

UNITAID-PSI
HIV SELF-TESTING AFRICA

Prevalence of testing and preference for self-testing in Malawi and Zambia: Baseline data from the STAR (HIV self-testing in Africa) project

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BACKGROUND

Substantial barriers to accessing HIV testing services (HIVST) in Sub-Saharan Africa remain, but HIV self-testing (HIVST) is a promising new tool. The STAR (HIV Self-testing in Africa) study is assessing interventions to improve uptake of testing and linkage to care in Malawi, Zambia, and Zimbabwe, and baseline data have been collected in Malawi and Zambia.

METHODS

The impact of community distribution of HIV self-tests on testing and on ART initiation at local clinics is being evaluated in cluster-randomised trials. In 22 rural communities in Malawi and 12 rural and peri-urban communities in Zambia, a population-based household survey was conducted at baseline. We describe baseline prevalence of prior ever HIV testing and recent testing (past 12-months), and preference for self-testing among prior testers.

RESULTS

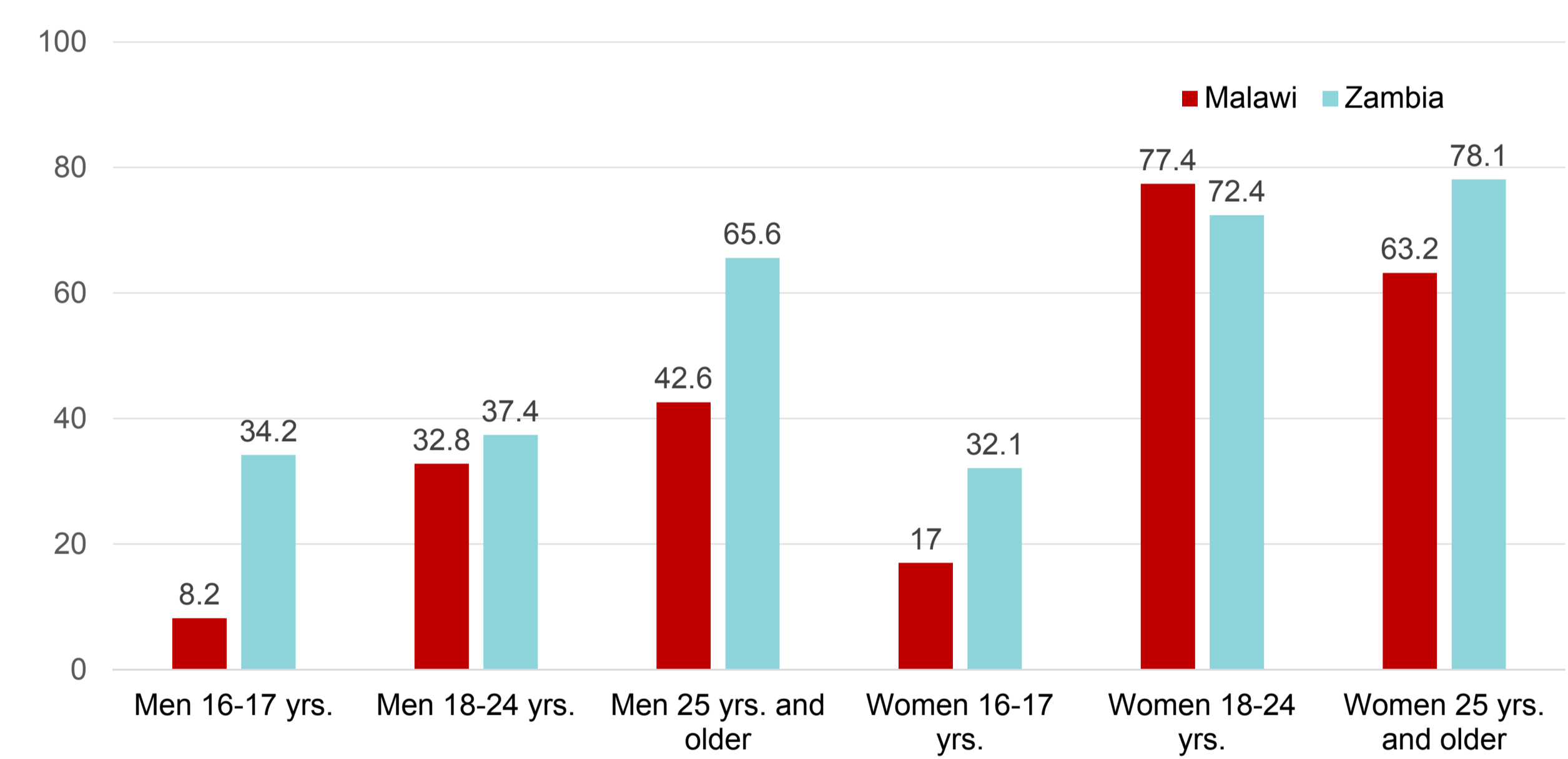
Baseline data were collected from 5,552 and 4,770 respondents in Malawi and Zambia, respectively. An extended baseline survey including additional questions on previous HIV testing experiences was collected from 1,387 in Malawi and 1,055 respondents in Zambia. The age and sex distribution in both baseline samples was similar (Malawi: median 31 years, IQR: 22-44, 58.6% female; Zambia: median 30.5 years, IQR: 22.0-43.1, 60.9% female). Overall, over 80% of women had ever tested for HIV (84.9% in Malawi; 87.2% in Zambia), and around three-quarters of men had ever tested (73.1% in Malawi; 75.8% in Zambia; **table 1**).

