# Antibiotic prophylaxis for STIs in Australia; an online survey.

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# Background and Aims

- Antibiotic prophylaxis reduces the incidence of sexually transmitted infections (STIs), but there are concerns about the safety and feasibility of its implementation.

- We conducted an online survey to quantify current use of and interest in antibiotic prophylaxis among Australian gay, bisexual and other men who have sex with men (MSM).

# Methods

- Online survey conducted between June and December 2018.
- Promoted through online gay community organisations and through Melbourne Sexual Health Centre.
- Used multinomial multivariate logistic regression analyses to analyse responses from participants who:
  1. Had used AB prophylaxis,
  2. Had not used AB prophylaxis but reported being likely to use it if this strategy were effective,
  3. Were not likely to use AB prophylaxis.

# Results – Users of AB Prophylaxis

517 participants

Compared to participants who were not likely to use AB prophylaxis, participants who had used AB prophylaxis:

- Were older (Mdn 43y *vs* 34y; p=0.018)
- Had more casual sexual partners (Mdn 14 vs 5 in last 6 months; p=0.002)
- More commonly had group sex (64.7% vs 42.1%; p = 0.003)
- More commonly on HIV PrEP (66.2% vs 35.7%; p<0.001).
- More commonly had an STI in last 12 months (57.4% vs 31.0%; p<0.001)

# Associations with use of AB prophylaxis

- In multivariate analysis, use of AB prophylaxis was associated with:
  - Being older than 35y (aOR 2.67; p=0.006)
  - GHB use during sex (aOR 3.04; p=0.049)
  - Current PrEP use (aOR 3.35; p=0.002)

  After adjusting for survey recruitment method (MSHC vs online), country of birth, and number of casual sexual partners.

# Reasons for using AB prophylaxis

- Compared to men who were not likely to use AB prophylaxis, users of AB prophylaxis reported:
  - Greater distress associated with STI risk (aOR 1.62, p=0.002)
  - Greater dissatisfaction with needing to attend STI clinics for treatment (aOR 1.59, p<0.001)
  - Less concern about the risk of AB resistance (aOR 0.69, p<0.001)
  - Greater belief in the effectiveness of AB prophylaxis (aOR 2.04, p<0.001).
- No difference in beliefs around condom effectiveness, STI stigma, risk of STI transmission to sexual partners, or risk of adverse effects from antibiotics.

# Conclusions

- 13% of 517 participants had used antibiotics to prevent STIs.
- 63% of participants reported being likely to use antibiotics to prevent STIs, if this strategy were effective.
- Participants who had used antibiotic prophylaxis had high rates of STIs and STI risk factors, indicating that this strategy is most attractive to those MSM who are at greatest need for STI protection.
- This strategy urgently needs more research attention to determine its safety.

# Thank you!



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