

Undiagnosed HIV is Higher among Urban Residents, Young Adults & Men: First Findings from Malawi Population-based HIV Impact Assessment

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Background

- The Malawi Population-based HIV Impact Assessment (MPHIA), part of the PHIA Project, measured the status of the national HIV response.
- Malawi has made substantial progress towards the 90/90/90 goals.
- Further progress in diagnosing people living with HIV (PLHIV), the first 90, is needed to control the HIV epidemic.
- We identify which PLHIV are at greatest risk of being undiagnosed.

Methods

Study design: Two-stage cluster-based household survey, nationally representative, stratified by urban/rural area of residence and zone.

Sample: 17,187 adults recruited in 2015-16.

Key Procedures: In-person interview, home-based rapid HIV testing and counselling per national guidelines with return of results.

Definition of Undiagnosed: Any participant testing HIV-positive who reported 1) never previously having an HIV test; or 2) testing negative on their most recent test.

Analysis: Multivariate log-binomial regression to estimate the relative risk of having previously undiagnosed HIV by area of residence, age and sex. All analyses account for complex survey design.

Results

2215 MPHIA participants age 15-64 years tested HIV-positive and responded to questions about their testing history.

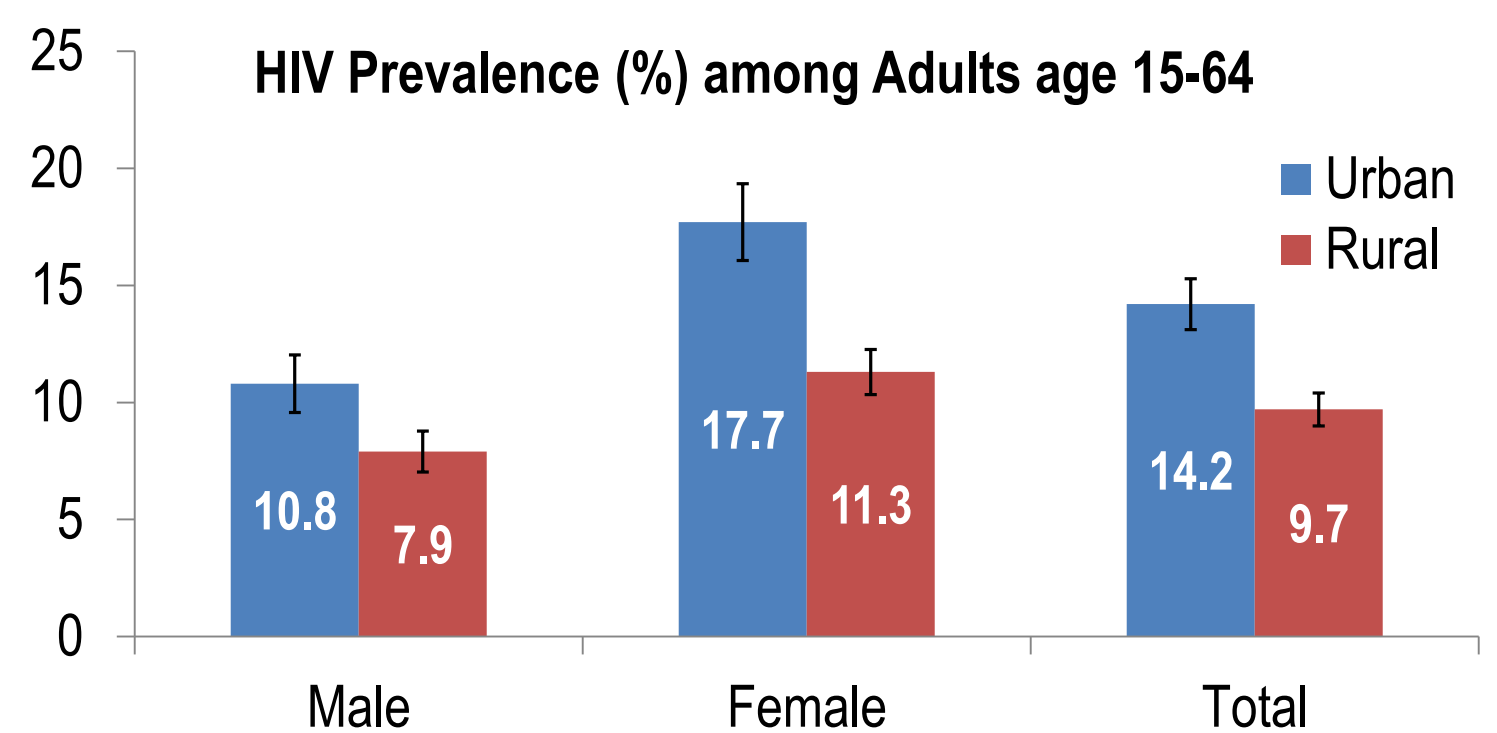
Characteristics of PLHIV age 15-64 y	n	% (unweighted)
Awareness of Status		
Previously Diagnosed	1633	73.7%
Previously Undiagnosed	582	26.3%
Area of Residence		
Urban	1055	47.6%
Rural	1160	52.4%
Gender		
Male	707	31.9%
Female	1508	68.1%
Age		
15-24	214	9.7%
25-64	2001	90.3%
TOTAL PLHIV	2215	100.0%

