

# Acceptability and Uptake of Home-Based HIV Self-Testing in Lesotho

Allison Zerbe<sup>1</sup>, Abby L DiCarlo<sup>1</sup>, Joanne E Mantell<sup>2</sup>, Robert H Remien<sup>2</sup>, Danielle D Morris<sup>1</sup>, Koen Frederix<sup>1</sup>, Blanche Pitt<sup>1</sup>, Zachary J Peters<sup>1</sup>, Wafaa M El-Sadr<sup>1</sup>

<sup>1</sup>ICAP at Columbia University, Mailman School of Public Health, New York, NY, USA, <sup>2</sup>HIV Center for Clinical and Behavioral Studies, NY State Psychiatric Institute & Columbia University, New York, NY, USA

## Background

With 61% of men and 31% of women aged 15-49 never tested as of 2009, HIV testing is a priority in Lesotho.

HIV self-testing is one potential strategy to address low testing rates and achieve universal testing coverage; however, little is known about the acceptability of self-testing in Lesotho.

This feasibility study explored the acceptability and uptake of home-based self-testing (HBST) in a sample of Basotho women and men.

## Methods

- 45 HIV-positive index participants were recruited from 4 health centers in Mafeteng and Mofale's Hoek in Lesotho.
- Home visits were scheduled to offer HIV testing to their household (HH) members.
- Eligible (HIV-negative or unknown status) HH members were offered two options for testing:
  - Standard HIV counseling and testing (SCT) or
  - HBST with OraQuick ADVANCE HIV-1/2, followed by confirmatory standard HIV testing.
- Demographic and acceptability measures were collected through in-person surveys.

## Index Participants

Of the 45 enrolled index participants (Table 1):

- 84% were women.
- 69% were recruited from antenatal clinics, 29% from TB clinics, and 2% from an outpatient department.

**TABLE 1: Index participant baseline and recruitment information**

	Index Participants		
	Total (n=45)	Female (n=38)	Male (n=7)
Age: Median (range)	28 (18-46)	27.5 (18-42)	36 (24-46)
Enrollment location			
• ANC	31 (69%)	31 (82%)	0
• TB Clinic	13 (29%)	6 (16%)	7 (100%)
• Outpatient Department	1 (2%)	1 (3%)	0
HIV+	45 (100%)	38 (100%)	7 (100%)
In HIV care (self-report)	43 (98%)	37 (97%)	6 (86%)

## Results

- 77 eligible HH members were offered HBST or SCT.
  - 59 (77%) HH members agreed to test.
- 58 (98%) of testing HH members chose the HBST option (Table 2).
- 14% of HBST participants were newly diagnosed as HIV-positive.
- Nearly all HBST participants (98%) described the self-testing process as "easy" or "very easy".
- 16% required extra instruction.
- 93% of HBST participants stated that they trusted the results of the self-test kit.
- Nearly all HBST participants (98%) reported that they would recommend HBST to friends and family.

**TABLE 2: HBST participant baseline, testing, and acceptability findings**

	HBST Participants		
	Total (n=58)	Female (n=34)	Male (n=24)
Age: Median (range)	37.5 (18-86)	43.5 (18-86)	35 (18-75)
Ever tested for HIV	55 (95%)	34 (100%)	21 (88%)
Self-reported risk of HIV			
• No risk	14 (24%)	7 (21%)	7 (29%)
• Small risk	11 (19%)	6 (18%)	5 (21%)
• Moderate risk	4 (7%)	2 (6%)	2 (8%)
• Great risk	22 (38%)	16 (47%)	6 (25%)
• Don't Know	7 (12%)	3 (9%)	4 (17%)
Will disclose if HBST is HIV+	47 (77%)	26 (76%)	21 (88%)
• With primary partner	32 (68%)	17 (65%)	15 (71%)
Tested HIV+	8 (14%)	6 (18%)	2 (8%)
Will seek HIV care & treatment	8 (100%)	6 (100%)	2 (100%)
Rating of HBST process			
• Very easy	43 (74%)	22 (65%)	21 (88%)
• Easy	14 (24%)	12 (35%)	2 (8%)
• Difficult/very difficult	0	0	0
Asked for extra instruction	9 (16%)	7 (21%)	2 (9%)
Trusted the result of HBST	54 (93%)	32 (94%)	22 (92%)
Recommend HBST to others	57 (98%)	34 (100%)	23 (96%)
Very satisfied with HBST	57 (98%)	34 (100%)	23 (96%)

## Results (continued)

When asked to describe positive or negative qualities of HBST nearly all (98%) HBST participants reported only positive qualities, including:

- Being visited in their home by health workers (32%)
- The openness and respectfulness of the study team (25%)
- The pain-free testing method without any need for a prick or blood-draw (25%)
- The ability to test oneself (19%)
- Being the first to know one's status (14%)
- The simplicity of the testing procedure (14%)
- The privacy and confidentiality of testing at home (7%)
- Having an option for testing (standard or self) (7%)
- The rapidity of the test (7%)

"I like the fact that they went out of their way to visit my home."

"Your approach made me feel free to take part."

"It is easy to test oneself, takes short time and is pain free."

"I became free because I was alone."

"I was given the chance to be the first person to see my results."

"It was a simple thing just to rub the swab around the gums."

"You ensured privacy and you are not from here so it is easy for us to talk to you."

"I like...choosing between two methods of testing."

"I like that I get quick results."

## Conclusions

- Home-based self-testing was feasible and highly acceptable to participants and something that they would recommend to others.
- There were high levels of uptake for home-based self-testing.
- Use of index patients to reach household members for home-based self-testing was feasible.
- Use of this home-based self-testing strategy resulted in the identification of newly diagnosed HIV-positive individuals.
- The use of HIV-positive individuals as index participants combined with home-based self-testing can be useful approach to increase rates of HIV testing and for programmatic interventions.

## Acknowledgments

The EPIC study team acknowledges the following groups for their support: Lesotho Ministry of Health, District Health Management Teams in Mofale's Hoek and Mafeteng districts, In-country ICAP staff, and the men and women who volunteered their time for this study.

ICAP is a global leader in HIV and health systems strengthening. Founded in 2003 at Columbia University's Mailman School of Public Health, ICAP supports work at more than 3,475 health facilities across 21 countries. Nearly 2.3 million people have received HIV care through ICAP-supported programs. [ICAP.columbia.edu](http://ICAP.columbia.edu)



Funding for this study was provided through MP3 award from the National Institutes of Allergy and Infectious Diseases (5R01A1083038). The contents are the responsibility of ICAP and do not necessarily reflect the views of the United States Government.