Psychological distress among Aboriginal participants in the Ontario HIV Treatment Network Cohort Study (OCS)

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Visioning Health: Indigenous Issues, Indigenous Methodologies
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OHTN Cohort Study

OHTN 2013 RESEARCH CONFERENCE
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CHANGING THE COURSE OF THE HIV PREVENTION, ENGAGEMENT AND TREATMENT CASCADE

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1 – Ontario HIV Treatment Network; 2 - University of Toronto 3 – Lakehead University; 4 - 2-Spirited People of the 1st Nations 5 – Women's College Hospital;; 6 – AIDS Bureau, Ministry of Health and Long Term Care

OHTN

Acknowledgement

- Traditional territory of the Mississauga of the New Credit

Background

- Psychological distress results from a combination of depression, anxiety and perceived stress
- Can be experienced as sadness, anxiety, distraction and psychotic symptoms
- May interfere with activities of daily living
- ↑ mental health → ↑ physical health
- Better quality of life

Aboriginal People with HIV

- Concern that Aboriginal people may have higher levels of psychological distress
  - Historical trauma
  - Higher rates of injection drug and alcohol use
  - Lower levels of education, employment and income
  - More likely to be unstably housed
  - Stress associated with diagnosis and related circumstances (e.g. financial concerns, isolation, discrimination)

Objective

- Determine the level of psychological distress among Aboriginal people with HIV
- Compare the level of psychological distress between Aboriginal and non-Aboriginal people who have entered care in specialty HIV clinics

What is the OHTN Cohort Study (OCS)?

- Community-governed, anonymous, open dynamic cohort of persons living with HIV who are in care in Ontario
- Over 6,100 participants recruited from specialized HIV clinics and primary care practices throughout Ontario since 1996
- Over 400 Aboriginal participants
- Primary data collection from medical records and participant interviews
- Data linkage with external administrative health databases (Public Health Ontario Laboratories)

Methods

- Kessler Psychological Distress scale (K10)
  1. Did you feel tired out for no good reason?
  2. Did you feel nervous?
  3. Did you feel so nervous that nothing could calm you down?
  4. Did you feel hopeless?
  5. Did you feel restless or fidgety?
  6. Did you feel so restless that you could not sit still?
  7. Did you feel depressed?
  8. Did you feel that everything was an effort?
  9. Did you feel so sad that nothing could cheer you up?
  10. Did you feel worthless?

Methods

- Levels of psychological distress
  - 0-19 likely to be well
  - 20-24 mild mental disorder
  - 25-29 moderate mental disorder
  - ≥ 30 severe mental disorder

- Dichotomized response[1]
  - 0-19 likely to be well
  - ≥20 signs of psychological distress