Conclusion

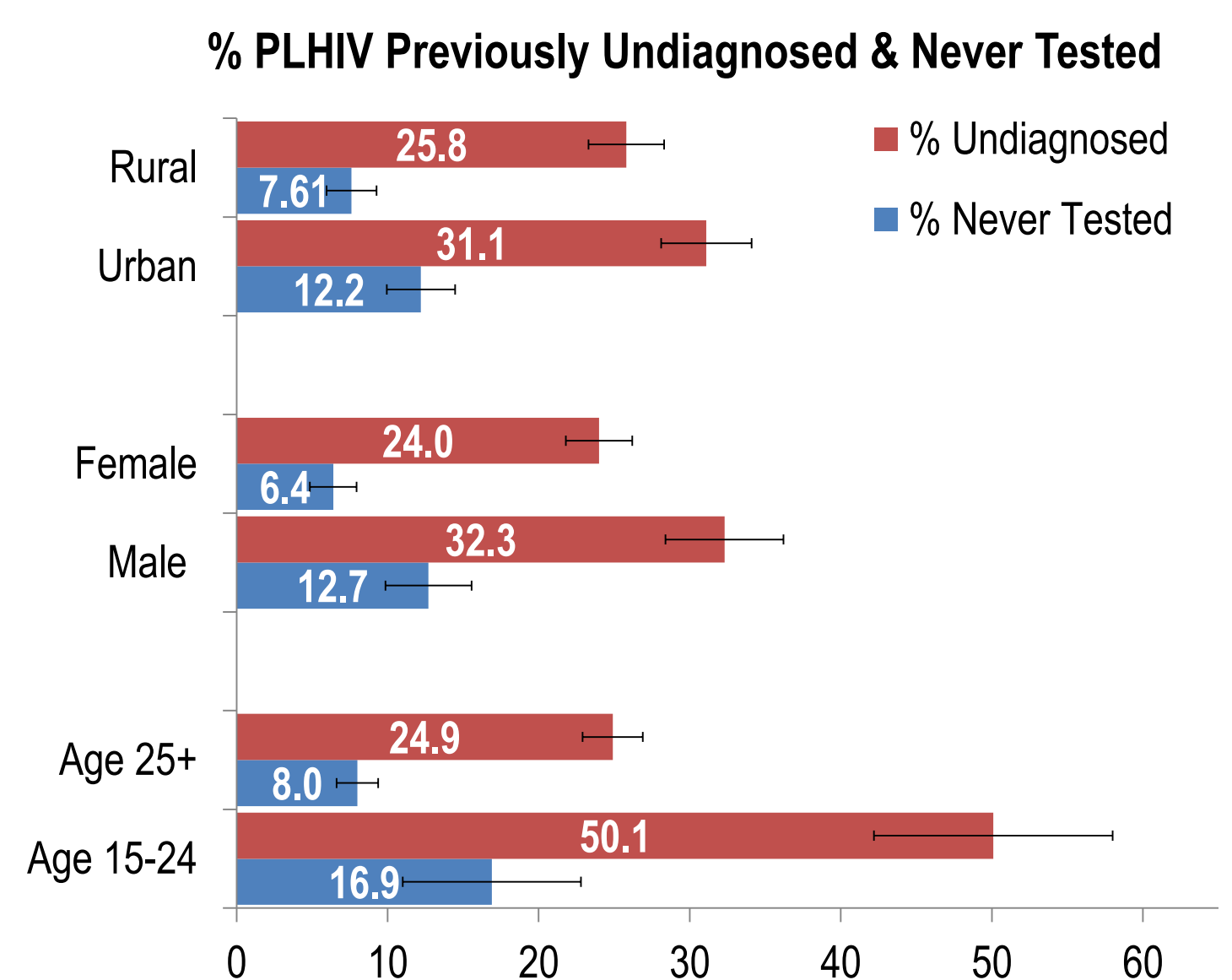
- Young, male and urban PLHIV were at increased risk of having undiagnosed HIV in Malawi and were more likely to have never tested.
- These disparities threaten HIV epidemic control as urban areas have higher HIV prevalence and increasing population due to urbanization.
- Malawi's HIV program should focus on innovative approaches to making testing more accessible in urban areas, particularly to young adults and men.

Results (continued)

HIV prevalence was higher in urban areas.



Previously undiagnosed HIV was higher among urban residents and significantly higher among men and younger adults. Among those undiagnosed, significantly greater proportions of urban residents, men and young adults have never had an HIV test.



In multivariate analysis, living in an urban area was associated with having undiagnosed HIV, even controlling for age and gender. Zone of residence was not associated with being undiagnosed.

Factors Associated with having undiagnosed HIV, among adult PLHIV

	Relative Risk	95% CI
Living in an urban area	1.19*	1.03-1.37
Being male	1.40***	1.22-1.62
Age 15-24	2.07***	1.74-2.46

* p<0.05, **p<0.01, ***p<0.001

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