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## Background

- In Malawi the major gap for the achievement of the UNAIDS 90-90-90 targets is in diagnosis: 23% of adults infected with HIV are unaware of their status.
- In 2016 the WHO recommended that HIV self-testing (HIVST) be offered as an additional approach to increase the coverage of HIV testing services.
- **MPHIA provides the first nationally representative estimates of acceptability of HIVST for Malawi.**

## Methods

- MPHIA was a nationally representative survey with a stratified two-stage cluster sample design, in which 11,386 households were interviewed.
- HIV testing was performed using a home-based rapid-testing algorithm followed by laboratory confirmatory testing. A qualitative assay was used for the screening of four HIV antiretroviral drugs (ARVs) indicative of the first and second line regimens prescribed in the country.
- **This analysis excludes respondents who tested HIV positive and were aware of their status** (they reported to have been previously diagnosed with HIV infection, or had detectable ARVs).
- **This analysis is based on 17,799 respondents aged 15-64 who were HIV-negative, HIV-positive unaware of their status, or with HIV status unknown for the survey (i.e., did not consent to the testing).**
- The study presents weighted estimates of the percentage of the population that would use an HIV self-test kit if it were available in the country. Analysis weights account for sampling selection probabilities and adjust for nonresponse and noncoverage. Logistic regression was used to evaluate factors associated with the willingness to use self-testing.

## Results

- Overall, **72% of the population** (95%CI 71%,73%), **76% of males and 65% of those who have never tested for HIV would use HIVST if available** (Figure).
- The willingness to use self-testing was significantly lower among females aged 15-24 and 45-64 than among those aged 25-44 years, among males and females who had never tested for HIV in comparison with those who ever tested, and among those whose HIV status was unknown for the survey (Table).
- The willingness to use self-testing was significantly higher among females and males having secondary or more education than among those having primary or no education, and among females in the two highest wealth quintiles compared with those in the three lowest (Table).
- Among females, those HIV-positive unaware of their status were more frequently willing to use HIVST than those who were HIV-negative (Table).

Percentage of the population that would use an HIV self-test kit if available in the country

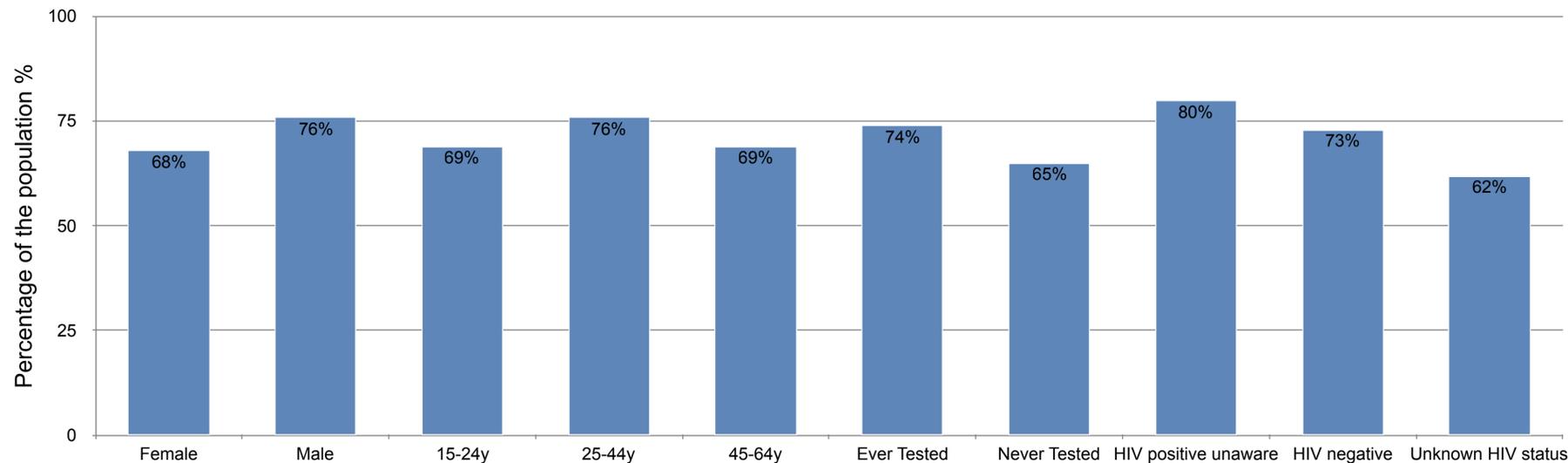


Table. Willingness to use HIVST among adults aged 15-64\*. Weighted percentages and adjusted odds ratios by selected demographic characteristics. MPHIA 2015-16.

Characteristic	Females		Males	
	Percentage who would use an HIV self-test kit if available in the country % (95% CI)	Adjusted Odds Ratio aOR (95% CI)	Percentage who would use an HIV self-test kit if available in the country % (95% CI)	Adjusted Odds Ratio aOR (95% CI)
Education	No education / Primary	Ref	72 (70,74)	Ref
	Secondary or more than secondary	<b>2.39 (2.07,2.76)</b>	83 (82,85)	<b>1.84 (1.59, 2.13)</b>
Wealth Quintile	Lowest / Second/ Middle	Ref	74 (72,75)	Ref
	Fourth / Highest	<b>1.53 (1.38,1.70)</b>	79 (77,80)	1.14 (0.98,1.33)
Age (years)	15-24	<b>0.76 (0.67,0.86)</b>	73 (71,75)	0.85 (0.68,1.06)
	25-44	Ref	79 (77,81)	Ref
	45-64	<b>0.73 (0.64,0.84)</b>	77 (74,79)	0.99 (0.83, 1.20)
HIV Testing History	Ever tested	Ref	80 (78,81)	Ref
	Never tested	<b>0.62 (0.54,0.72)</b>	70 (67,72)	<b>0.66 (0.57,0.76)</b>
HIV Status (as tested by the survey) and HIV+ awareness (based on self-report and ARV detection)	HIV-positive unaware of status	<b>1.69 (1.15,2.49)</b>	79 (71,86)	1.07 (0.66, 1.71)
	HIV-negative	Ref	77 (76,79)	Ref
	Unknown HIV status	<b>0.55 (0.47,0.65)</b>	68 (64,71)	<b>0.56 (0.47, 0.67)</b>

\* Adults who are HIV negative, HIV positive unaware of their status, and with HIV status unknown for the survey.

\*\* The logistic model also adjusts for rural/urban residence and for marital status. Neither for females nor for males were these characteristics associated with the willingness to use HIVST and the results are not presented in the table.

## Conclusion

- In Malawi, a large proportion of the population is willing to use HIVST. This is an opportunity to increase testing coverage, especially among difficult to reach priority groups such as males, young persons, and those who have never tested for HIV.

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