



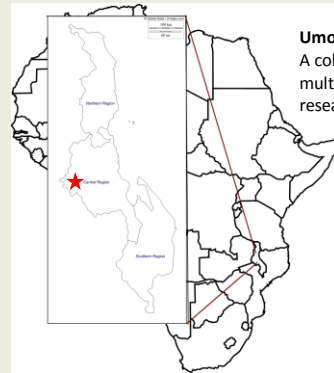
Sex differences in HIV knowledge,
testing behaviors, and decision making
influences in rural Malawi



Norris A, Esber A, Chemey E,
Phuka J, Kwiek JJ, Turner AN

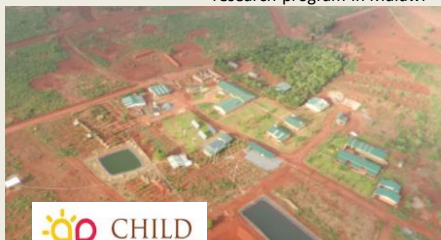


Funders (Ohio State University):
Public Health Preparedness for Infectious Diseases
Institute for Population Research
Center for Clinical and Translational Science



Umoyo wa Thanzi (UTHA)
A collaborative,
multidisciplinary health
research program in Malawi

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HIV testing in Malawi

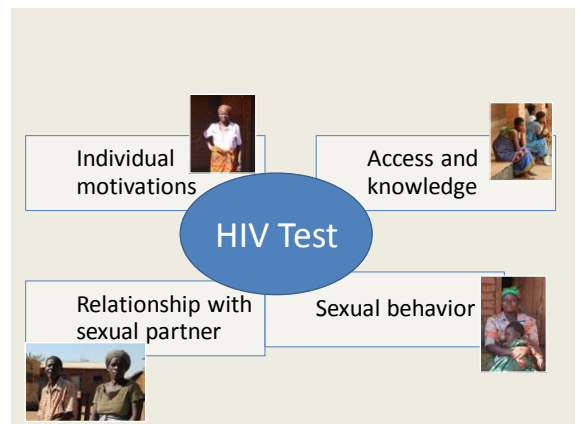
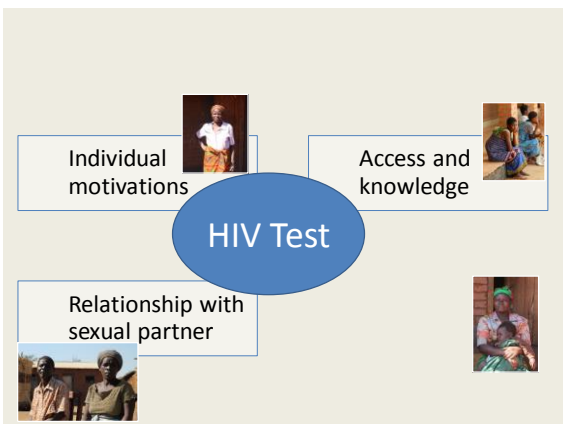
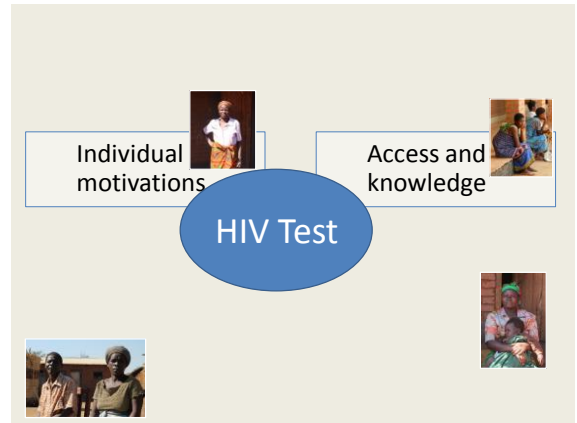
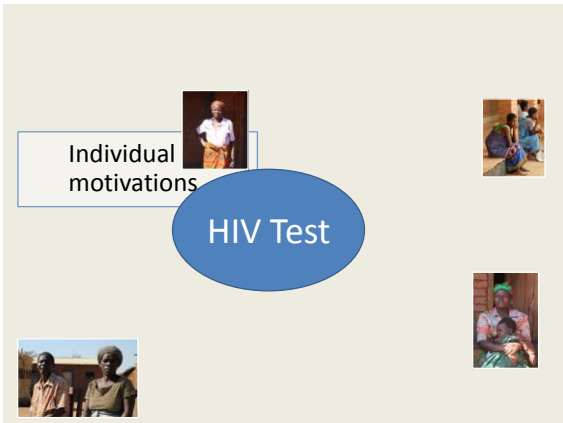
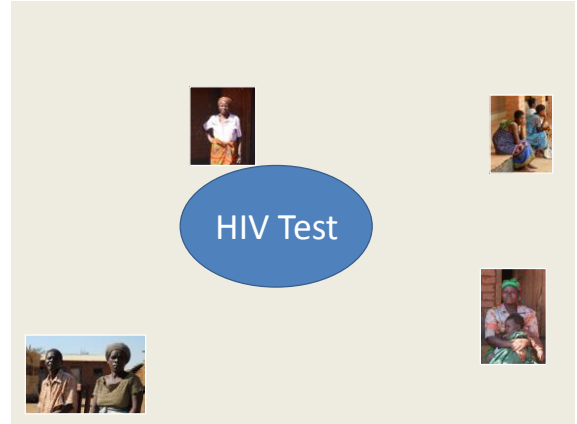
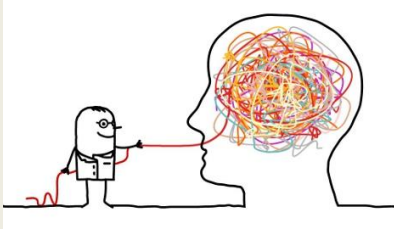
Malawi country population ~16 million

