Risk-Compensation and loss-to-follow-up among PWID in an HCV Vaccine Trial

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Background:

People who inject drugs (PWID) are the most vulnerable group at risk of hepatitis C virus (HCV) infection. We examine risk compensation among PWID who participated in a clinical trial of the world's first experimental vaccine to prevent chronic HCV infection and the effects of loss-to-follow-up on risk exposures.

Methods:

Participants were enrolled in Baltimore, San Francisco, and Albuquerque between 2012 and 2018, and were ≥18 years, healthy, actively injecting any drug, and HCV RNA-negative. Participants self-reported risk behavior data were assessed at baseline and quarterly thereafter. Risk reduction counseling and, as requested, referrals to care for treatment of substance use disorder was provided at all study visits.

Results:

Of 470 trial participants, 104 were female (22.1%) and 366 (77.9%) were male. Median age was 30 years (18,45). Over half (59.8%) of participants identified as Caucasian, 22.6% African American, 14.3% American Indian/Alaska Native, Asian/Pacific Islander or Mixed. 14.5% identified Latino/a. The majority (80%) reported injecting heroin alone, 30.4% injected methamphetamine alone, and 22.23% injected both opioids and stimulants (methamphetamines or cocaine). Sharing any injecting equipment declined from 45.1% at baseline to 27.1% at visit 24. The median baseline frequency of injecting among those retained at final visit was higher compared to those who were lost-to-follow-up, which suggests that there was not a differential loss of higher risk participants. Between baseline and end of study, 234 participants (49.8%) reported ceasing injecting altogether.

Conclusions:

Our initial analyses suggest there was no risk compensation among trial participants. Among retained participants there was a decrease in various measures of exposure risk including receptive sharing of drug equipment, stopping injection, and reduced frequency of injection. These decreases suggest that participants were receptive to the counseling and referrals provided to reduce risk of HCV infection associated with injection drug use.



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