

HIV-related sexual behaviours among African - Caribbean men in Toronto, Ontario

Authors: Wangari Tharao¹, Juan Liu², Winston Husbands³, Rupert Kaul^{2,7}, Jamie Thomas-Pavanel⁴, LaRon Nelson², Mona Loutfy^{4,5}, Anu Rebappagada⁵, Robert S. Remis^{2,6}

¹Women's Health in Women's Hands Community Health Centre, ²University of Toronto, ³AIDS Committee of Toronto, ⁴Maple Leaf Clinic, ⁵Women's College Research Institute,

⁶Ontario Agency for Health Protection and Promotion, ⁷University Health Network

The authors have no conflicts of interest to disclose.



BACKGROUND

Populations from sub-Saharan Africa and the Caribbean constitute a sizable component (19%) of the Ontario HIV epidemic, with heterosexual men accounting for approximately 60% of the diagnoses. While more Black men have been diagnosed with HIV compared to women, only a 3rd of men estimated to be living with HIV have been diagnosed.

To understand the context and factors driving transmission, the KALI Black Men's Health Study (KALI Study), a cross-sectional, community-based study of HIV and other sexually transmitted diseases was implemented in Toronto. The aims of the study were: a) To determine the prevalence and distribution of relevant co-infections; b) To examine their correlation with HIV infection, and c) to use knowledge obtained to develop novel community and clinically based interventions to prevent HIV transmission.

We utilized KALI Study data to examine the sexual behaviours of Black men who self-identify as heterosexual.

METHODS:

The KALI Study was launched in the Greater Toronto area (GTA) between April, 2012-March, 2013. Black men were recruited by a team of peer recruiters through an extensive network of community-based organizations, social and cultural activities and public venues. Men were eligible if they, a parent or grandparent were born in Africa or the Caribbean. Participants provided biologic samples and completed a socio-behavioural questionnaire which included demographic and sexual behaviour questions using ACASI. We examined questions related to HIV-related sexual behaviours and condom use. We performed univariate and multivariable logistic regression.

RESULTS:

- Three hundred and sixty one (n= 361) Black men self-identified as heterosexual
- Sex with a woman in the last six months: 70.7%, yes; 29.3%, No
- Sex with a man in the last six months was 0.6 % (n=2)
- 84% (n=283) strongly agree/agree that condoms can prevent HIV/AIDS
- 71.7% (n=239) strongly agree/agree they would refuse sex if partner does not want to use condom
- 19.2% (n=71) strongly agree/agree they would assume if willing to have sex without condom one is HIV-negative
- Condom put on before starting sex during the previous 6 months: 70.1% (n=171) yes; 29.9% (n=73), no
- Condom taken off after starting sex during the previous 6 months: 22.2% (n=54), yes; 77.8% (n=189), no

Demographic Characteristics of participants

Demographic Characteristics		Self-identified Heterosexual Black Men
N		361
Age (years)	Mean	34.4
	Median (IQR)	33 (16 - 72)
Region of birth	Canada	146 (40.4%)
	Caribbean	107 (29.6%)
	Africa	94 (26.0%)
Ability to communicate in English	Spoken	282 (82%)
	written	302 (86.8%)
Education	some college/ completed University education	152 (88.3%)
Marital Status	Legally Married/living common law with woman	46 (13%)
	Single	265 (75.1%)
	separated/divorced/widowed	42 (11.9%)
Annual household income	Less \$10,000	121 (45.3%)
	\$10,000 - \$19,999	53 (19.9%)
	\$20,000 - \$39,999	49 (18.4%)
Illicit drug use in previous six months	Marijuana, cannabis or hashish	197 (58.5%)
	Cocaine ('crack', 'coke', 'freebase')	52 (15.4%)

Belief that condoms can prevent HIV/AIDS

Correlates of belief that condoms can prevent HIV/AIDS		Total	Agree	% Agree	p value
		361	276	84.0%	
Age	<25	108	81	75.0%	0.002
	25+	229	202	88.2%	
Marital status	Single	255	208	81.6%	0.005
	Other	76	72	94.7%	
Smoking	Ever	212	171	80.7%	0.033
	Never	124	111	89.5%	
Health Status	Excellent/very good	220	191	86.8%	0.039
	Other	114	89	78.1%	
Having a casual female partner	yes	151	118	78.1%	0.005
	No	165	148	89.7%	

Multivariable regression Analysis: Belief that condoms can prevent HIV/AIDS

Predictors	Effect	Adjusted OR	95% CI OR		p value
Age	<25 vs. 25+ years	0.32	0.15	0.68	0.0029
Marital status	Single vs. other	0.34	0.11	1.05	0.061
Smoking	Ever vs. Never	0.25	0.11	0.58	0.001
Health status	Excellent/very good vs. other	2.57	1.32	5.00	0.005

Delayed condom application

Correlates of delayed condom application		Total	Yes	%Yes	p-value
Region of birth	Africa	56	9	16.1%	0.01
	Other	188	64	34.0%	
Marital status	Married/common-law	29	14	48.3%	0.052
	Separated/Divorced/Widowed	21	4	19.0%	
	Single	191	55	28.8%	
Household income	Less \$20,000	111	28	25.2%	0.088
	\$20,000 +	76	28	36.8%	
Health status	Excellent/very good	158	42	26.6%	0.083
	Other	83	31	37.3%	
Having a casual female partner	Yes	148	37	25.0%	0.018
	No	77	31	40.3%	

Multivariable regression analysis: Delayed condom application

Predictors	Effect	Adjusted OR	95% CI OR		p value
Region of birth	Africa vs. other	0.44	0.18	1.05	0.063
Health status	Excellent/very good vs. other	0.46	0.23	0.95	0.035
Having a casual female partner	Yes vs. no	0.44	0.22	0.88	0.021

CONCLUSION AND RECOMMENDATIONS:

- Belief that condoms can effectively prevent HIV was significantly associated with:
 - Being older (OR 0.32; 95% CI 0.15-0.68), being single (OR 0.34; 95% CI 0.11-1.05), ever smoking (OR 0.25; 95% CI 0.11-0.58) and with excellent/very good health status (OR 2.57; 95% CI 1.32-5.00)
 - In relation to age, belief that condoms could prevent HIV was significantly lower (75% vs 88%) in those below 25 years of age.
- Delayed condom application was associated with excellent/very good health status (OR 0.46; 95% CI 0.23-0.95) and having a casual female partner (OR 0.44; 95% CI 0.22-0.88)

LIMITATIONS

- Reliance on convenience sampling which may limit generalizability of the findings to the Black male population in general
- May be selection bias with respect to the following:
 - Age
 - Country of origin
 - Sexual behaviour
 - Refusal to participate
- Cross-sectional study; therefore, temporal and causal relationships cannot be determined
- Sexual behaviour self-reported and not independently validated

ACKNOWLEDGMENTS:

- Study participants
- Community Advisory Committee
- Peer Recruiters
- CIHR Emerging Research Team
- Laboratory testing:
 - Rupert Kaul laboratory
 - Department of Pathology, UHN
 - Toronto Medical Laboratories, Mt. Sinai Hospital
 - Toronto Public Health Laboratory, Public Health Ontario
- CIHR and the OHTN for funding the study