



What's race got to do with it? Symptoms of Anxiety and Depression in Indigenous gbMSM and gbMSM of colour in Vancouver, Toronto and Montreal

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LAND ACKNOWELDGEMENT

I respectfully acknowledge that we are privileged to work and learn on the traditional lands referred to as Treaty 6 Territory, the territories of the Cree, Dene, Nakota, Salteaux and Ojibwe First Nations and the Homeland of the Métis



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9 au 12 mai 2019 á Saskatoon (SK)

Conflict of Interest Disclosure

In the past 2 years I have been an employee of: BC Centre for Excellence in HIV/AIDS

In the past 2 years I have been a consultant for: NONE

In the past 2 years I have held investments in the following pharmaceutical organizations, medical devices companies or communications firms: **NONE**

In the past 2 years I have been a member of the Scientific advisory board for: NONE

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I agree to disclose approved and non-approved indications for medications in this presentation: N/A

I agree to use generic names of medications in this presentation: YES

There are relationships to disclose: NO

Background

- Racialized, colonized and immigrant groups are disproportionately affected by health inequities
 - ► Indigenous communities still live with structural health inequities rooted in colonization Czyzewski, K. IIPJ 2011; 2:5
 - ► race is rarely used as a primary lens when working with gay, bisexual and other men who have sex with men (gbMSM), particularly in Canada Raphael, D. 2016; p31
- ▶ gbMSM demonstrate high levels of anxiety and depression Lachowsky, NJ. SUM 2017;
 52:785

Sexual minority stress compounded by race-related factors may increase vulnerability to mental health challenges Dentato, MP. JGLSS 2013; 25:509

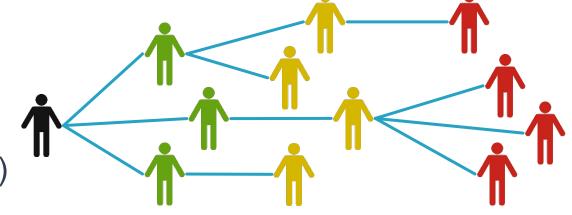
Methods: The Engage Study

- Mixed-Method Cross-Sectional study being conducted in Vancouver, Toronto, and Montreal
- ► Recruiting cisgender and transgender men who:
 - ► Are 16 years of age or older
 - ▶ Reported having sex with another man in the past 6 months
- Participants complete computer-assisted surveys and biomedical testing (i.e.: STI testing)

Methods: The Engage Study (cont'd)

Recruitment using Respondent-Driven Sampling

- ► The Current Sample:
 - ► 201 Seeds (initial participants)



- ► N = 2,198 (1179 Montreal, 422 Toronto and 597 Vancouver)
- ▶ Recruitment period: February 2017 February 2019 (data collection is ongoing)

Methods (cont'd)

- Community consultation with 10 queer Men of Colour and Two-Spirit men in Vancouver:
 - identify key community health priorities
 - highlight variables relevant to their needs and experiences

Variables of interest

- Ethnicity: "What single ethnic group or family background do you MOST identify with?"
- ► Ethnoracial differences in anxiety and depression symptomology assessed using Hospital Anxiety and Depression Scale (HADS)
 - Scores ≥8 indicate mild to severe symptoms Bjelland I. JPR 2002; 52:69

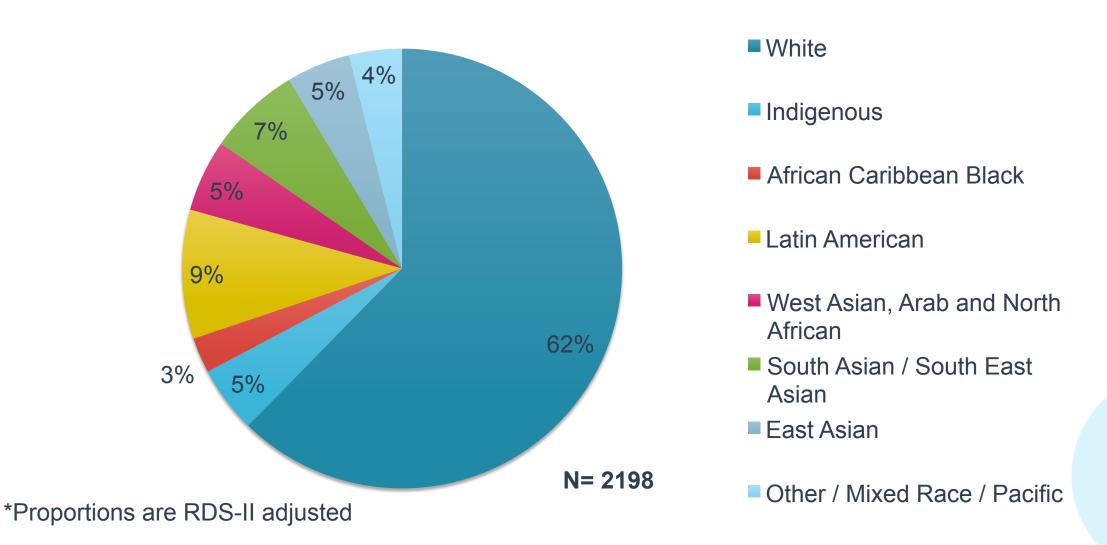
Methods (cont'd)

