

Knowledge of HIV-positive status among adult people living with HIV (PLHIV) in Eswatini: a population-based survey

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BACKGROUND

HIV testing is the entry point to HIV prevention and treatment. The first-90 of the global 90-90-90 targets seeks 90% of PLHIV to know their status by 2020. Eswatini (formerly Swaziland) has 220,000 PLHIV but lacks a population-based first-90 estimate. We used the 2016-17 Swaziland HIV Incidence Measurement Survey2 (SHIMS2) to describe and determine factors associated with knowledge of HIV seropositive (HIV+) status among adults aged 15+.

METHODS

- SHIMS2 was a cross-sectional, nationally representative, population-based, two-stage randomized cluster-sampled household survey.
- Knowledge of HIV+ status was defined as tested positive by rapid HIV test and responded to be HIV+ prior to testing during face to face interviews.
- Frequencies, weighted proportions, Chi-square (Chi2) and logistic regression analyses stratified by sex using Jackknife variance estimation were conducted using STATA 14.
- Potential factors were analyzed in two domains: socio-demographic and behavioral.
- Adjusted odds ratios (aORs) with 95% confidence intervals (CI) were reported.

RESULTS

- Of the 13,339 adult participants enrolled, 7,413 (55.6%) were females. Median age was 32 [IQR:23-48] (females) and 30 [21-43] years (males).
- Response rate was 92.5% for females and 84.4% for males. Figure 1 shows the number and weighted percent of respondents to HIV testing, those tested HIV+, and those responded to be HIV+ prior to testing.
- Among respondents, 32.5% of females and 20.4% of males were confirmed HIV+, and among those, 88.6% of females and 77.5% of males responded to be HIV+ prior to testing.
- More females knew their HIV+ status than males (Chi2 p-value (p) <0.001).

Factors associated with knowledge of HIV seropositive status (Table 1)

- For both females and males, awareness of HIV+ status was more likely among those who:
 - Reported using condom at last sex
 - Reported previous visit to tuberculosis (TB) clinics
 - Were aged 25-49 compared to those aged 15-24 years old
- Among females, HIV+ status awareness was more likely among those who:
 - Reported to have previously visited antenatal care clinics
 - Were ever pregnant
- Among males, HIV+ status awareness was more likely among those who:
 - Were married and those who were divorced
 - Resided in rural areas

Figure 1: Illustration of numbers (n) and weighted proportions (p) of respondents, those tested and those aware of their status

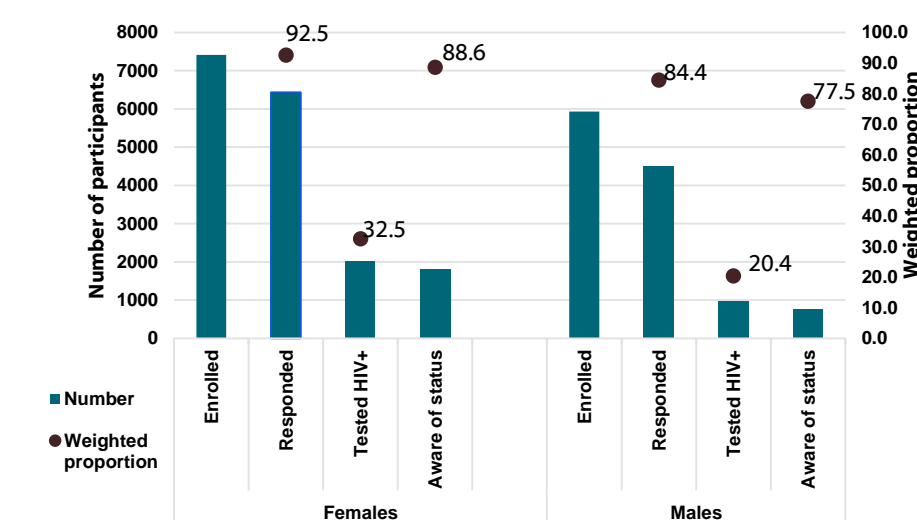


Table 1: Factors associated with knowledge of HIV seropositive status among adults 15+

Variable	Domain 1- Socio-demographic factors			Domain 2- Behavioural & health promotion factors		
	aOR	95% CI	p-value	aOR	95% CI	p-value
Domain 1- Socio-demographic factors						
Marital status		Females		Males		
Never	1	Ref		1	Ref	
Married	1.26	0.93-1.72	0.141	2.09	1.38-3.16	0.001
Divorced	1.65	0.88-3.11	0.118	2.32	1.26-4.26	0.007
Widowed						
Age		Females		Males		
15-24	1	Ref		1	Ref	
25-49	2.23	1.53-3.26	<0.001	2.16	1.19-3.91	0.012
50+	1.55	0.71-3.35	0.266	3.88	1.75-8.57	0.001
Residence		Females		Males		
Rural	1.35	0.92-1.98	0.122	1.65	1.15-2.36	0.007
Region		Females		Males		
Hhohho	1	Ref		1	Ref	
Lubombo	1.61	1.07-2.43	0.024	1.54	0.93-2.55	0.094
Mansini	1.72	1.16-2.54	0.007	0.93	0.62-1.38	0.699
Shiselweni	2.26	1.36-3.74	0.002	2.02	1.06-3.87	0.033
Education		Females		Males		
Primary/less	1	Ref		1	Ref	
Secondary	0.74	0.48-1.14	0.171	0.98	0.63-1.55	0.942
Higher	0.52	0.34-0.80	0.003	0.96	0.62-1.49	0.865
Parity		Females		Males		
Never	1	Ref		N/A		
Pregnant One	1.86	1.12-3.11	0.018			
Two pregnancies	3.85	2.47-5.99	<0.001			
3-5 pregnancies	6.60	4.16-10.48	<0.001			
6+ pregnancies	4.98	2.53-9.80	<0.001			
Domain 2- Behavioural & health promotion factors						
Condom use at last sex in the last 12 months		Females		Males		
Did not use a condom at last sex	1	Ref		1	Ref	
Used a condom at last sex	2.10	1.50-2.94	<0.001	3.04	1.99-4.63	<0.001
Previous TB clinic visit		Females		Males		
No	1	Ref		1	Ref	
Yes	5.26	2.75-10.05	<0.001	2.65	1.58-4.44	<0.001
HIV testing approach		Females		Males		
Opt-in	1	Ref		1	Ref	
Opt-out	1.06	0.76-1.48	0.738	1.56	0.99-2.47	0.057
Ever visited ANC health facility		Females		Males		
No	1	Ref		N/A		
Yes	1.76	1.20-2.58	0.004			

CONCLUSION

- In Eswatini, females are close to reaching the first-90 whilst males are >10% behind.
- Providing male-friendly, male-targeted services should be spearheaded in order to unlock more testing opportunities required to bridge this gap and achieve the first-90.
- Females may provide the gateway to reach males by reaching their partners through index testing

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