagnose HIV infections among Black women and link them to HIV medical care are critical to reduce new HIV infections.

References

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What we found

To reduce HIV-related health disparities for Black women, increasing HIV testing efforts among this group is needed. Community-based interventions may vary in terms of their content, implementation settings and intensity, but overall seem to be effective in increasing testing rates among Black women. In some cases, these interventions were not designed solely for women but they comprised at least half of the study participants.

High-income country settings

The Girlfriends Project

This HIV risk-reduction and testing intervention was developed by African American women for African American women, and was implemented by a large AIDS service organization in Pennsylvania (4). In addition to being the program founders, African American women served as paid facilitators and played important roles in study design and data collection processes. In the intervention, 149 women received incentives to host parties for members of their social networks. Facilitators recruited women to host parties through community settings including outreach on the street, in social environments, to civic or provider groups, and to leaders of subsidized housing communities. Group- versus individual-level randomization was used to ensure social networks stayed intact during parties. Women were incentivized to participate in parties - hosts received \$50 gift cards to a local grocery store. Women who participated in the parties received \$10 gift cards, regardless of whether or not they participated in the study. Women in the study also received \$10 gift cards upon completion of a three-month follow up survey.

During the single session intervention parties, which lasted approximately two hours, trained facilitators provided HIV risk-reduction information, informal assessments and referrals related to addiction and domestic violence, empowerment around sexual decision making, and on-site HIV oral swab testing. HIV test results were given approximately two weeks after the party in the homes of women who had been tested. Women who tested positive were actively linked to care via the facilitator who accompanied all women to their initial clinical appointments.

All women who were tested returned for their results, and none were found to be HIV-positive. The study also demonstrated the feasibility of providing HIV testing and counselling services through house parties. Recruiting women to host house parties for members of their social networks appears to be an effective method of engaging African American women in HIV testing given that 87% of project participants accessed HIV testing and counselling during the parties, with a 100% return rate for results (4).

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Healthy Love Workshop

The Healthy Love Workshop was a community-based intervention among Black women (3). The intervention was delivered to pre-existing groups of women (e.g., friends, sororities) in settings of their choosing (in Atlanta only). The Healthy Love Workshop used a single-session intervention design which lasted three to four hours and was usually delivered to groups of four to 15 women. The intervention was designed to reduce unprotected sex and the number of sex partners. It also promoted HIV testing, and receipt of test results. The Healthy Love Workshop reflected the belief that Black women's collective wisdom and lived experiences provided important learning opportunities and encouraged women to demand safer sexual behaviours for themselves and their partners. It was also designed to change participants' attitudes about HIV testing. The Healthy Love Workshop consisted of three modules (Setting the Tone, The Facts, and Safer Sex). Together, these modules contained 11 content focused components. Only one module was on HIV testing – "The look of HIV." This module dispelled the myth that one can visually tell if someone is living with HIV, described HIV testing options, encouraged testing for HIV and knowledge of serostatus, and provided information about HIV prevalence of among Black women.

The three and six-month follow-up assessments asked whether women had been tested for HIV during the past three months, whether they received the test result, and their HIV serostatus. At the six-month follow-up, intervention participants reported significantly higher rates of HIV testing and receipt of test results (AOR = 2.30; 95% CI = 1.10, 4.81).

Although Healthy Love Workshop participants were more than twice as likely to report testing for HIV at six-month follow-up, most women in the study did not have an HIV test during this period. The study authors concluded that future research is needed to determine and evaluate effective approaches to enhance the promising effects of the Healthy Love Workshop on HIV testing (3).

The Teenage Access Project

The Teenage Access Project was conducted in Alabama among primarily Black (75%) disadvantaged, HIV-positive, and at-risk adolescent and young adult women (83%) aged 10–21 years (5). This intervention aimed at preventing further HIV transmission through empowerment and reduction of risk behaviour, providing HIV counselling and testing to increase screening of young women, and facilitating referrals to medical and psychosocial services. One part of the Teenage Access Project included "My Individual Responsibility Reduces Our Risk (MIRROR)" – a six-module risk-reduction and empowerment activity specifically designed for young women, using a small group format. In addition to risk-reduction and empowerment activities, it offered an opportunity

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for confidential HIV counselling and testing.

