INCONSISTENCIES IN METHODOLOGY, REPORTING, AND SUBJECTIVE DESCRIPTION OF HEPATITIS C VIRUS REINFECTION RATES AMONG PEOPLE WHO INJECT DRUGS: POTENTIAL CONTRIBUTION TO STIGMA AND DISCRIMINATION?

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Background: Concern about reinfection after hepatitis C virus (HCV) treatment among People Who Inject Drugs (PWID) is often reported as a barrier to initiating treatment, by both PWID and physicians. The number of PWID receiving HCV treatment has increased since the introduction of Direct Acting Antiviral (DAA) therapy, with concomitant increases in studies reporting reinfection rates. To understand variation in measurement, reporting, and description of HCV reinfection rates, we performed a critical review of conference abstracts.

Methods: All abstracts from four 2018 international conferences (AASLD, CROI, EASL & INHSU) that reported on HCV reinfection after DAA treatment were reviewed, with 23 abstracts reporting reinfections among PWID identified for analysis. Study design, definition of PWID, length of follow-up, frequency of post-treatment HCV RNA testing, rate/proportion of reinfection observed, and characterization of reinfection rate were extracted.

Results: Of 23 abstracts reviewed, 20 were eligible for extraction. A quarter (5/20) only reported reinfection proportions, ranging from 0% to 25.93%, without reporting person years (PY) of follow up. Among abstracts reporting PY of follow up (15/20), reinfection rates ranged from 0.3 to 18.3/100 PY. Reinfection rates between 0-4/100 PY (n=12) were described as: 'elevated', 'high', 'uncommon', 'similar to general population', and 'low'. Reinfection rates between 4-10/100 PY (n=2) were described as; 'relatively low', and 'possible'. Reinfection rates >10/100 PY (n=6) were described as; 'high', and 'more common'.

Conclusion: Varying methods used to estimate reinfection rates, and inconsistent reporting may obscure actual risk of HCV reinfection among PWID after receiving DAAs. Reinfection rates below 4/100 PY were subjectively described as 'high' or 'elevated', which may deter treatment providers from treating PWID, or discourage PWID from engaging in HCV care. Inconsistent measurement and careless description of HCV reinfection may contribute to stigma and discrimination experienced by PWID living with HCV, hindering global HCV elimination.

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