

# Disjunction between self-perceived and clinically-assessed HIV risk among urban gay, bisexual, other men who have sex with men (GBM) in Ontario and British Columbia

**Oscar Javier Pico-Espinosa<sup>1</sup>, Mark Hull<sup>2</sup>, Paul MacPherson<sup>3</sup>, Daniel Grace<sup>4</sup>, Mark Gaspar<sup>4</sup>, Kevin Woodward<sup>5</sup>, Nathan Lachowsky<sup>6</sup>, Saira Mohammed<sup>2</sup>, Karla Fisher<sup>7</sup>, Simon Rayek<sup>8</sup>, Camille Arkell<sup>9</sup>, Tyllin Cordeiro<sup>10</sup>, Garfield Durrant<sup>11</sup>, Warren Greene<sup>12</sup>, David Hall<sup>13</sup>, Matthew Harding<sup>14</sup>, Jody Jollimore<sup>15</sup>, Marshall Kilduff<sup>16</sup>, John Maxwell<sup>17</sup>, Leo Mitterni<sup>18</sup>, Eric Peters<sup>19</sup>, Robinson Truong<sup>1</sup>, Darrell H. S. Tan<sup>1</sup>**

1. St Michael's Hospital, Toronto ON; 2. BC Centre for Excellence in HIV/AIDS, Vancouver BC; 3. University of Ottawa, Ottawa ON; 4. University of Toronto, Toronto ON; 5. McMaster University, Hamilton ON; 6. University of Victoria, Victoria BC; 7. Toronto General Hospital, Toronto ON; 8. Health Initiative for Men, Vancouver BC; 9. Canadian AIDS Treatment Information Exchange (CATIE), Toronto ON; 10. Alliance for South Asian AIDS Prevention (ASAAP), Toronto ON; 11. Black Coalition for AIDS Prevention (Black CAP), Toronto ON; 12. Canadian Aboriginal AIDS Network, Fort Qu'Apelle SK; 13. Vancouver Coastal Health, Vancouver, BC, Canada; 14. MAX Ottawa, Ottawa ON; 15. Community-Based Research Centre, Vancouver BC; 16. AVI Health and Community Services, Victoria BC; 17. AIDS Committee of Toronto, Toronto ON; 18. Hassle Free Clinic, Toronto ON; 19. The Gay Men's Sexual Health Alliance, Toronto ON



## Background

- Individuals' self-perception of HIV risk does not always align with the risk assessments generated by clinical screening tools.
- We compared self-perceived versus clinically assessed risk of HIV and reasons for perceived low risk among GBM from large cities in Ontario and British Columbia.

## Methods

- Cross-sectional survey between July/2019 and August/2020
- Never PrEP users
- We contrasted self-assessed HIV risk against criteria from the Canadian PrEP guideline: condomless anal sex in the past six months with any of the following:
  - HIRI-MSM score  $\geq 11$
  - Syphilis
  - Rectal gonorrhea/chlamydia
  - Post-exposure prophylaxis (PEP) use  $\geq 2$

