



# Exploring the Efficacy of FOXY and SMASH Arts-based HIV Prevention strategies with Northern and Indigenous Youth: Implications for Tailored HIV Prevention

Candice Lys, Carmen Logie, Kayley  
Inuksuk Mackay, Nancy MacNeill,  
Abdool Yasseen



# Background and Research Question

- ▶ The Northwest Territories (NWT) is home to among Canada's highest rates of sexually transmitted infections (STI)
  - ▶ In 2015, gonorrhea rates were 14 times higher in NWT than in all of Canada<sup>1</sup>
  - ▶ In 2015, chlamydia rates were 6 times higher in NWT than in all of Canada<sup>2</sup>
- ▶ Nationally, rates of HIV are higher among Indigenous populations than non-Indigenous populations<sup>3</sup>
- ▶ These inequities are rooted in intergenerational trauma and effects of colonization<sup>4</sup>
- ▶ Gap in research: limited knowledge of efficacious approaches for HIV prevention among Indigenous and Northern young men and women in the Northwest Territories (NWT)
- ▶ Study aim: to explore the effectiveness of arts-based HIV/STI prevention workshops to increase HIV/STI knowledge and safer sex-self-efficacy (SSSE) among Northern and Indigenous youth in the NWT



# Methods and Analysis

- ▶ Methods
  - ▶ School-based arts-based HIV/STI prevention workshops in 17 NWT communities
- ▶ Population and sample size:
  - ▶ 610 participants (mean age 12.2 [SD: 1.5], 49.5% cisgender women, 48.9% cisgender men) and most (73.3%) were Indigenous
- ▶ Analysis:
  - ▶ Conducted pre- and post-test surveys to assess STI knowledge and SSSE scores using validated instruments
  - ▶ Descriptive statistics explored differences in STI knowledge and SSSE scores pre-post workshop, with statistical comparisons made using a paired student's t-test
  - ▶ To account for the effect of baseline differences in STI knowledge and SSSE scores, used multivariable regression models adjusting for socio-demographic variables
  - ▶ Conducted sensitivity analyses stratified by age and gender



# Results and Implications

- ▶ Results:

- ▶ After accounting for baseline differences, there was a 6.2 point (CI: 5.4, 7.0,  $p < 0.001$ ) increase in STI knowledge, and a 1.8 point (CI: 1.10, 2.52) increase in SSSE scores between pre- and post-test scores
- ▶ Some subgroups shows no statistically significant differences between pre- and post-test scores:
  - ▶  $\geq 15$  years (difference: 0.04,  $p = 0.689$ )
  - ▶ Those who were sexually active (difference: -0.26,  $p = 0.968$ )
  - ▶ Those who use alcohol/drugs (difference: -0.26,  $p = 0.340$ )
- ▶ Increased STI knowledge scores were significantly higher among younger age groups (<15 year old vs. >15)
- ▶ SSSE scores revealed greater increases among women than men

- ▶ Implications:

- ▶ This study provides novel findings regarding the efficacy of arts-based strategies for increasing STI knowledge and SSSE among Northern and Indigenous youth
- ▶ Future research should tailor HIV/STI prevention for age, gender, alcohol and drug use, and sexual experience in the NWT

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Contact info:  
Candice Lys, PhD, M.S.M.  
Co-Founder & Executive Director, FOXY/SMASH  
[candice@arcticfoxy.com](mailto:candice@arcticfoxy.com)

The authors have no conflicts of interest to declare

References: 1. Choudhri Y, Miller J, Sandhu J, Leon A, Aho J. Gonorrhoea in Canada, 2010–2015. Canada Communicable Disease Report. 2018 Feb 1;44(2):37–42. 2. Choudhri Y, Miller J, Sandhu J, Leon A, Aho J. Chlamydia in Canada, 2010–2015. Canada Communicable Disease Report. 2018 Feb 1;44(2):49–54. 3. Haddad N, Robert A, Weeks A, Popovic N, Siu W, Archibald C. HIV in Canada—Surveillance Report, 2018. CCDC. 2019 Dec 5;45(12):304–12. 4. Smylie J, Firestone M. Chapter 19: The Health of Indigenous Peoples. In: Social determinants of health: Canadian perspectives. Third edition. Toronto: Canadian Scholars' Press Inc; 2016. p. 434–69; Flicker S, Wilson C, Monchalin R, Oliver V, Prentice T, Jackson R, et al. "Stay Strong, Stay Sexy, Stay Native": Storying Indigenous youth HIV prevention activism. Action Research. 2019 Sep 1;17(3):323–43.