RDS-II adjusted pooled analysis

- Univariate logistic regression performed on individual dummy ethnicity variables for each major ethnic group (versus nongroup identities)
- Adjusted model without selection controlling for:
 - age, city, relationship status, income, education, employment, immigration status, sexual orientation
 - HIV/STI status and testing history
 - PrEP awareness and uptake
 - prior diagnoses of substance use disorder and other mental health conditions

RESULTS – Overall Descriptives

Figure 1. Ethnicity Distribution



RESULTS: Overall Descriptives (cont'd)



Median age of the sample was 32 years



Median HIRI-MSM score was 15

No significant difference found across ethnicities



16% self-reported HIV-Positive



53% anxious and **24% depressive** symptoms

Results: Descriptives by Ethnicity

					W. Asian, Arab, N.		
	White (n=1518)	Indigenous (n=90)	ACB (n=57)	L. American (n=161)	African (n=88)	S/SE Asian (n=100)	E. Asian (n=96)
Median Age	32	38	32	32	33	26	29
Income <30k/yr	59.9%	84.7%	64.3%	79.1%	74.0%	69.2%	58.2%
Unemployed	38.6%	63.4%	33.4%	37.7%	54.0%	17.2%	40.4%
Post-secondary education	73.1%	55.5%	94.1%	89.0%	89.6%	84.1%	90.5%
HIV-Positive	17.3%	35.9%	20.5%	10.3%	10.3%	4.8%	3.9%
Has a Doctor	64.6%	57.1%	54.8%	58.5%	65.4%	42.8%	72.1%
Out to doctor	54.3%	53.2%	35.7%	39.2%	51.9%	23.0%	33.7%
Anxiety Diagnosis	35.1%	41.1%	35.7%	26.8%	27.2%	24.3%	30.4%
Major Depressive Diagnosis	18.8%	12.5%	15.5%	14.4%	18.4%	13.4%	7.9%

^{*}Proportions are RDS-II adjusted

Figure 2. Odds of reporting anxious symptoms by ethnicity (univariate model with 95%CI)



Figure 3. Adjusted Odds of reporting anxious symptoms compared to White gbMSM (95%CI)