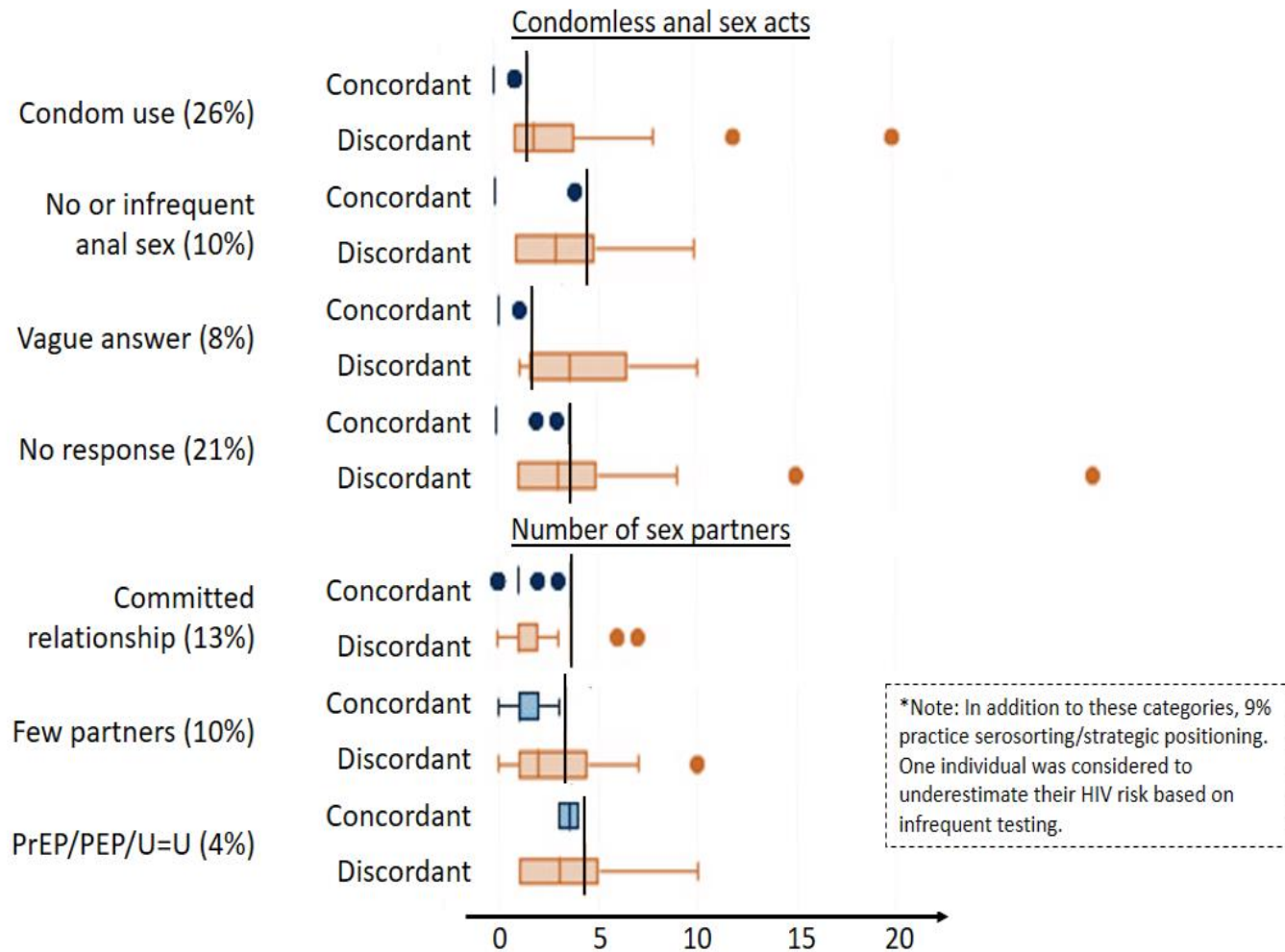
## Methods – continued

- Participants provided a written explanation of their self-assessment, including their strategies to avoid HIV infection.
- Responses were analyzed using content analysis.
- The resulting themes were compared with number of sex partners and number of condomless anal sex acts; those with numbers exceeding the highest values of their peers, were considered to be possibly underestimating their HIV risk.

## Results

- Of 315 participants who perceived themselves to be at low risk, 146 (46%) were considered at high risk based on criteria from the Canadian PrEP guideline (labeled “discordant”).
- Reasons for perceiving themselves at low risk of HIV in the discordant group included: condom use, being in a committed relationship/having one main partner, no or infrequent anal sex and having few partners. We estimated that 39% may, possibly, underestimate their HIV risk.

# Results - continued



# Conclusions

- More efforts to increase GBM’s HIV risk awareness and of evidence-based HIV prevention options are needed. Contextualizing individuals’ sexual behaviours in relation to that of their peers could aid efforts to increase PrEP uptake.

# Funding