

RISK BEHAVIOURS FOLLOWING HEPATITIS C TREATMENT AMONG GAY AND BISEXUAL MEN LIVING WITH HIV IN MELBOURNE, AUSTRALIA

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Background: Hepatitis C virus (HCV) elimination among gay and bisexual men (GBM) living with HIV is feasible in many high-income countries. There is concern that risk behaviours following treatment may lead to reinfection and adversely impact HCV elimination goals. We examined risk behaviours prior to and following HCV treatment commencement among sexually active GBM living with HIV.

Methods: Data were drawn from co-EC, a prospective study aiming to treat and eliminate HCV among people living with HIV. Pre and post-HCV treatment commencement changes in self-reported sexual and injecting drug-related behaviours among sexually active GBM attending primary and tertiary care clinics in Melbourne were assessed using McNemar's test. Modified Poisson regression with robust variance was used to examine factors associated with risk behaviours following treatment commencement.

Results: Of 173 males who started treatment, 120 completed pre and post-treatment commencement questionnaires; 90 reported ≥ 1 male sex partner before or after treatment commencement. Among these 90 sexually active GBM, there was no significant change in condom-less anal intercourse with casual partners (52.5%/56.6%, p 0.513) or injecting drug use (41.2%/45.9%, p 0.344), but a significant decrease in group sex (34.4%/21.1%, p 0.011). Post-treatment commencement, condom-less intercourse (adjusted prevalence ratio (aPR) 1.80, 95%CI 1.07-3.03, p 0.026) and group sex (aPR 4.53, 95%CI 1.76-11.67, p 0.002) was highest amongst those who had reported these behaviours pre-treatment. Post-treatment commencement, injecting drug use was associated with the use of crystal methamphetamine during follow-up (aPR 4.36, 95%CI 1.27-14.94, p 0.019).

Conclusions: HCV-related risk behaviours were common among sexually active GBM before HCV treatment, and many continued to engage in these behaviours following HCV treatment commencement. There was no significant evidence of increasing risk behaviour following treatment. More frequent post-treatment HCV testing may be justified among GBM engaging in these behaviours to identify potential HCV reinfection and provide prompt re-treatment to prevent further transmission.

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