



Crystal Methamphetamine Use Predicts Subsequent STIs Among Gay, Bisexual, and Other Men Who Have Sex With Men (GBM)

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Background

- ▶ GBM bear a disproportionate burden of crystal methamphetamine (CM) use and bacterial STIs.
- ▶ We examined the association of CM use and diagnosed bacterial STIs among GBM.
- ▶ We also examined whether this association is mediated by negative attitudes toward condoms, escape motives, and sexual behaviours.

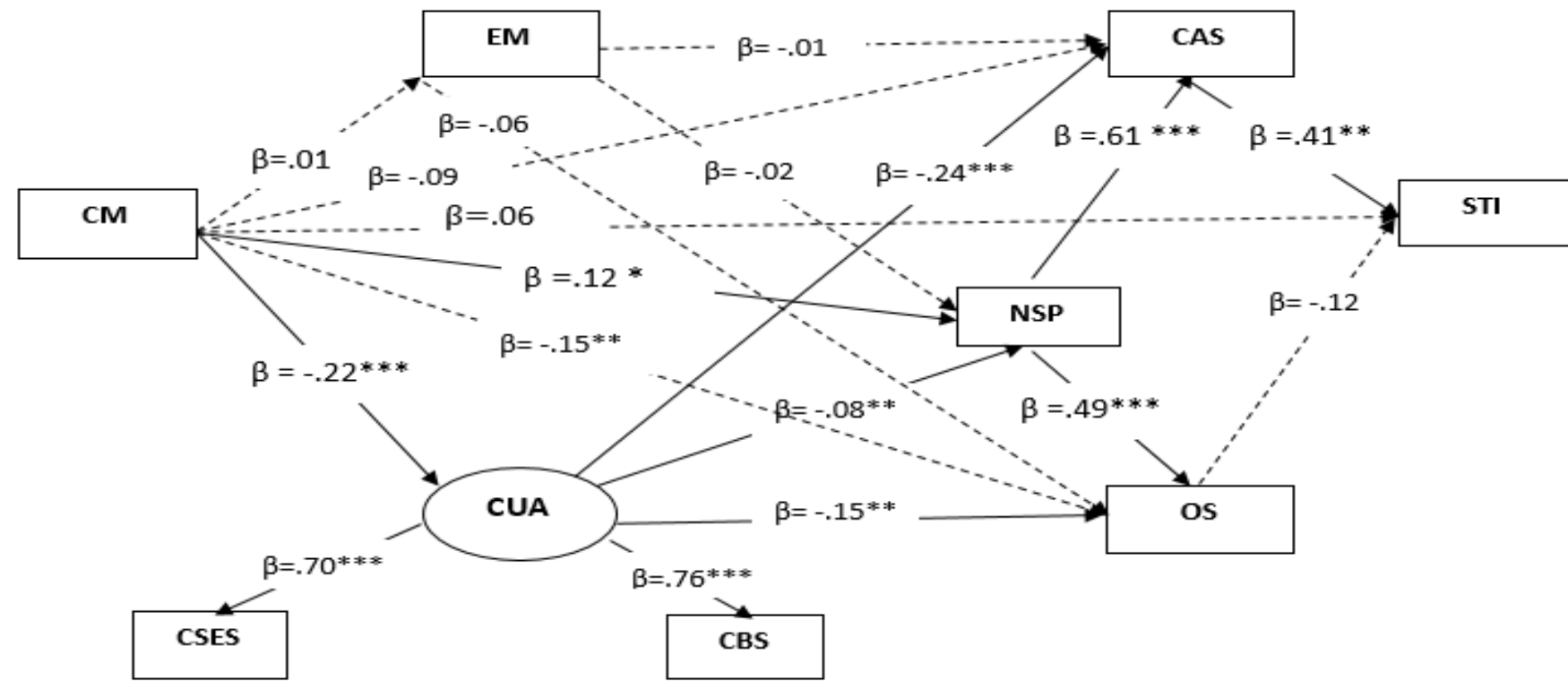
Methods

- ▶ Sexually active GBM, aged ≥ 16 years, were recruited through respondent-driven sampling (RDS) from February 2017 to August 2019.
- ▶ Participants completed a computer-assisted self-interview and tests for HIV, and other bacterial sexually transmitted infections.
- ▶ We fit a structural mediation model on the association between baseline CM use and bacterial STI diagnosis at 1-year study follow-up.
- ▶ We estimated indirect paths from CM use to bacterial STIs via: 1) escape motives, 2) negative attitudes toward condoms at baseline and 3) sexual behaviours at 1-year study follow-up (condomless anal sex [CAS], number of sex partners, and oral sex), adjusting for demographic variables (age, race, and HIV status).

Results

- ▶ We recruited 1179 participants in Montreal, 517 in Toronto, and 753 in Vancouver.
- ▶ Analyses revealed a non-significant direct effect from baseline CM use to STIs at 1-year follow-up in the mediated model ($\beta=.06$; 95%CI, -0.06, 0.16; $p=.35$).
- ▶ There was **one significant indirect path from CM use to STI: CM use to negative attitudes toward condoms to CAS to STIs** ($\beta=.02$; 95%CI, .01, .04; $p=.01$).
- ▶ The model fit the data well (weighted root mean square residual=.032).
- ▶ The Figure presents the structural equation model.

Figure



Conclusions

- ▶ CM use seems to predict subsequent bacterial STIs via negative attitudes toward condoms, which, in turn, is associated with CAS.
- ▶ Interventions to reduce STIs among CM-using GBM should attend to the association between CM use and negative attitudes toward condoms.
- ▶ There is a need to better integrate substance use services with STI/sexual health clinics for GBM.

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