Poor attendance and lack of use of the clinic testing center by targeted agencies forced the Teenage Access Project team to re-evaluate its original model and reinvent the Project using a community-based model. Project staff moved services and testing out of the clinical setting and into community settings serving at-risk young women (5). HIV testing and pre- and post-test counselling were provided confidentially in the community setting by the testing coordinator. All staff members were trained to provide HIV pre- and post-test counselling, using a protocol developed by the project which included a review with the client of her reasons for testing, her understanding of the nature of the test, and her personal resources for support. Generally, pretest counselling required 45 minutes. The nurse facilitator performed specimen collection at agency and detention center sites. Test results were given during a post-test counselling session one to two weeks after the test. Post-test counselling sessions generally required 45 minutes and included a review of the meaning of the results and an assessment of risk knowledge and behaviour of the client.

Two church-based interventions

Black churches have also been studied as possible venues for HIV testing interventions.

The first Los Angeles County-based intervention included two African American churches and involved HIV education and peer leader workshops, pastor-delivered sermons on HIV with imagined contact scenarios, and HIV testing events (2, 11). The workshop lasted about 90 minutes and was co-facilitated by a research team member and a health educator from the health department. Peer Leader Workshops gave participants the opportunity to role play and develop skills for discussing HIV stigma and HIV testing with community members. They also lasted 90 minutes and were co-facilitated by members of the project team. Health department counsellors conducted rapid oral fluid testing and counselling through a mobile clinic stationed at the church during regularly scheduled services and activities. The congregations helped promote the event. The

African American Baptist intervention church had higher rates of HIV testing during the follow-up than its paired control church (32 vs. 13 %) (2).

The differences between the intervention and control churches were highly significant in the multivariate logistic model ($p < 0.001$ for both) providing strong evidence that the intervention had a positive impact on HIV testing rates (2).

Another church-based intervention from Kansas City involved a church-based HIV awareness and screening intervention (Taking It to the Pews) that fully involved African American church leaders in all phases of the research project (1). A toolkit designed and distributed by the project consisted of religiously tailored materials for church-wide delivery during Sunday morning and Wednesday services with the entire congregation and included sermon guides, pastoral observations, responsive/liturgical readings, bulletin inserts to address stigma and fact sheets that included specific information on HIV transmission, prevention, and high-risk groups. The toolkit also included a large poster containing HIV transmission and screening information and smaller posters for church restrooms. Information on local HIV screening sites was provided on the back of all bulletin inserts. The project had a nine-month implementation phase with focus group discussions, two booster meetings, and a wrap-up meeting. Participants with high intervention exposure were significantly more likely to report being ready to get tested for HIV ($p = 0.014$).

Low-income country settings

In addition to the US-based interventions described above, we also identified several studies conducted in sub-Saharan Africa (7-9, 12). Most of these had varying definitions of what a “community-based” intervention is and many of them considered home-based testing as an approach to deliver wide-scale HIV testing.

One systematic review and meta-analysis involving 21 studies ($n = 524,867$ individuals) offered home-based testing in five countries (Uganda, Malawi, Kenya, South Africa, and Zambia) and

examined its effectiveness (6). Using the home-based voluntary counselling and testing approach, people were visited in their home by health workers regardless of their perceived risk of HIV. The advantage of this approach was that it upheld the “3 Cs” of HIV testing: testing is confidential, accompanied by counselling, and conducted only with informed consent (6). The authors of this meta-analysis concluded that home-based testing could substantially increase awareness of HIV status in previously undiagnosed individuals in sub-Saharan Africa, with over three-quarters of the studies in the review reporting higher than 70% uptake (6).