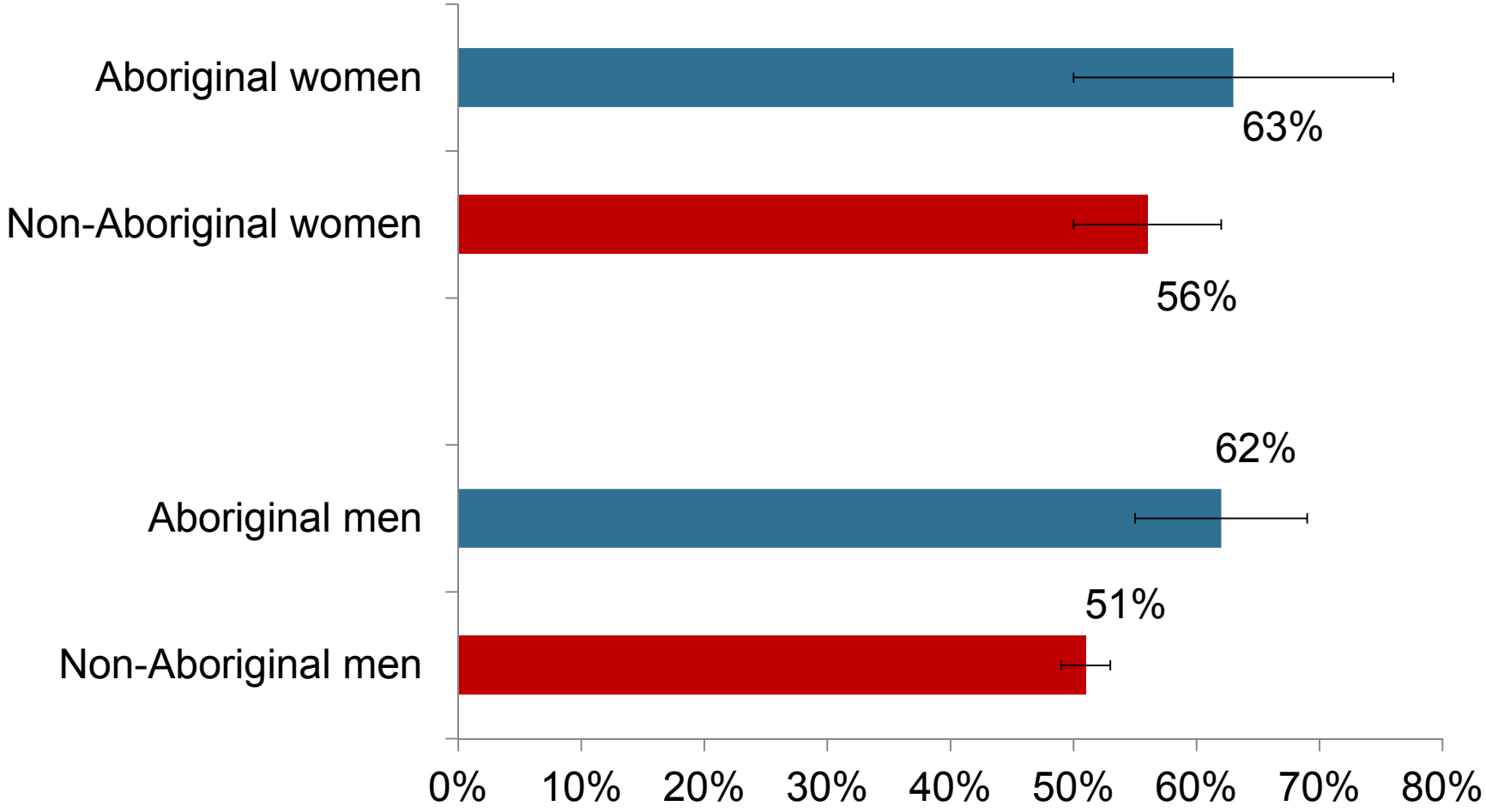
1. Schrier et al. *BMC Public Health* 2012, 12: 1090

Methods

- Levels of psychological distress were measured at annual interviews from 2007-2012

