Increased risk of HCV and HIV acquisition among people who inject drugs who recently engaged in sex work or male-with-male sexual activity: a systematic review and meta-analysis

Joshua Dawe¹, Adelina Artenie¹, Jack Stone¹, Hannah Fraser¹, Daniel Stewart¹, Chiedozie Arum^{1,2}, Matthew Hickman^{1,3}, Peter Vickerman^{1,3}

¹ Bristol Population Health Science Institute, Bristol, England, ² Yale School of Medicine, New Haven, United States, ³ Health Protection Research Unit, Bristol, England

Background

People who inject drugs (PWID) comprise other key populations who experience additional and overlapping risk behaviours and experiences, including sex work and malewith-male sexual activity.

Aim

We assessed whether PWID who have also engaged in recent (within previous year) sex work or who were male and recently engaged in male-with-male sexual activity have increased risks of HCV and HIV acquisition.

Methods

- Searched MEDLINE, Embase and PsycINFO databases for studies published between 01/01/2000 and 12/12/2021.
- Extracted unadjusted estimates of change in risk of HIV acquisition among PWID reporting recent sex work and recent male-with-male sex.
- Pooled data using random-effects meta-analysis.

Figure 1. Association between (a) sex work in previous 12 months and (b) male-with-male sexual activity in previous 12 months and HIV acquisition among people who inject drugs

