



Advances in Screening
and Prevention
in Reproductive Cancers

HPV prevalence and uptake of cervical cancer screening among HIV positive and negative women participating in a pilot RCT in Uganda comparing self-collection based HPV testing to VIA

Mitchell S, Moses E, Pedersen H, Sekikubo M, Mwesigwa D, Singer J, Biryabarema C, Byamugisha J, Money D, Ogilvie G



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Disclosures

- No disclosures to report



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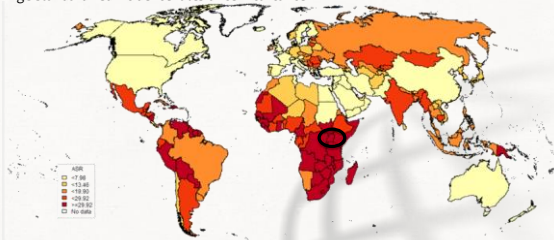


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Cervical Cancer Globally

Age-standardized incidence rates of cervical cancer



ASIR, age-standardized incidence rates, Rates per 100,000 women per year.
Source: GLOBOCAN 2012, Cancer incidence and Mortality Worldwide



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About ASPIRE

- Collaboration between Canadian and Ugandan partners:



BC Centre for Disease Control



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BC Cancer Agency CARE + RESEARCH



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- Community-based cervical cancer screening strategy in Uganda using self-collected HPV
- Bridges research and program implementation



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Background

- Women living with HIV (WHIV) are at greater risk for acquiring human papillomavirus (HPV) and progressing to cervical cancer
- As technology develops, a variety of approaches to cervical cancer screening are now possible, policy makers are continually evaluating new models of care
- Utilizing a self collection method for the detection of high risk strains of HPV (HR-HPV) is a novel approach to cancer screening in low resource settings



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Background

- Kisenyi is a densely populated urban community in Kampala
- Visual inspection with acetic acid (VIA) current standard of care
- Limitations
 - Human resources
 - Invasive
 - Women with HIV



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Methods

- 500 women recruited and randomized to self-collection based HR-HPV testing or VIA
- HIV status was self-identified at time of recruitment
- HR-HPV arm: given a swab at place of recruitment
- VIA arm: referred for VIA at the local health unit where VIA positive women were provided cryotherapy at time of screening
- Women in both arms were referred to colposcopy when indicated

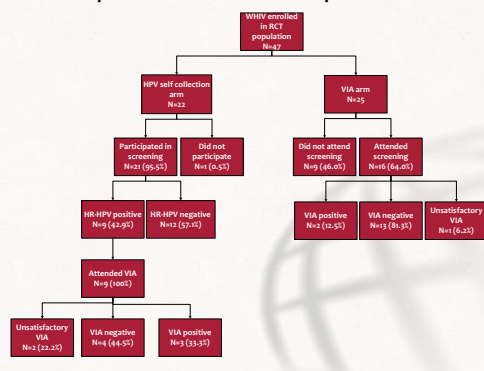
Analysis

- Uptake rates of screening and HPV status in WHIV vs HIV- women were compared using Chi-square or Fisher's exact test, as well as demographic/risk factors.
- Logistic regression was performed to determine demographic/risk factors significantly associated with HIV status: adjusted odds ratios (AOR) and 95% confidence intervals (CI) reported

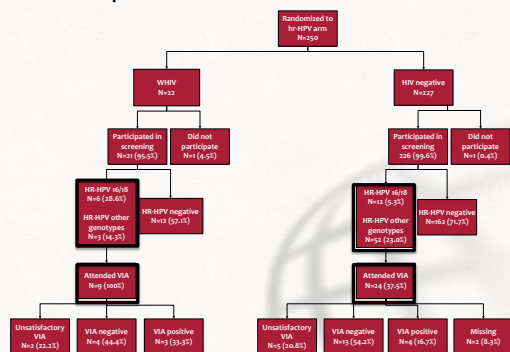
Population Characteristics

Variable	Variable Level	WHIV HIV-		p-value
		Total N=47	Total N=453	
Age	Mean (SD)	39.62(8.64)	38.99(9.28)	0.43
Marital status	Single	7(14.9)	93(20.8)	0.03
	Common law	14(30.0)	200(44.5)	
	Married	3(6.4)	46(10.2)	
	Separated/divorced	13(27.7)	84(18.6)	
Work outside of the home	Yes	3(6.4)	348(72.6)	0.67
	No	14(29.4)	104(23.1)	
Accommodation	Rent	40(87.0)	319(71.0)	0.03
	Own (or partner owns)	6(13.0)	130(29.0)	
How much money do you have to live on each week	Less than 15,000 Ugh\$	41(89.4)	365(81.7)	0.36
More than 15,000 Ugh\$	5(10.6)	87(18.3)		
Religion	Catholic/ Christian (various denominations)	32(68.1)	311(68.8)	1.00
	Muslim	15(31.9)	141(31.2)	
How long to walk to nearest health centre?	Less than 10 minutes	12(25.5)	175(39.7)	0.12
	Less than 30 minutes	23(51.2)	206(46.5)	
	More than 30 minutes	12(25.3)	84(18.8)	
Age at first sexual intercourse	Mean(SD)	16.75(2.64)	16.92(3.05)	0.76
Number of pregnancies	Mean(SD)	4.47(2.24)	4.49(3.02)	0.03
Ever had a pelvic exam	Yes	7(14.9)	36(8.0)	0.27
	No	40(85.1)	414(91.7)	
Number of male partners in past week	Don't know	0	6(1.3)	0.03
	One	24(51.1)	146(32.4)	
	Two - Five	23(48.9)	299(65.6)	

Uptake and Follow-up of WHIV



Participants Randomized to HPV Arm



Discussion

- Self-collection based screening had **high uptake** in both WHIV and HIV- women
- Highly acceptable and improves access compared to VIA alone
- Completion of screening and treatment in WHIV randomized to HPV self-collection suggests potential for integration into comprehensive HIV care programs

Conclusions

- This innovative approach to cervical cancer screening has significant benefit for WHIV
- Higher HR-HPV infection rates in WHIV requires a focus on low-barrier options for screening



Publications

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THANK YOU!

Sheona.Mitchell-Foster@unbc.ca
 @SheonaMitchell
www.aspireafrica.ca
 @ASPIRE_PROJECT