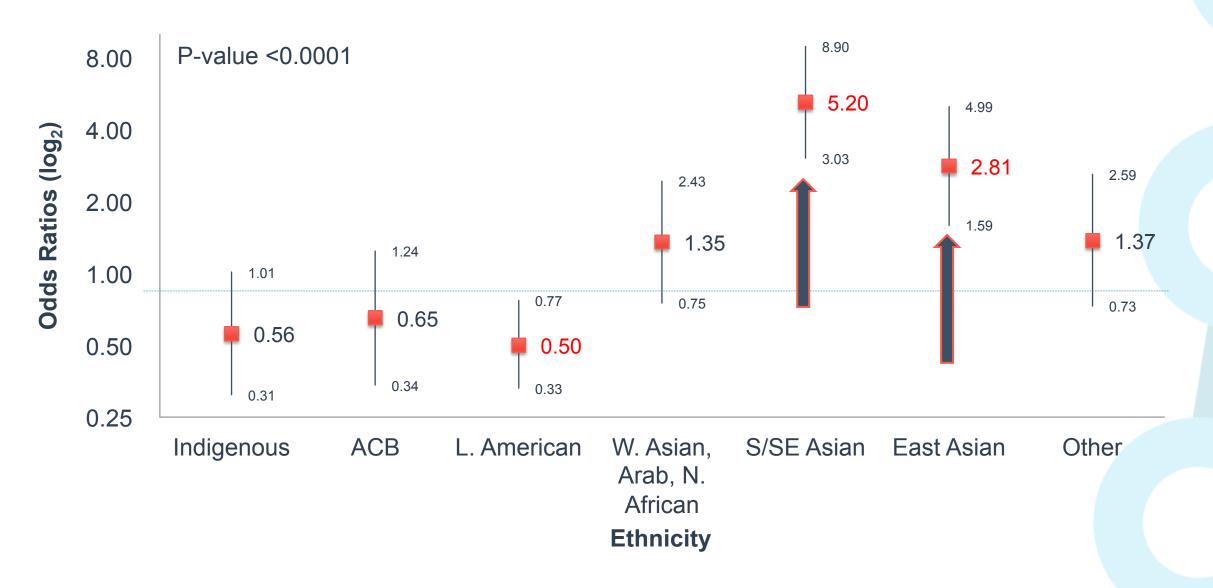


Figure 4. Odds of reporting depressive symptoms by ethnicity (univariate model with 95%CI)

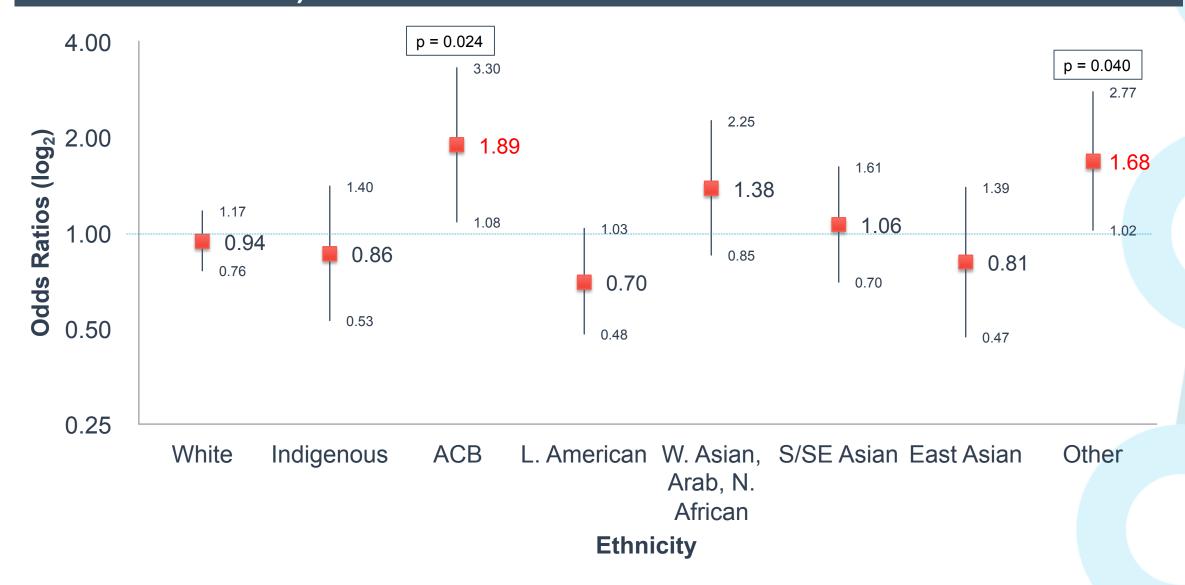
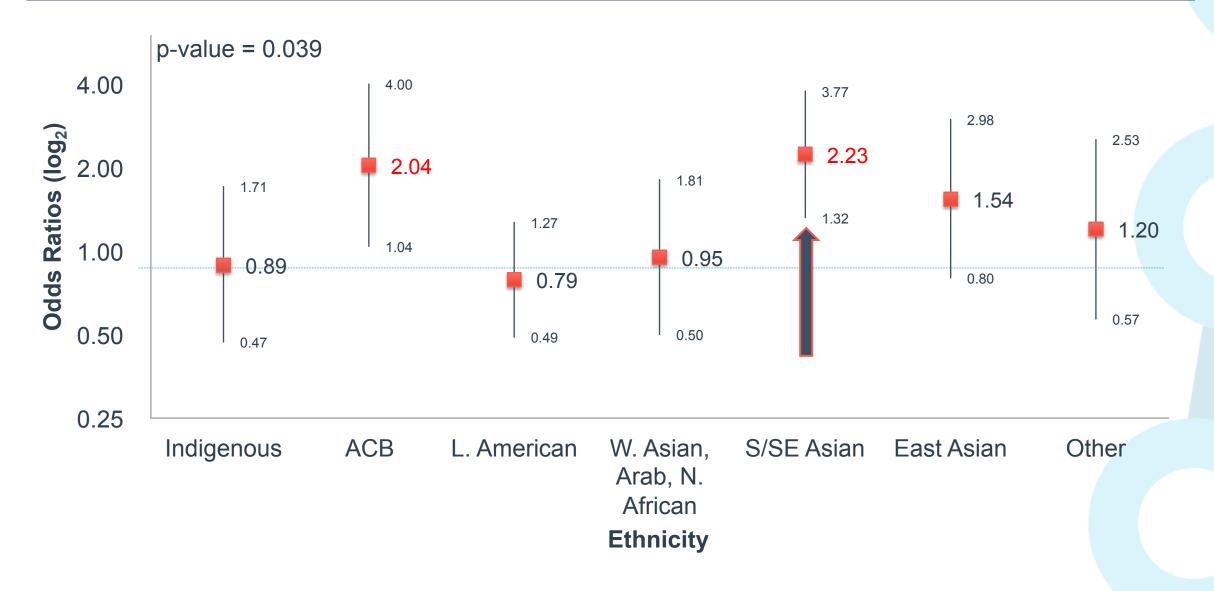