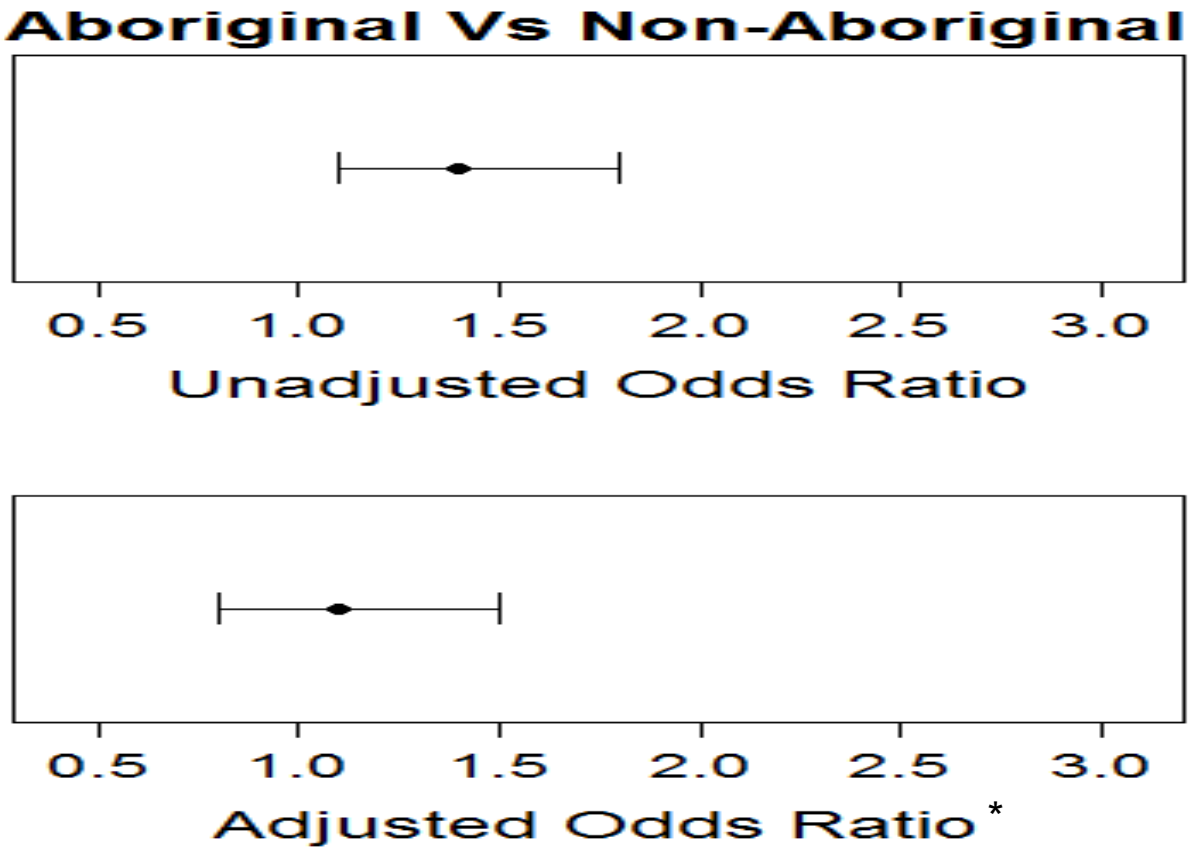
- K10 scores compared between Aboriginal (206 males and 52 females) and non-Aboriginal participants using Chi-square tests and logistic regression using GEE to account for repeated events

Proportion with K10 scores suggesting psychological distress



Effect of Aboriginal ethnicity on distress

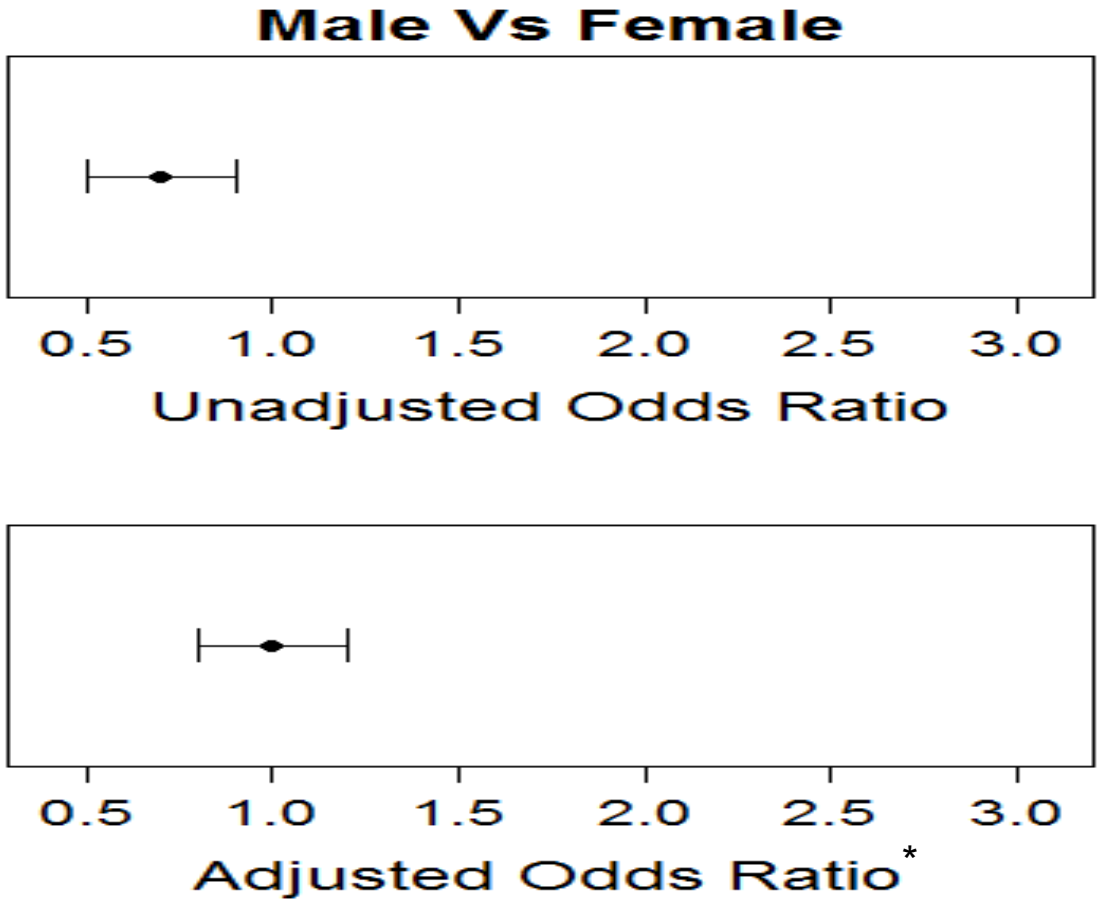
Aboriginal people are more likely to have distress, but the difference is minimized after accounting for history of injection drug use and SES



