THE RISKS OF HCV AND HIV INCIDENCE AMONG PEOPLE WHO INJECT DRUGS WHO ALSO UNDERTAKE SEX WORK OR MALE-WITH-MALE SEXUAL ACTIVITY: A META-ANALYSIS COMBINING PUBLISHED AND UNPUBLISHED ESTIMATES

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Background:
People who inject drugs (PWID) engage in sexual risk behaviours that may increase HIV and hepatitis C virus (HCV) risk, including sex work and male-with-male sexual activity. We undertook a systematic review to assess whether PWID who recently (previous year) engaged in sex work or male-with-male sexual activity have increased HCV and HIV acquisition risks.

Methods:
We searched relevant databases for HCV and HIV incidence studies among PWID published between 01/01/2000 and 12/12/2022. We contacted studies which reported HIV or HCV incidence, but did not report an association with sex work or male-with-male sex, to request data. We extracted and pooled estimates of the association between recent male-with-male sex or sex work (selling sex only) and HIV or HCV incidence using random-effects meta-analysis. For sex work, we also conducted analyses gender-stratified analyses. We used adjusted estimates if reported, otherwise we used unadjusted estimates.

Results:
We included 47 studies, of which 21 were unpublished, and 121 estimates. Among male PWID, male-with-male sex was associated with increased HIV risk (RR:2.32; 95%CI:1.59–3.40; n=16) and increased (but inconclusive) HCV risk (RR:1.26; 95%CI:0.94–1.69; n=11 estimates). Overall analyses (including both males and females) suggest that recent sex work is associated with increased risk of HIV (pooled relative risk (RR):1.78; 95%CI:1.32–2.39; n=19) and HCV acquisition (RR:1.59; 95%CI:1.28–1.99; n=22) among PWID. In gender-stratified analyses, we found that recent sex work was associated with greater HIV risk among female PWID (RR:2.25; 95%CI:1.47–3.43; n=13), and greater HCV risk among male PWID (RR:1.44; 95%CI:1.15–1.79; n=14).

Conclusion:

Risk of HIV and HCV acquisition is higher among PWID who engage in sex work or male-with-male sex, but the magnitude depends on the virus (HIV/HCV) and gender. Services that provide healthcare and harm reduction for PWID should tailor their services to address these sexual risk behaviours.

Disclosure of Interest Statement:
None to declare.
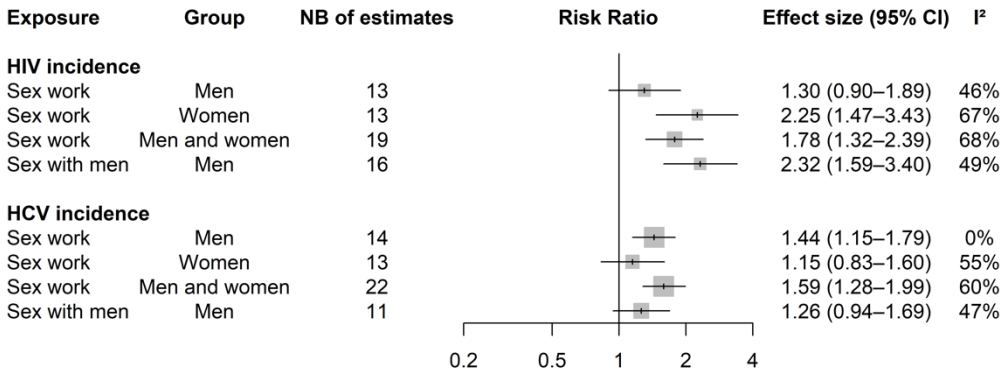
Figure. Pooled associations between recent male-with-male sexual activity or sex work and risk of HIV or HCV acquisition among people who inject drugs