a. Sex work in previous 12 months

b. Male-with-male sexual activity in previous 12 months

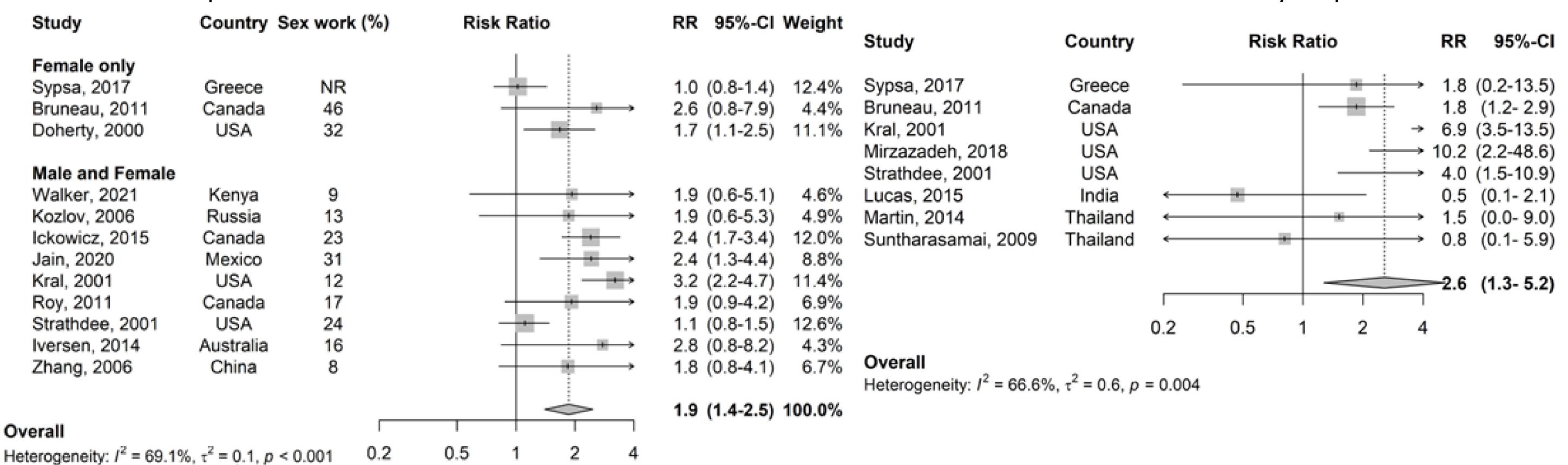
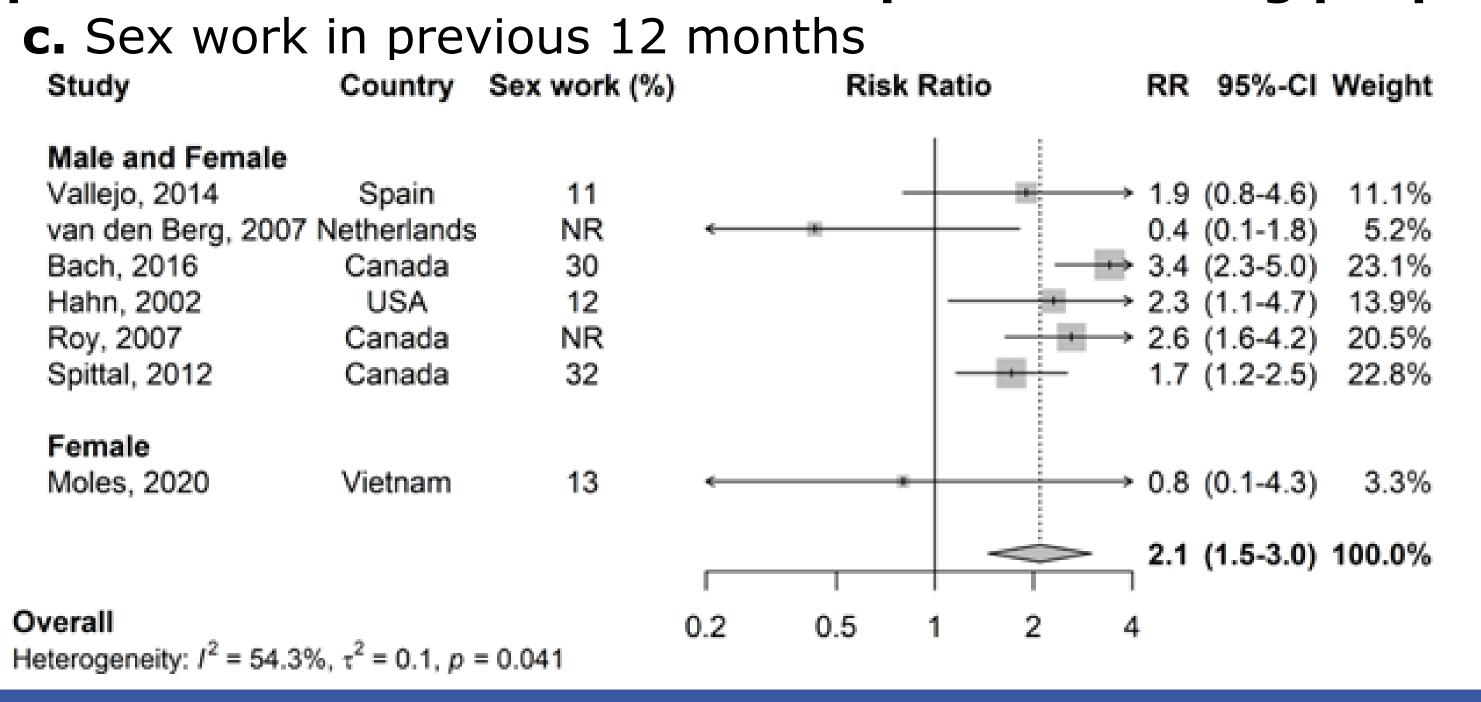
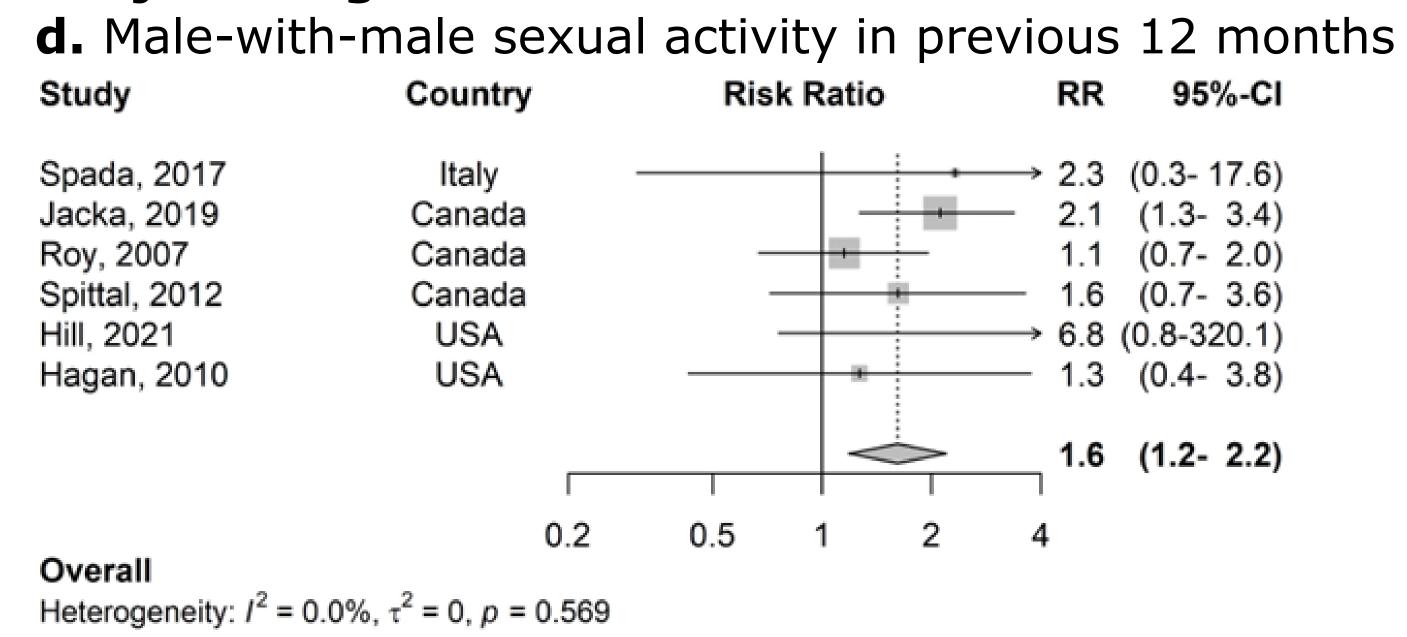


Figure 2. Association between (c) sex work in previous 12 months and (d) male-with-male sexual activity in previous 12 months and HCV acquisition among people who inject drugs





Findings and conclusions

- People who inject drugs who also engage in sex work or male-with-male sex have higher HCV and HIV risks compared
 to PWID who do not engage in these risk behaviours.
- Pooled estimates carried moderate between-study heterogeneity.
- Our findings indicate that interventions tailored towards people who inject drugs should expand to address these
 overlapping risk factors.