*Adjusted for age, sex, employment status, income and history of injection drug use

Sex differences in distress

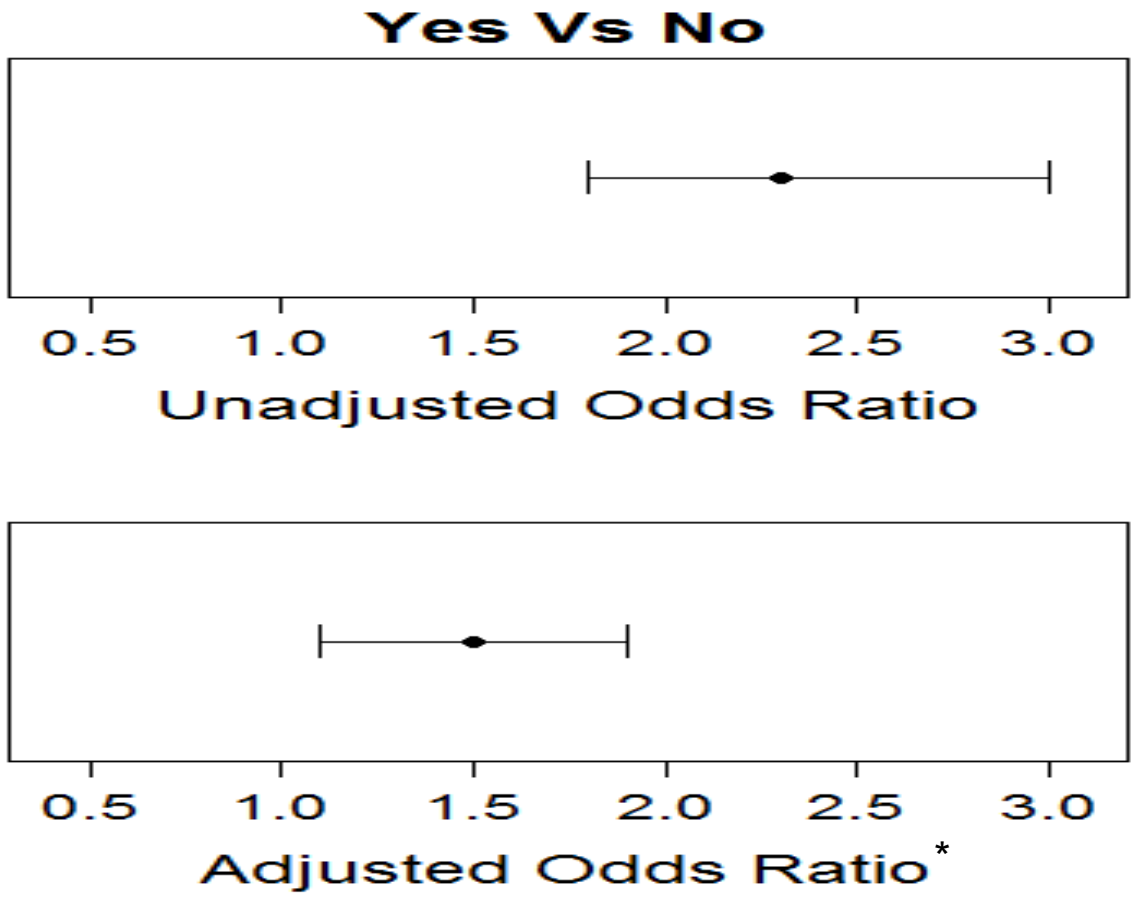
Females are more likely to have distress, but there is no difference after accounting for history of injection drug use and SES



