

SEX WORK OR MALE-WITH-MALE SEXUAL ACTIVITY AND THE RISKS OF HCV AND HIV ACQUISITION AMONG PEOPLE WHO INJECT DRUGS: A SYSTEMATIC REVIEW AND META-ANALYSIS

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Background:

Some people who inject drugs (PWID) have overlapping risk behaviours for HIV and hepatitis C virus (HCV) acquisition, including sex work and male-with-male sexual activity. We assessed whether PWID who have engaged in recent (previous year) sex work (PWID-SW) or who were male and ever engaged in male-with-male sexual activity (PWID-MSM) have increased risks of HCV and HIV acquisition.

Methods:

We searched MEDLINE, Embase and PsycINFO databases for HCV and HIV incidence studies among community-recruited PWID published between 01/01/2000 and 12/12/2022. We extracted unadjusted estimates comparing risks of HIV and HCV acquisition between PWID-SW and PWID who had not recently engaged in sex work (PWID non-SW) and between PWID-MSM and male PWID who did not engage in male-with-male sex (PWID non-MSM). We included PWID-MSM studies that included both women and men combined if >2/3 of participants were male. We pooled data using random-effects meta-analysis.

Results:

We included 26 studies, of which 21 reported on recent sex work and 14 reported on male-with-male sexual activity. In included studies, between 8%–46% of male and female PWID were PWID-SW and between 1%–34% were PWID-MSM. Compared to PWID non-SW, PWID-SW were approximately twice as likely to acquire HIV (relative risk [RR]:1.86;95%CI:1.34–2.47;I²:69.1%; n=12 studies) and HCV (RR:2.09;95%CI:1.45–3.01;I²:54.3%; n=7 studies). Compared to PWID non-MSM, PWID-MSM had an 156% (RR:2.56;95%CI:1.27–5.17;I²:66.6%; n=8 studies) and 62% (RR:1.62;95%CI:1.08–2.42;I²:9.9%; n=5 studies) greater risk of HIV and HCV acquisition, respectively. In PWID-MSM analyses, no HIV studies and three HCV studies included both men and women. Pooled estimates carried low or moderate between-study heterogeneity (Figure).

Conclusion:

PWID who engage in sex work or male-with-male sex have higher risks of HIV and HCV acquisition compared to PWID who do not engage in these practices. Interventions for PWID should include services to address these overlapping risks.

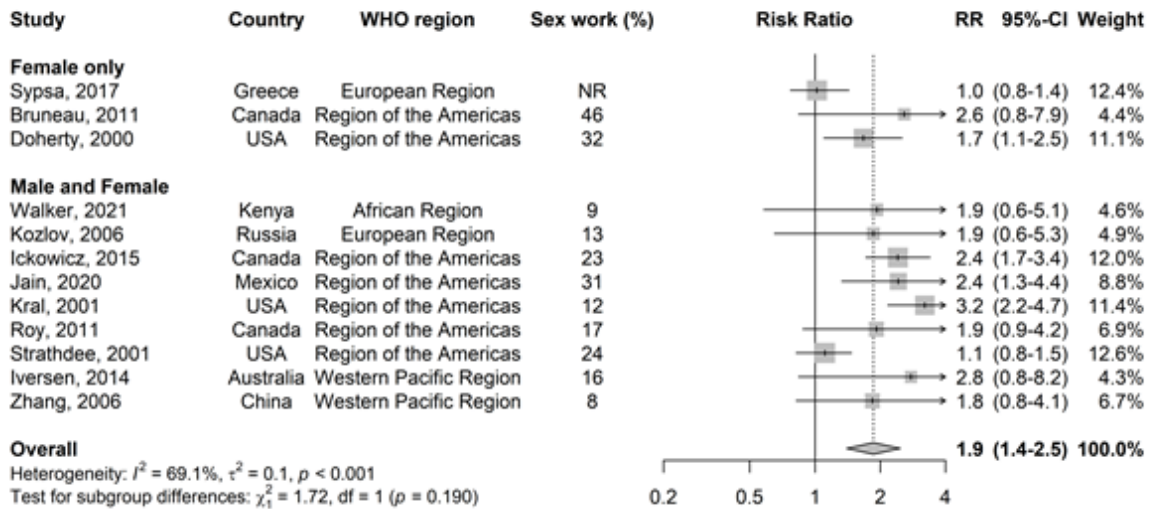
Disclosure of Interest Statement:

None to declare.

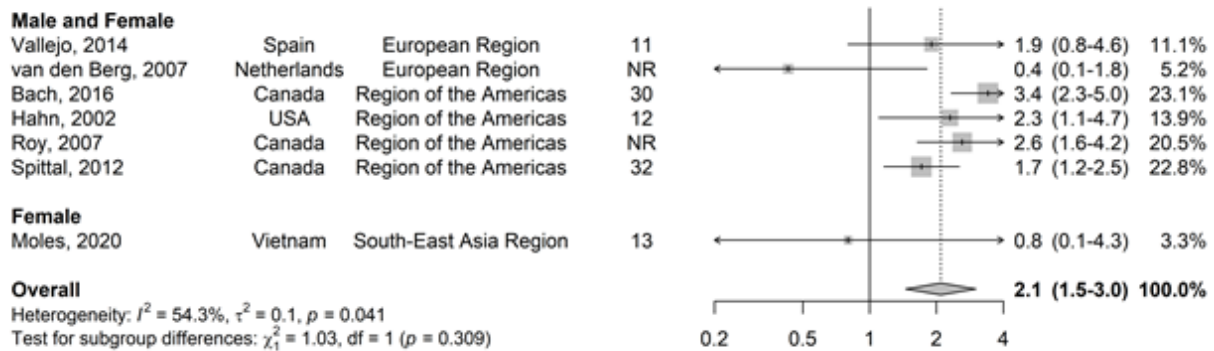
Figure. Associations between sex work in previous 12 months and (a) HIV acquisition and (b) HCV acquisition, and male-with-male sexual activity and (c) HIV acquisition and (d) HCV acquisition among people who inject drugs

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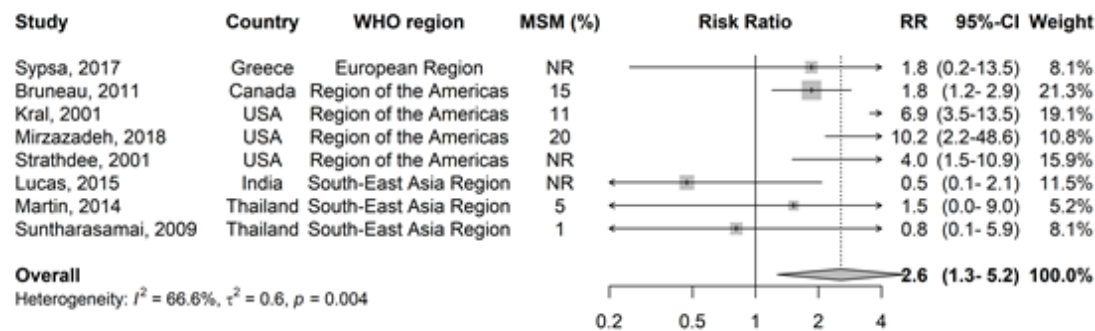
a. Sex work in previous 12 months and HIV acquisition



b. Sex work in previous 12 months and HCV acquisition



c. Male-with-male sexual activity and HIV acquisition



d. Male-with-male sexual activity and HCV acquisition

