Feasibility and acceptability of HIV self-testing among men who have sex with men in Nigeria

Population Council
INTRODUCTION

Innovative HIV testing approaches are needed to meet the UNAIDS HIV care and treatment cascade 90–90–90 goal. HIV self-testing (HIVST) provides an alternative to facility-based HIV testing services, particularly for key populations such as men who have sex with men (MSM), who face barriers to testing due to stigma, discrimination, and criminalization.

MSM are disproportionately affected by HIV in Nigeria; findings from the Integrated Biological and Behavioural Sentinel Survey show that the HIV prevalence among MSM increased from 17.2 percent in 2010\(^1\) to 22.9 percent in 2014\(^2\), while the prevalence among other key populations decreased.

HIVST as a screening test allows the user to perform the test on himself in a private place of his choice and read the test result himself. In addition to facilitating privacy, HIVST is convenient, easy to use, and can achieve acceptable sensitivity and specificity. If tested positive on this screening test, the user must seek confirmatory testing and treatment (if confirmed positive).

METHODOLOGY

A mixed-methods study was conducted between May and October 2017. We implemented a pilot intervention which entailed twelve KOLs recruiting MSM aged 17–59 years (N=319) who were HIV-negative or of unknown status from their own social network. KOLs were selected because they were highly respected by the MSM community and influential, showed great motivation to serve as KOLs, and had real-time information about their MSM community, events, and hotspots (physical and virtual). KOLs mobilized potential participants at hotspots considered to be safe, such as football fields, gyms and cafes. Virtual mobilization was done via mobile applications (primarily WhatsApp). KOLs informed potential participants about the study and provided them with information or referral cards to either meet at the Population Council’s MSM-friendly community health center (which offers HIV prevention and treatment services) or another convenient and safe space for the interview and distribution.

PROJECT GOAL

Population Council conducted an implementation science research study to provide evidence on the feasibility and acceptability of an oral fluid-based HIVST strategy (using OraQuick™) to improve uptake of HIV testing, treatment, and linkage to care using key opinion leaders (KOLs) to distribute self-test kits to MSM in Lagos, Nigeria. This study is the first of its kind in Nigeria and one of the first studies to report actual usage, positivity rate, and linkage to care among MSM in sub-Saharan Africa.

For more information about this study, contact: Dirisu Osasuyi at odirisu@popcouncil.org or Waimar Tun at wtun@popcouncil.org.
Participants completed a baseline survey and received two HIVST kits. Additionally, a helpline counsellor followed-up with participants to provide support as required. The study team conducted a post-intervention survey (N=257) after three months to inquire about participants’ experiences with the use of the kit and linkage to care if positive. Researchers conducted IDIs with 20 MSM from the cohort and FGDs with 12 KOLs to explore MSM’s self-testing experiences, operational aspects of HIVST kit distribution, and linkage to HIV care.

**RECRUITMENT AND PARTICIPANT CHARACTERISTICS**

- Distribution of kits by KOLs was efficient reaching the majority of eligible participants within one month.
- Baseline characteristics: The median age was 25 years; 18 percent had never tested for HIV, and 26 percent did not use condoms during sex with their last male partner.

**KEY FINDINGS**

- At endline, self-reported use of the HIVST kit was 97 percent.
- The majority of HIVST kit users found it easy to understand the instructions and perform the test. The pictorial illustrations and instructions were considered self-explanatory and easy to follow.
- The majority of the participants were very satisfied with the HIVST process because it was easy, confidential, and painless.

*“Overall, I think is very good, very convenient; the privacy part of it is good.*

- Although a few participants called the helpline, those who called reported that the helpline was a useful anonymous non-judgmental resource to get guidance on linkage to care.

  “There’s enough information on the [informational] card in case your result comes out negative or positive... People you can reach for counselling and you know the next step you need to do, so I think it’s a win-win.”

- Some participants recommended the inclusion of pre-counselling information on the HIVST kit to reassure MSM prone to self-harm prior to taking the test.

**CONCLUSION**

This study demonstrates high acceptability for HIVST among MSM. Lessons learned from this study indicate that the scale-up of HIVST in Nigeria must include provision of adequate pre- and post-test counselling information, as well as the availability of helpline support to improve linkage to care for those who test positive. Future research should explore how HIV retesting can be operationalized through HIVST, cost effectiveness of different HIVST distribution models, and strategies for linkage to care.

**WHAT PARTICIPANTS LIKED ABOUT HIVST KITS (N=264)**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Easy to use</td>
<td>88%</td>
</tr>
<tr>
<td>Guarantees confidentiality</td>
<td>83%</td>
</tr>
<tr>
<td>Convenient to use</td>
<td>74%</td>
</tr>
<tr>
<td>No need for needle prick</td>
<td>65%</td>
</tr>
<tr>
<td>Learn test result quickly</td>
<td>57%</td>
</tr>
<tr>
<td>Easy to understand instructions</td>
<td>55%</td>
</tr>
<tr>
<td>Easy to interpret results</td>
<td>56%</td>
</tr>
<tr>
<td>Do not have to go to a facility</td>
<td>54%</td>
</tr>
<tr>
<td>Saves time</td>
<td>50%</td>
</tr>
<tr>
<td>Can test with friend/partner</td>
<td>43%</td>
</tr>
<tr>
<td>Don’t have to talk to health provider</td>
<td>38%</td>
</tr>
</tbody>
</table>

**Reference**


The research reported in this publication was supported by the U.S. National Institutes of Health under award number 1R21AI124409-01. The content is solely the responsibility of the authors and does not necessarily represent the official views of the U.S. National Institutes of Health.