By 2010: estimated 73% of women and 52% of men had ever had an HIV test

During 2012: 2.2 million people had an HIV test
(36% tested for the first time)

UNAIDS, 2014 / DHS 2010

Decision making in sexual and reproductive health



Methods

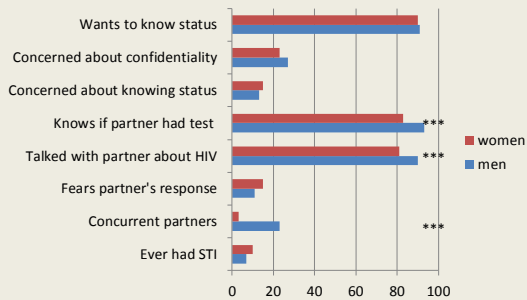
Cluster randomized sampling from CLI catchment area
Face to face baseline interview, electronic data capture (n=1475)



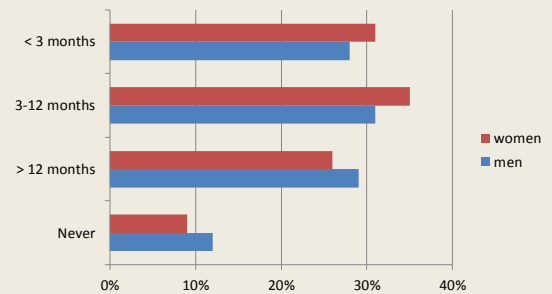
Demographic characteristics

	Total N=1267	Women N=832	Men N=435	p-value for χ^2
Education				0.002
< 2 years primary	11%	13%	8%	
2-4 years of primary	33%	34%	31%	
4-8 years of primary	40%	39%	42%	
Some secondary +	16%	14%	19%	
Age				<0.001
15-22	25%	32%	13%	
23-30	40%	39%	41%	
30 +	35%	30%	46%	
Monthly income				0.025
< 9 US\$	33%	36%	28%	
9-35 US\$	38%	36%	40%	
≥ 36 US\$	29%	28%	32%	

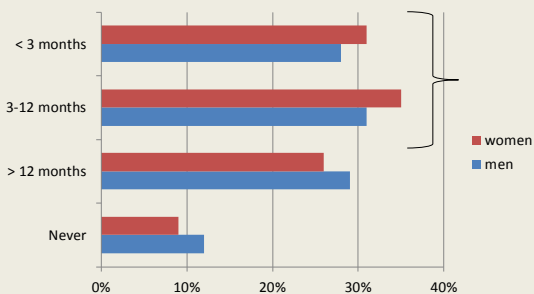
Sex differences in motivators, partner characteristics, sexual risk behaviors