In both Malawi and Zambia, young women and men (ages 16-17 years) were less likely to have tested for HIV within the past 12 months than were their older counterparts. In Malawi, 8.2% of young men and 17.0% of young women have tested for HIV, compared with 36.3% of all men and

64.6% of all women; in Zambia, 34.2% of young men and 32.1% of young women compared with 53.8% of all men and 74.4% of all women ($p<0.001$; **figure 1**).

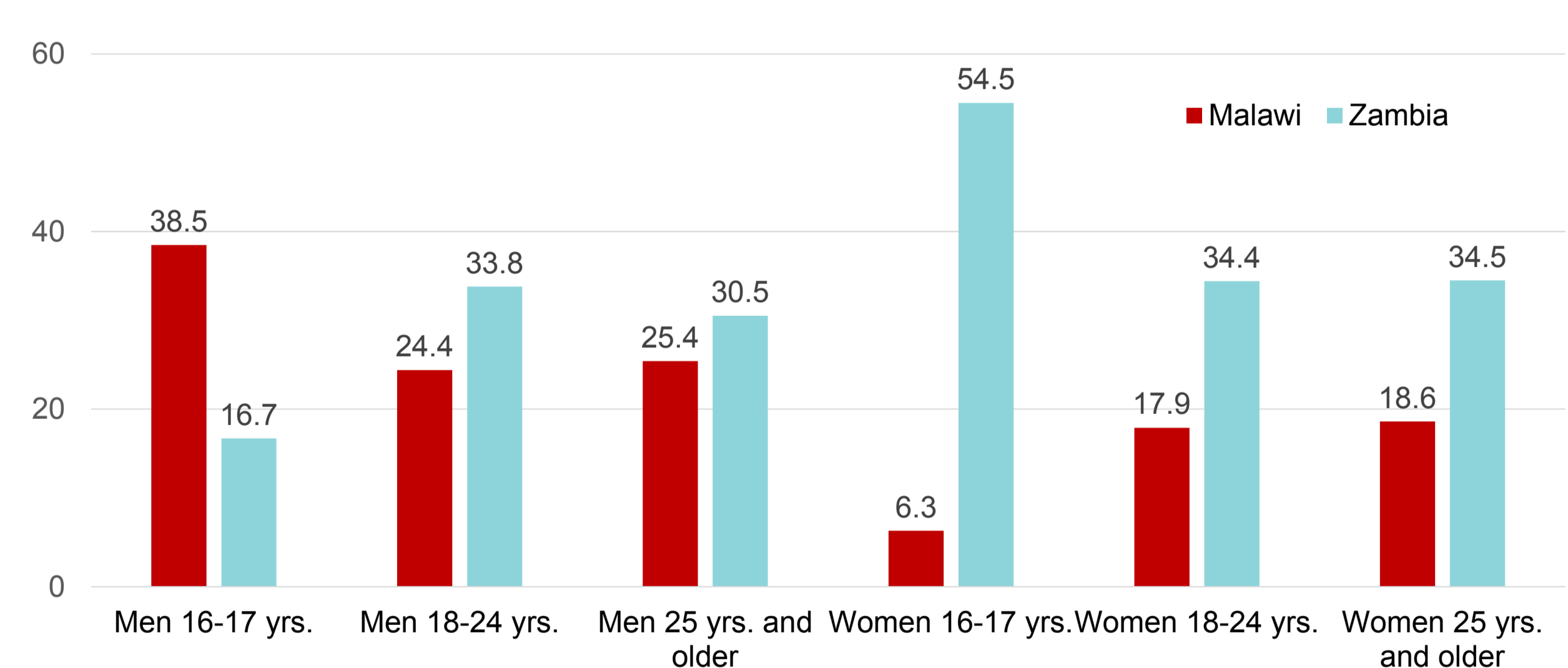
Young men in Zambia and young women in Malawi who had previously tested were particularly likely to prefer a self-test for their next test. (8.5% of young Malawian men preferred a self-test compared with 25.9% of all men, and 54.5% of young Zambian women preferred a self-test compared with 34.9% of all Zambian women. However, there was no evidence of statistical difference in stated preference for HIV self-testing between age and sex groups ($p=0.513$ in Malawi; $p=0.788$ in Zambia, **figure 2**).

Figure 1. Proportion tested for HIV within past 12 months by sex and age, Malawi and Zambia



P-values for Pearson's chi-squared test comparing six age-sex subgroups and accounting for clustering using clchi2 command in Stata 14: $p<0.001$ (Malawi and Zambia);

Figure 2. Among testers, proportion preferring self-test for next HIV test by sex and age, Malawi and Zambia



