HIV-RELATED SEXUAL BEHAVIOURS AMONG AFRICAN-CARIBBEAN MEN IN TORONTO, ONTARIO

<u>Wangari Tharao</u>¹, Juan Liu², Winston Husbands³, Rupert Kaul^{2, 7}, Jamie Thomas-Pavanel⁵, LaRon Nelson^{2, 8}, Mona Loutfy^{4, 5}, Anu Rebappragada⁶, Robert S. Remis^{2, 6}

¹Women's Health in Women's Hands Community Health Centre, ²University of Toronto, ³Ontario HIV Treatment Network, ⁴Maple Leaf Clinic, ⁵Women's College Research Institute, ⁶Ontario Agency for Health Protection and Promotion, ⁷University Health Network ⁸University of Rochester

> OHTN Conference: HIV Endgame II November 21st, 2016







DISCLOSURE:

• We have no conflict of interest to disclose

BACKGROUND:

- Populations from sub-Saharan Africa and the Caribbean constitute a sizeable component (19%) of the Ontario HIV epidemic:
 - heterosexual men account for approximately 60% of the diagnoses in ACB populations
- More Black men have been diagnosed with HIV compared to women
 - a 3rd of men have been diagnosed compared to approximately 50% of women

BACKGROUND (2):

- 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;
 - c) To use knowledge obtained to develop novel community and clinically based interventions to prevent HIV transmission.

STUDY OBJECTIVE:

• To examine sexual behaviors 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.
- Participant recruitment was done by a team of 25 trained peer recruiters (PRs)
- Recruitment was done through an extensive network that included:
 - PRs own social networks;
 - community-based organizations;
 - social and cultural activities;
 - 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-behavioral questionnaire which included demographic and sexual behaviour questions using ACASI.
- For this presentation, we examine questions related to HIV-related sexual behaviours and condom use.
- We performed univariate and multivariable logistic regression to determine correlates of sexual behaviours in the previous six months.

RESULTS

Demographic Characteristics:		Self-identified Heterosexual Black	
		361	
Age (years)	Mean	34.4	
	Median (IQR)	33 (16 – 72)	
	Canada	146 (40.4%)	
Region of birth	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%)	
	Legally Married/living common law with woman	46 (13%)	
Marital Status			
	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%)	

- 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

Correlates of belief that condoms can prevent HIV/AIDS					
		Total	Agree	% Agree	p value
Belief that that condoms can prevent HIV/AIDS		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%	

Predictors of belief that condoms can prevent HIV/AIDS:

Multivariable regression analysis	Effect	Adjusted OR	95% CI OF	2	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	2.57	1.32	5.00	0.005
	good vs. other				

Multivariable regression model initially included variables significant at <0.10 in univariate, analysis with backward stepwise elimination.

Initial variables included: age, marital status, smoking, health status and having a casual female partner.

Total observation: 304 (Yes = 260, No =44)

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%	

Predictors of delayed condom application:

Multivariable regression analysis	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

Multivariable regression model initially included variables significant at <0.10 in univariate, analysis with backward stepwise elimination.

Initial variables included: region of birth, marital status, household income, health status and having a casual female partner.

```
Total observation: 171 (Yes = 53, No =118)
```

CONCLUSION AND RECOMMENDATIONS:

- Self-identified heterosexual Black men in our study were more likely to be:
 - Canadian born, fluent in English, highly educated, single and with the majority (65%) living on an income of less than \$20,000/household.
 - Use of illicit drugs particularly marijuana, cannabis and hashish was also common (59%)
- Belief that condoms can effectively prevent HIV was significantly associated with:
 - Younger age, being single, ever smoking and with excellent/very good health status
- Delayed condom application was associated with excellent/very good health status and having a casual female partner
- Condoms use behaviour needs to be optimized among ACB heterosexual men
- These results are invaluable to policy makers and service providers involved in HIV
 prevention initiatives in ACB communities, particularly those working with
 heterosexual Black men.

STUDY LIMITATIONS:

- This was not a randomised sample hence reliance on convenience sampling may limit generalizability of the findings to the Black male population in general
- There may have been selection bias (based on characteristics of PRs) with respect to:
 - Age
 - Country of origin
 - Sexual behaviours
 - Refusal to participate
- This being a cross-sectional study, temporal and causal relationships cannot be determined.
- Sexual behaviour is self-reported and not independently validated

ACKNOWLEDGEMENTS

- Study participants
- Peer Recruiters
- Community Advisory Committee
- Community Partners TAIBU CHC, Rexdale Community Health Centre and Women's Health in Women's Hands chc
- 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
- Funders: CIHR and the OHTN