Figure 5. Adjusted Odds of reporting depressive symptoms compared to White gbMSM (95%CI)



Discussion

- ► Findings suggest significant ethno-racial variation in anxiety and depression symptoms
- ➤ South and South-East Asian men were significantly the most likely to score high on the anxiety subscale however they reported the least lifetime anxiety diagnoses
 - ► Limited access to culturally relevant services?
 - Mental health stigma/social desirability bias?

Discussion (cont'd)

- ► ACB and S/SE Asian men were the most likely to report symptoms of depression
- ▶ Latin American men were consistently the least likely to report anxiety and depression symptom
- No significant differences found for Indigenous and W. Asian, Arab and N. African men
 - ► <u>Note</u>: Indigenous men had highest rate of prior anxiety diagnoses: Desirability bias? Resilience?

Strengths and Limitations

- Strengths
 - ► Ethnicity was intentionally factored into seed selection
 - Respondent Driven Sampling



- difficulty engaging Indigenous and other People of Colour (IPOC) in research
- questionnaire limitations
- cross-sectional vs. longitudinal



Conclusions

- Mental wellness is a critical healthcare issue for gbMSM
 - ► Anxiety for East, South and South-East Asian men
 - ▶ Depression for African Caribbean and Black men and S/SE Asian Men
- Further research using race and intersectionality as primary lenses is needed
 - address reasons for lack of IPOC engagement in research
 - allyship by supporting increased visibility of IPOC researchers, trainees and students
- "Nothing about us without us!"
- Culturally relevant interventions focusing on minority stress would be valuable

Acknowledgements

Community & Public Health Partners



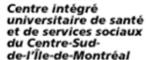


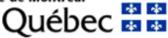




























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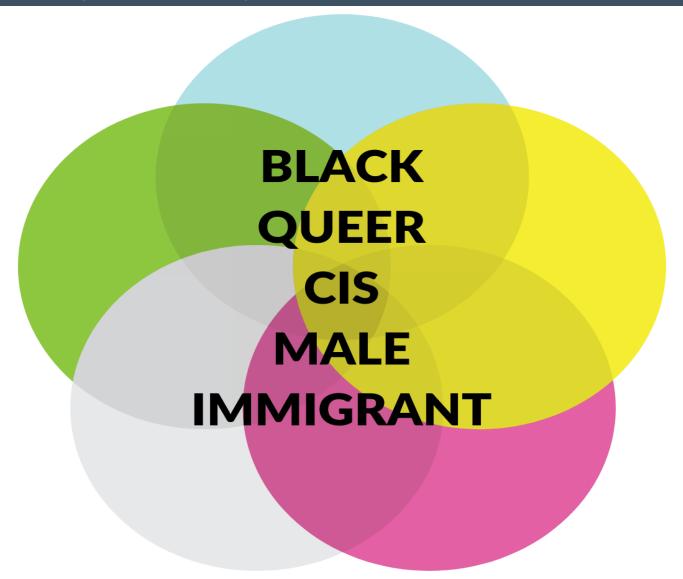


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Intersectionality Theory



Mental Health for People of Colour (POC)

- ➤ Research shows that POC are less likely to utilize mental health services Anglin, DM. AJCP 2008; 42:17
- Community resilience from repeated exposure to adversity might mitigate the effects of minority stress on mental wellness or affect its reporting Herrick, AL. AIDS Behav. 2014; 18:1
 - ► Instead, POC may rely on diverse community affiliation to manage minority stress McConnell E. 2017