*Adjusted for age, ethnicity, employment status, income and history of injection drug use

Differences in distress by injection drug use history

Participants who report a history of injection drug use are more likely to have distress, but the difference is minimized after accounting for SES



*Adjusted for age, ethnicity, employment status, income and sex

Limitations

- All OCS participants in HIV care →
  - Absolute burden of distress may be higher for people who are not in care
  - Ethnic differences may be different for persons not in care

Summary

- Burden of psychological distress higher among Aboriginal people with HIV compared to:
  - non-Aboriginal people with HIV
  - Two times higher than First Nations people who participated in Phase 2 of the Regional Health Survey [1]

1. Chiefs of Ontario. First Nations Regional Longitudinal Health Survey (RHS) Phase 2 (2008-2010) 2012.

Summary

- Differences between Aboriginal and non-Aboriginal participants were explained by lower socioeconomic status and more common histories of injection drug use

a3

Next Steps

- Explore interventions for Aboriginal people with HIV that may help alleviate psychological distress
  - Mental health services
  - Substance use services
    - Art therapy [1]
    - Traditional dances, ceremonies and spiritual practices – Culture is treatment and all healing is spiritual [2]

1. Bien, M. B. *Journal of Psychoactive Drugs 2005, 37(3): 281*
2. McCormick, R. Canadian Journal of Counselling 2000, 34(1): 25

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a3 People may wonder about root causes of distress that cannot be addressed directly by the individual patient with systemic, structural, and/or political changes --- be prepared to answer such questions

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CIHR New Investigator salary award to ANB
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Data Linkage

Public Health Ontario Laboratories

Results

Variable	OR (95% CI)	AOR (95% CI)
Ethnicity		
Aboriginal Vs non-Aboriginal	**1.4 (1.1-1.8)**	a4 1.1 (0.8-1.5)
Sex		
Male Vs Female	**0.7 (0.5-0.9)**	1.0 (0.8-1.2)
Age		
<30 Vs 30-49	1.2 (0.9-1.8)	1.2 (0.8-1.7)
<30 Vs ≥50	**1.9 (1.3-2.8)**	**2.1 (1.5-3.1)**
30-49 Vs ≥50	1.3 (0.5-1.8)	**1.8 (1.5-2.1)**
Injection Drug Use		
Yes Vs No	**2.3 (1.8-3.0)**	**1.5 (1.1-1.9)**
Income		
<$20,000 Vs $20,000-49,999	**1.8 (1.5-2.2)**	**1.4 (1.1-1.6)**
<$20,000 Vs $50,000-79,999	**2.9 (2.4-3.6)**	**1.8 (1.5-2.3)**
<$20,000 Vs ≥$80,000	**4.1 (3.3-5.0)**	**2.4 (1.9-3.1)**
$20,000-49,999 Vs $50,000-79,999	**1.6 (1.3-1.9)**	**1.4 (1.1-1.7)**
$20,000-49,999 Vs ≥$80,000	**2.2 (1.8-2.7)**	**1.8 (1.5-2.2)**
$50,000-79,999 Vs ≥$80,000	**1.4 (1.1-1.7)**	**1.3 (1.1-1.6)**
Employment Status		
Unemployed Vs Employed	**2.7 (2.3-3.1)**	**2.2 (1.8-2.5)**

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a4 What factors were largely responsible for the Aboriginal association in unadjusted model? That is, what were the main confounders?

Slide is a bit busy, especially for this audience. Perhaps show unadjusted & adjusted, with footnote listing variables you adjusted for?

You could have table as an extra slide if needed?

OK, now that I see subsequent slides, perhaps you don't need this table at all, and should just have on hand if asked a detailed question.

ann, 11/13/2013