

# IMPACT OF HEALTH BEHAVIOR CAMPAIGNS ON HIV-RISK BEHAVIORS IN SWAZILAND

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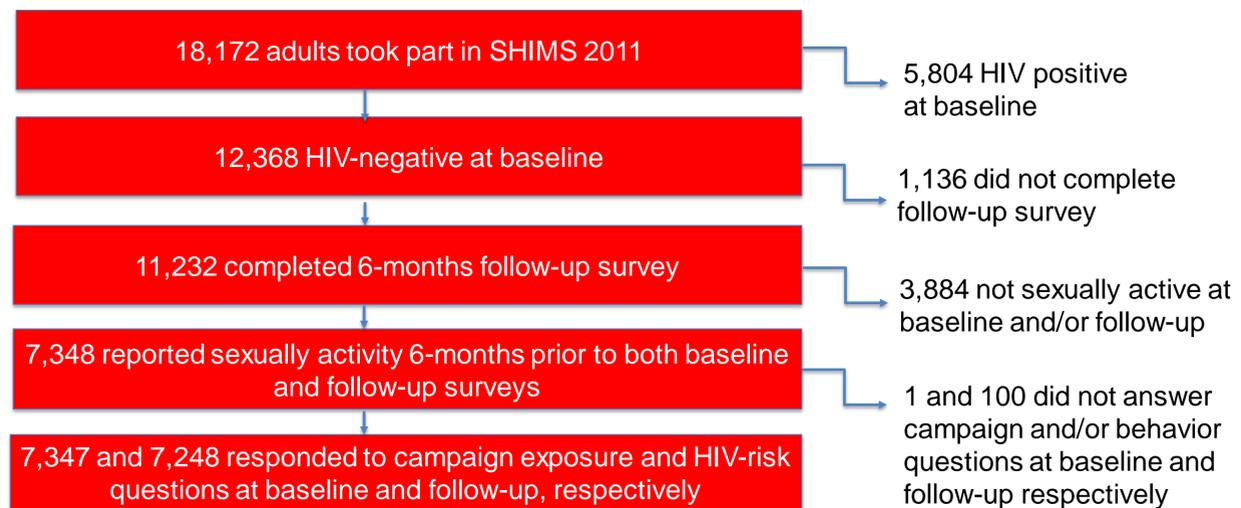
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## Background

Several mass media health behavior campaigns (HBCs) were conducted in Swaziland between 2010-2015 to avert new HIV infections. We describe the association between HBCs and self-reported specific behaviors among a prospectively followed, nationally representative, HIV-negative cohort from the 2011 Swaziland HIV Incidence Measurement Survey (SHIMS).

## Methods

Survey staff conducted household-based HIV testing and collected information from adults, aged 18-49 y, about risk behaviors and exposure to HBCs in the previous 6 months. HIV-negative participants repeated the questionnaire and HIV testing 6 months later. Survey data were weighted for sampling design and multivariable logistic regression analysis assessed associations between HBC exposure and risk behaviors among those reporting sexual activity at both baseline and follow-up. Assessed behaviors were having ever HIV tested (at baseline); number of sexual partners in past 6 mo; condom use in past 6 mo; and male circumcision (MC) or having a circumcised primary partner.



Weighted Logistic Regression Modeling Low-Risk Behaviors <sup>§</sup> for HBC Exposures at Baseline and Risk Behavior Outcomes at Baseline (Cross-Sectional) and 6 Months Follow-Up (Longitudinal)								
	Men				Women			
	#Adjusted Cross-Sectional Analysis (Baseline)		#Adjusted Longitudinal Analysis (6 Months Follow-Up)		#Adjusted Cross-Sectional Analysis (Baseline)		#Adjusted Longitudinal Analysis (6 Months Follow-Up)	
Campaign Topic Exposure (yes vs. no):	aOR	95% CI	aOR	95% CI	aOR	95% CI	aOR	95% CI
Reducing No. Sexual Partners*	<b>*2.26</b>	<b>(1.49-3.44)</b>	<b>*1.95</b>	<b>(1.26-3.00)</b>	<b>*3.02</b>	<b>(1.38-6.62)</b>	1.90	(0.64-5.62)
Using Condoms	0.73	(0.26-2.07)	1.25	(0.49-3.18)	1.48	(0.45-4.88)	0.86	(0.36-2.05)
Benefits of Male Circumcision	2.36	(0.98-5.69)	1.16	(0.40-3.36)	1.16	(0.61-2.21)	1.51	(0.79-2.88)
HIV Testing	1.13	(0.47-2.73)	-	-	<b>*3.84</b>	<b>(1.18-12.55)</b>	-	-

<sup>#</sup>Adjusted for age, employment status, marital status, pregnancy status (for women only) and education level  
<sup>\*</sup>Significant association  
<sup>†</sup>Ordinal for number of sexual partners, categorized as 1, 2 or > 3 partners  
<sup>§</sup>Low-risk behaviors: having ever HIV tested; fewer sexual partners; always using condoms; being circumcised or having a circumcised primary partner

## Results

At baseline, among women, there was a significant association between reporting having ever HIV tested and exposure to HIV testing HBC messages (adjusted OR [aOR] 3.84, 95% CI [1.18-12.55]); and reporting fewer (i.e., 1 versus 2, or 2 versus ≥3) recent sexual partners and exposure to partner reduction HBC messages (aOR = 3.02, 95% CI [1.38-6.62]). Among men, there was a baseline association between reporting fewer recent partners and exposure to partner reduction messages (aOR = 2.26, 95% CI [1.49-3.44]). In the longitudinal assessment, men who reported baseline exposure to partner reduction HBCs were more likely to report fewer sexual partners 6 months later (aOR = 1.95, 95% CI [1.26-3.00]). No significant association was found for men or women regarding exposure to HBCs about condoms and condom use, nor regarding MC and the MC outcome (Table). There were 121 incident HIV infections observed among HIV negative participants at the 6 mo F/U visit. Exposure to HBCs did not predict incident HIV infections.

## Conclusion

These findings suggest an uneven impact of mass media HBCs on promoting low-risk behaviors among adults in Swaziland, the country with the highest global national HIV prevalence. Although both men and women appeared to respond positively to partner reduction HBC messages, affecting a wider set of risk behaviors at a population level appears to require additional interventions.



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