Clinical Sciences - Poster Abstracts / Sciences cliniques - Abrégés affiches

Abstract #11

Receipt of mpox vaccine among gay, bisexual, and other men who have sex with men living with HIV: Findings from the Ontario HIV Treatment Network Cohort Study

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Background: Gay, bisexual, and other men who have sex with men (GBMSM) have experienced a disproportionate burden of the mpox outbreak that started in 2022. GBMSM who meet the eligibility criteria (i.e., sexually transmitted infection [STI] in the past year, have two or more sexual partners, and attend venues for sexual contact, or have anonymous sex) were prioritized for publicly funded mpox vaccination (two-dose series). We identified factors associated with receipt of mpox vaccine among GBMSM living with HIV and receiving HIV care in Ontario.

Methods: Using annual questionnaires (2023-2024) from the Ontario HIV Treatment Network Cohort Study (OCS), we measured self-reported receipt of mpox vaccine. We used a modified Poisson regression to calculate prevalence ratios and 95% confidence intervals adjusted for age, education, and OCS site in the entire sample and a subset who were eligible for publicly funded vaccination.

Results: Of the 1518 GBMSM included in the sample (median age: 58 years; 72% white; 66% born in Canada; 73% in Toronto area), 607 (40.0%) had received ≥1 dose; among one-dose recipients, 330 (54.4%) completed the two-dose series. There was higher receipt of mpox vaccine (≥1 dose) among GBMSM who were born in Canada, received care in Toronto or Ottawa, had CD4 cells count of ≥500 cells/mm3, had higher income, used recreational drugs, were concerned about mpox, had been diagnosed with a STI, had multiple sexual partners, sought sexual partners from sex venues or using dating apps/websites, and had received other vaccines. Findings were similar among the 576 GBMSM who were eligible for publicly funded vaccination although receipt of ≥1 dose was higher (58.9%) than the entire sample.

Discussion: Tailored strategies that address low risk perceptions, promote equitable vaccine access and uptake, and ensure completion of the two-dose series are needed given the ongoing mpox virus transmission in Ontario.

Uptake of Mpox Vaccine among Gay, Bisexual and Other Men who Have Sex with Men Living with HIV in Ontario: Findings from the Ontario HIV Treatment Network Cohort Study

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Background

- Gay, bisexual, and other men who have sex with men (GBM) have experienced a disproportionate burden of the mpox outbreak that started in May 2022.
- In response to the outbreak, the first dose mpox vaccine was rolled out a month later (June 2022) and the second dose became available in September 2022 following a dose sparing strategy.
- GBM who meet the eligibility criteria (e.g., sexually transmitted infection in the past year, have ≥2 sexual partners, and attend venues for sexual contact, or have anonymous sex) were prioritized for publicly funded 2-dose mpox vaccination.
- Our objectives were to estimate uptake of mpox vaccine and identify factors associated with receipt of mpox vaccine among GBM living with HIV and receiving HIV care in Ontario.

Methods

- Receipt of mpox vaccine was assessed using annual questionnaires (2023-2024) from the Ontario HIV Treatment Network Cohort Study (OCS).
- We used a modified Poisson regression to calculate prevalence ratios and 95% confidence intervals adjusted for age, education, and/or OCS site.
- Regression analyses were repeated on a subset of the sample who were eligible for publicly funded vaccination (n=576).

Results

- Study sample included 1518 GBM who completed the OCS questionnaire in 2023 and 2024 (median age: 58 years; 72% white; 66% born in Canada; 73% in Toronto area).
- Of the 1518, 607 (40.0%) had received ≥1 dose and 330 (22%) had received ≥2 doses (Figure 1).

Figure 1. Receipt of mpox vaccine among GBM OCS participants

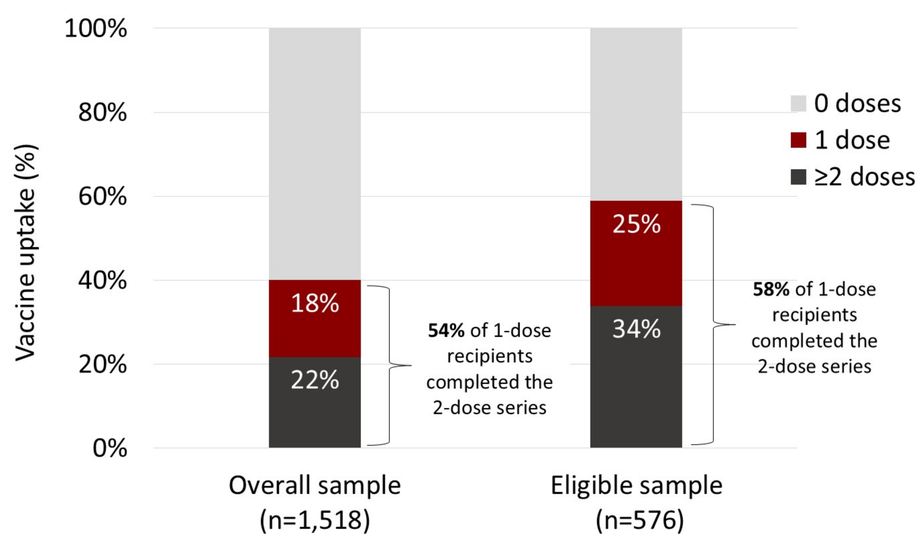

Table 1. Receipt of mpox vaccine (≥1 dose) among GBM OCS participants by selected demographic and sexual characteristics

Characteristics	Overall sample (N=1516)	Eligible sample (N=576)
	%	%
Age in years		
<30	52.5	46.7
30-39	44.4	52.3
40-49	48.9	58.7
50-59	44.5	63.9
60-69	31.7	57.7
≥70	35.4	71.4
Education		
High school completion or lower	27.3	37.8
Trade/Technical/College/Some Univ.	35.5	52.1
Completed university	50.1	71.7
Region of OCS site		
Ottawa	39.2	57.9
Toronto	44.5	66.3
Rest of Ontario	23.0	34.2
Number of sexual partners, past 3 months*		
0	30.2	55.3
1	37.5	51.3
≥2	61.3	61.3
Diagnosed with STI, past 12 months*		
No	37.1	57.6
Yes	61.6	61.6
Used sex venues to seek sex partners, past year*		
No	36.8	55.0
Yes	70.6	70.6
Used apps/websites to seek sex partners, past year*		
No	32.5	57.5
Yes	59.3	59.3

*GBM who met one of these criteria were classified as eligible for publicly-funded two-dose mpox vaccination.

- After controlling for age, education, and OCS clinic site, receipt of mpox vaccine was significantly higher among GBM who:
  - were born in Canada
  - received care in Toronto or Ottawa
  - had CD4 cells count of ≥500 cells/mm^3
  - had higher income
  - used recreational drugs
  - were concerned about mpox
  - had been diagnosed with a STI
  - had multiple sexual partners
  - sought sexual partners from sex venues or using dating apps/websites, and had received other vaccines.
- Findings were similar among GBM who were eligible for publicly funded vaccination although receipt of ≥1 dose was higher (58.9%) than the overall sample (Figure 1).

Discussion

- 40% of GBM living with HIV had received ≥1 dose, with higher uptake (59%) among those eligible for publicly funded vaccine.
- Among vaccinated participants, just over half had completed the two-dose series in both the overall and eligible samples.
- Tailored strategies that address low risk perceptions, promote equitable vaccine access and uptake, and ensure completion of the two-dose series are needed.

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ONTARIO HIV TREATMENT NETWORK

Conflict of Interest Disclosure
I have no conflicts of interest.