Stigma associated with seeking help, especially men Satcher D. AJPH 2003; 93:707

Methods: Community Consultation

Themes from the consultation included:

- ▶ Identity, community, racism, fetishization, relationships and sex
- Coming out and social disintegration
- Substance use
- ► HIV prevention access and use (PrEP)

Future Work

- Further community consultation
- Engage study data
 - ► LGBT POC Microagressions scale included
 - ► Longitudinal studies on mental wellness trends and impact on HIV/STIs risk
- Qualitative studies looking at factors behind anxiety and depression by race/ethnicity
 - ► Are communal vs. individualistic constructs important?
 - How does resilience impact these outcomes? What about community connectedness?

Results: Univariate Analyses (dummy variables)

	Anxious Symptoms		Depressive Symptoms	
Ethnicity	Univariate OR (95% CI)	p-Value	Univariate OR (95% CI)	p-Value
White (n=1518)	0.77 (0.64-0.98)	0.007	0.94 (0.76-1.17)	0.589
Indigenous (n=90)	0.67 (0.45-1.01)	0.056	0.86 (0.53-1.40)	0.544
African, Caribbean, Black (n=57)	0.80 (0.47-1.37)	0.422	1.89 (1.08-3.30)	0.024
Latin American (n=161)	0.59 (0.44-0.80)	0.001	0.70 (0.48-1.03)	0.067
West Asian, Arab, North African (n=88)	1.37 (0.86-2.20)	0.183	1.38 (0.85-2.25)	0.191
South Asian, South-East Asian (n=100)	3.98 (2.54-6.23)	<0.0001	1.06 (0.70-1.61)	0.773
East Asian (n=96)	2.03 (1.26-3.25)	0.003	0.81 (0.47-1.39)	0.440
Other (including "other", Pacific, or mixed race/ethnicity) (n=71)	1.74 (1.05-2.88)	0.029	1.68 (1.02-2.77)	0.040

RESULTS: Mental Health Symptoms

► Confounding model w/o selection

	Anxiou	s Symptoms	Depressive Symptoms		
Ethnicity (reference group: White)	Odds Ratio	95% Confidence Interval	Odds Ratio	95% Confidence Interval	
Indigenous (n=90)	0.56	0.31 - 1.01	0.89	0.47 – 1.71	
African, Caribbean, Black (n=57)	0.65	0.34 – 1.24	2.04	1.04 – 4.00	
Latin American (n=161)	0.50	0.33 - 0.77	0.79	0.49 – 1.27	
West Asian, Arab, North African (n=88)	1.35	0.75 – 2.43	0.95	0.50 – 1.81	
South Asian, South-East Asian (n=100)	5.20	3.03 – 8.90	2.23	1.32 – 3.77	
East Asian (n=96)	2.81	1.59 – 4.99	1.54	0.80 - 2.98	
Other (including "other", Pacific, or mixed race/ethnicity) (n=71)	1.37	0.73 – 2.59	1.20	0.57 – 2.53	

REFERENCES

- Social Structure, Living Conditions, and Health." *Social Determinants of Health: Canadian Perspectives*, by Dennis Raphael, Canadian Scholars' Press Inc., 2016, pp. 31–31.
- Lachowsky et al. (2017) "Lifetime Doctor-Diagnosed Mental Health Conditions and Current Substance Use Among Gay and Bisexual Men Living in Vancouver, Canada."
- Dentato et al. (2013) "Minority Stress Theory: An Examination of Factors Surrounding Sexual Risk Behavior among Gay & Bisexual Men Who Use Club Drugs."
- Carastathis, A. (2014).\ "The concept of intersectionality in feminist theory."
- Hankivsky & Christoffersen (2008) "Intersectionality and the determinants of health: a Canadian perspective"
- Anglin, DM. et al. (2008) "Racial Differences in Beliefs About the Effectiveness and Necessity of Mental Health Treatment."
- Herrick, A. L. et al (2014). Resilience as a Research Framework and as a Cornerstone of Prevention Research for Gay and Bisexual Men: Theory and Evidence.
- McConnell, E. (2017) "People of Color Experience Discrimination Within LGBT Spaces"
- ▶ Satcher, D (2003) "Overlooked and Underserved: Improving the Health of Men of Color."
- ▶ Chiu, M. (2017) "Ethnic Differences in Mental Health and Race-Based Data Collection."
- Vang et al (2017) Are immigrants healthier than native-born Canadians? A systematic review of the healthy immigrant effect in Canada