This systematic review also included a three-year study from Uganda entitled “Everyone Know Your Status” (7). The sample size of this study was very large with 282,857 people, about half of them female. Twenty-nine teams comprising a counselor and a laboratory assistant systematically visited homes offering home-based voluntary counselling and testing for all people older than 14 years of age and at-risk children using a rapid HIV testing three-test algorithm (7). Ninety-four percent of women in the study accepted testing and received their results. Of those who tested, 90% were being tested for the first time.

According to a study from ten rural communities in Tanzania and eight rural communities in Zimbabwe, combining community mobilization, mobile community-based HIV testing and counselling, and post-test support may increase HIV testing rates (12). Project Accept compared multiple component community-based voluntary counselling and testing interventions together with access to standard clinic-based voluntary counselling and testing (12). This intervention was provided for approximately three years to 16–32 year-olds, with about half of participants being female. The Project Accept intervention included:

1. community mobilization activities
2. easily accessible mobile HIV voluntary counselling and testing; and
3. community-based post-test support services (13).

The percentage of clients receiving an HIV test at Project Accept service venues was 4–10-fold higher compared to control communities. In Tanzania, during first year of intervention delivery, the project experienced a high frequency of repeat testing among those residing in community-based voluntary counselling and testing communities, approaching 35% of all HIV tests provided by Project Accept. Over time this rate dropped, and fluctuated between 15% and 20%. In Zimbabwe there was a consistent increase in repeat HIV testing over time, reaching 28% of all HIV testing in community-based voluntary counselling and testing venues by the end of the intervention period for residents of those communities (12).

Other variations of voluntary counselling and testing, such as mobile services, have been studied in sub-Saharan African countries as well. A study from Kenya compared three ‘mobile’ HIV counselling and testing approaches with existing ‘stand-alone’ counselling and testing approach (8). A retrospective cohort of 62,173 individuals (about half female) assessed various mobile counselling and testing approaches: community-site mobile counselling and testing (utilizing existing community sites such as churches, empty school rooms, clinics), semi-mobile container counselling and testing (a converted shipping container placed at each location for 7–10 days), and fully mobile truck counselling and testing (a large truck with two fully-equipped counselling rooms moving from site to site to provide mobile services in communities) (8). Data showed comparatively higher utilization of women at the community-site and semi-mobile container than at the stand-alone site. This may be related to the barriers women face in getting time away from domestic responsibilities and the cost of transportation to attend more remote stand-alone counselling and testing sites.

A study from Zimbabwe also examined the effectiveness of free, anonymous mobile voluntary counselling and testing using rapid HIV tests in 12 marketplaces (9). A driver/outreach worker, four HIV nurse-counsellors, and a study interviewer in a mobile van provided free, anonymous voluntary counselling and testing to women. Almost all participants elected to receive HIV test results the same day. Same-day HIV testing in community

settings seems to be acceptable in sub-Saharan Africa. Barriers to HIV testing are often logistic and can be overcome with community-based strategies (9). Further, adding mobile HIV counselling and testing to existing stand-alone services appears to be a cost-effective approach for expanding testing coverage and for reaching different target populations including women (8).

What we did

We searched Medline using a combination of text terms HIV and test* and women and (community-based or community based or non-clinical or nonclinical or CBO* or AIDS Service Organi* or community setting*). Google searches with different combinations of these terms were also conducted. Reference lists of identified articles were searched. All searches were conducted on August 15, 2016 without date or language restrictions. We excluded studies that discussed HIV testing interventions among pregnant women. The search yielded 242 references from which 13 were included. Sample sizes of primary studies ranged from 149 to 282,857.

Factors that may impact local applicability

The literature discussed HIV testing interventions among Black women in the US and throughout sub-Saharan Africa. Even within the same country, community-based interventions varied significantly in terms of intervention type, location, duration, required resources and other characteristics and may not always be relevant to the Canadian setting.

Rapid Response: Evidence into Action

The OHTN Rapid Response Service offers quick access to research evidence to help inform decision making, service delivery and advocacy. In response to a question from the field, the Rapid Response Team reviews the scientific and grey literature, consults with experts, and prepares a brief fact sheet summarizing the current evidence and its implications for policy and practice.

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