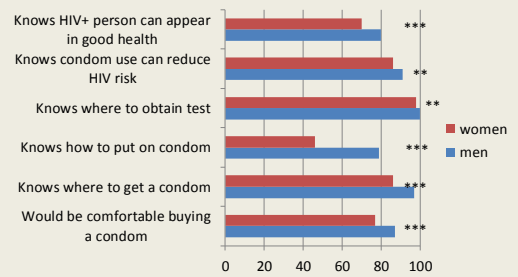
Sex differences in HIV testing



Sex differences in HIV testing



Sex differences in HIV knowledge



Influences on HIV testing decision making

Motivators, partner characteristics, sexual risk behaviors, and ever having an HIV test, in women

	Unadjusted	
	OR	95% CI
Wants to know HIV status	1.77	0.77, 4.12
Concerned re confidentiality	0.73	0.37, 1.41
Concerned re knowing status	0.47	0.24, 0.93
Knows partner had a test	11.36	5.48, 23.6
Talked w partner about HIV	1.42	0.50, 4.00
Fears partner's response	0.32	0.17, 0.62
Concurrent partners	1.41	0.32, 6.15
More lifetime partners	0.97	0.76, 1.25
STI diagnosis	1.16	0.41, 3.33

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Concerned re confidentiality	0.73	0.37, 1.41		
Concerned re knowing status	0.47	0.24, 0.93	0.79	0.19, 3.26
Knows partner had a test	11.36	5.48, 23.6	9.41	3.61, 24.5
Talked w partner about HIV	1.42	0.50, 4.00		
Fears partner's response	0.32	0.17, 0.62	0.35	0.10, 1.24
Concurrent partners	1.41	0.32, 6.15		
More lifetime partners	0.97	0.76, 1.25		
STI diagnosis	1.16	0.41, 3.33		

Motivators, partner characteristics, sexual risk behaviors, and ever having an HIV test, in men

	Unadjusted	
	OR	95% CI
Wants to know HIV status	2.62	1.16, 5.92
Concerned re confidentiality	1.26	0.64, 2.49
Concerned re knowing status	0.97	0.42, 2.28
Knows partner had a test	15.0	6.32, 35.36
Talked w partner about HIV	2.61	1.00, 6.75
Fears partner's response	1.17	0.44, 3.11
Concurrent partners	1.02	0.90, 1.15
More lifetime partners	1.05	0.94, 1.17
STI diagnosis	0.70	0.26, 1.91

Motivators, partner characteristics, sexual risk behaviors, and ever having an HIV test, in men

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Motivators, partner characteristics, sexual risk behaviors, and ever having an HIV test, in men

	Unadjusted		Adjusted ¹	
	OR	95% CI	OR	95% CI
Wants to know HIV status	2.62	1.16, 5.92	4.21	1.48, 12.0
Concerned re confidentiality	1.26	0.64, 2.49		
Concerned re knowing status	0.97	0.42, 2.28		
Knows partner had a test	15.0	6.32, 35.36	21.9	7.54, 63.3
Talked w partner about HIV	2.61	1.00, 6.75		
Fears partner's response	1.17	0.44, 3.11		
Concurrent partners	1.02	0.90, 1.15		
More lifetime partners	1.05	0.94, 1.17		
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**HIV knowledge
and condom use efficacy
among testers and non-testers**

HIV knowledge and condom use efficacy varies by testing status in women

	All N=941	Ever test N=861	Never test N=80	p-value for χ^2
Knows where to obtain test	98%	99%	87%	<0.001
Knows HIV+ person can appear in good health	70%	72%	61%	<0.001
Knows condom use can reduce HIV risk	86%	87%	70%	0.012
Knows how to put on condom	46%	46%	30%	0.101
Knows where to get a condom	86%	87%	70%	0.003
Would be comfortable buying a condom	77%	78%	59%	0.012

HIV knowledge and condom use efficacy varies by testing status in men

	All N=442	Ever test N=389	Never test N=53	p-value for χ^2
Knows where to obtain test	100%	100%	100%	
Knows HIV+ person can appear in good health	80%	82%	67%	<0.001
Knows condom use can reduce HIV risk	91%	91%	92%	0.414
Knows how to put on condom	79%	82%	59%	<0.001
Knows where to get a condom	97%	98%	88%	<0.001
Would be comfortable buying a condom	87%	89%	76%	0.091

Conclusions

- High rates of HIV testing reported by both women and men
- **Knowing that the partner had an HIV test was the strongest predictor for women and men to test themselves.**
- Those who have had a test know more about HIV and are more confident about condom use.
- Communication and support between sexual partners is critical to achieve HIV testing in the Malawian context