P-values for Pearson's chi-squared test comparing six age-sex subgroups and accounting for clustering using clchi2 command in Stata 14: Zambia: $p=0.788$; Malawi: $p=0.513$.

Table 1. Prevalence of ever testing by sex and age, Malawi and Zambia

	Men				Women				P-value*
	16-17 yrs.	18-24 yrs.	25 yrs. and older	Total	16-17 yrs.	18-24 yrs.	25 yrs. and older	Total	
Malawi (N=5,552)**									
Total respondents (No.)	148	596	1,543	2,298	152	965	2,125	3,254	-
Ever tested (% respondents)	39	67.5	78.4	73.1	50.7	89.7	85.2	84.9	<0.001
Zambia (N=4,770)***									
Total respondents	126	530	1,210	1,866	84	944	1,876	2,904	-
Ever tested (% respondents)	60.7	61.5	83.5	75.8	55.6	85.2	89.6	87.2	<0.001

* P-value for Pearson's chi-squared test comparing six age-sex subgroups and accounting for clustering using clchi2 command in Stata 14.

** 23 respondents in the full survey (10 in the extended baseline) were missing age data and are omitted from this analysis.

*** 2 respondents in the full survey (1 in the extended baseline) were missing information on respondent sex and are omitted from this analysis

CONCLUSION

Malawi and Zambia have made major progress towards scaling up HTS, but testing gaps remain, especially among men. Even before introduction, HIVST appears highly acceptable in these rural and peri-urban communities.

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