“Chemsex” and High-Risk Sexual Behaviours in HIV-Positive Men Who Have Sex With Men

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BACKGROUND

- In the UK, HIV incidence remains high among men who have sex with men (MSM).
- “Chemsex” refers to the use of drugs to increase sexual disinhibition and arousal. If drugs are injected it is referred to as “slamsex”.
- Chemsex and slamsex may contribute to the transmission of HIV and other sexually transmitted infections (STIs).
- Typical drugs used for both chemsex and slamsex include MCAT, GHB/GBL, crystal meth, and ketamine.
- Despite the recent rise in chemsex among MSM, little is known about the population engaging in it, particularly among HIV+ MSM.

OBJECTIVES

We use self-reported behavioural data from HIV-Positive MSM linked to their clinical viral load (VL) records to:

1. Describe HIV positive MSM who engage in chemsex/slamsex.
2. Determine associations between chemsex/slamsex and sexual risk behaviours, a recent STI diagnosis, and having been diagnosed with hepatitis C.

METHODS

- Positive Voices is a cross-sectional, computer-assisted self-interview (CASi) behavioural and health needs survey. People living with HIV were recruited through a representative sample of 30 HIV clinics in England and Wales between May - November 2014.
- Participants (N=777; MSM n=532) self-reported sexual behaviours, injecting and injecting drug use during, and STI diagnoses over the previous year.
- Nationally weighted population prevalence estimates (with 95% CIs) of chemsex and slamsex were calculated.
- Demographics were compared using the chi-square statistic. Multivariable regressions, based on a directed acyclic graph (Figure 1), were used to examine associations.

RESULTS

Who is engaging in chemsex?

- 105 (29%) of 392 sexually active MSM engaged in chemsex in the previous year, and 35 (10%) in slamsex (Figure 2).
- Compared to other sexually active MSM, MSM who engaged in chemsex were more likely to:
  - Be mostly aged 35-44 (33%) and 45-54 (35%), as opposed to 18-34 (20%) and 55+ (18.9%) (p<0.01).
  - Live in London (37% vs 17%, p<0.004).
  - Have been diagnosed with depression or anxiety (38% vs. 24%, p<0.01).
  - Be current smokers (39% vs. 24%, p<0.001).
  - Use drugs outside of sex (44% vs. 13%, p<0.001).
- Similarly, those participating in slamsex were more likely to:
  - Live in London (13% vs. 6%, p=0.046).
  - Be on ART (19% vs. 9%, p=0.049).
- There were no associations with region of birth, education level, employment, having a main partner, binge drinking, or VL.

Is there an association between chemsex and STI diagnoses?

- 50% of men reported a bacterial STI diagnosis in the previous year, and 9.4% had ever been diagnosed with hepatitis C.
- Chemsex was associated with an increased risk of being diagnosed with:
  - any STI (AOR: 3.42, 95% CI: 1.71-6.83).
  - gonorrhea (AOR: 2.76, 95% CI: 1.31-6.52).
  - hepatitis C (AOR: 6.26, 95% CI: 2.05-19.1).
- Slamsex was associated with increased odds of being diagnosed with:
  - any STI (AOR: 3.85, 95% CI: 1.26-11.8).
  - multiple STIs (AOR: 2.86, 95% CI: 1.48-5.56).
  - chlamydia (AOR: 3.09, 95% CI: 1.11-8.62).
  - hepatitis C (AOR: 9.12, 95% CI: 2.40-34.6).

Is there an association between chemsex and STI diagnoses with a risk of onwards HIV transmission?

- In the previous year, among the 392 sexually active MSM:
  - 77% had unprotected (condomless) anal sex (UAI).
  - 46% had sero-discordant UAI (sdUAI) and
  - 9.2% had sdUAI with a VL ≥50 copies/mL.
- Chemsex was associated with increased:
  - UAI (AOR 6.0, CI:2.9-12.5).
  - sdUAI (AOR 2.9, CI:1.2-6.8).
  - sdUAI with a detectable VL (AOR 7.4, CI:3.0-18.1).
  - average number of partners in the past year (Mean: 30.3 vs. 9.5; Adjusted difference: +15.5, 95% CI:12.18.5).
- Slamsex was associated with increased odds of UAI (AOR 6.3, CI:1.01-39) (Figure 3).

DISCUSSION

- One in three HIV-Positive MSM reported chemsex in the previous year, which was associated with risky sexual behaviours and STI diagnoses.
- Chemsex, but not slamsex was associated with increased odds of sexual risk with a risk of onwards HIV transmission (i.e. sdUAI with a detectable VL).
- Chemsex and slamsex were associated with greatly increased odds of hepatitis C infection.
- Due to the small number of MSM engaging in slamsex, the analyses were underpowered to detect differences between those engaging in slamsex and not.
- Causality cannot be concluded in a cross-sectional survey. However, our results are supported by qualitative research which have found that the chemsex leads people to take risks and engage in behaviours that they would not otherwise.
- Results are limited by the sample size, recall bias in self-reports, and potential non-response bias (39% response rate).

CONCLUSIONS

- These are the first nationally representative estimates of chemsex and slamsex among HIV+ MSM in the UK.
- We show a clear association between chemsex and risky sexual practices.
- Beyond the potential for HIV transmission, chemsex is linked to STI diagnosis including hepatitis C infection.
- Interventions to address the risk of HIV and STI transmission among MSM who use drugs in a sexual context are needed.
- The first full round of Positive Voices is planned for spring 2016 and will allow for repeat analyses with a larger sample.

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REFERENCES