

Screening HIV-positive men who have sex with men for hepatitis C re-infection risk: is a single question on condom-use enough? A sensitivity analysis

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BACKGROUND

Hepatitis C virus (HCV) is common in men who have sex with men (MSM) with HIV. The Swiss HCVree Trial targeted a micro-elimination by using a treat and counsel strategy. Self-reported condomless anal intercourse with non-steady partners was used as the selection criterion for participation in a counselling intervention designed to prevent HCV re-infection. The purpose of this study was to assess the ability of this criterion to identify men who engaged in other sexual risk behaviours associated with HCV re-infection.

METHODS

Men who disclosed their sexual and drug-use behaviours during the prior 6 months, at study baseline, were included in the current study. Using a descriptive comparative study design, we explored self-reported sexual and drug-use risk behaviours, compared the odds of reporting each behaviour in men who reported and denied condomless anal intercourse with non-steady partners during the prior year and calculated the sensitivity/specificity (95% CI) of the screening question in relation to the other at-risk behaviours.

RESULTS

Seventy-two (61%) of the 118 men meeting eligibility criteria reported condomless anal intercourse with non-steady partners during the prior year. Many also engaged in other potential HCV transmission risk behaviours, e.g., 52 (44%) had used drugs. In participants disclosing drug use, 44 (37%) reported sexualised drug use and 17 (14%) injected drugs. Unadjusted odds ratios (95% CI) for two well-known risk behaviours were 2.02 (0.80, 5.62) for fisting and 5.66 (1.49, 37.12) for injecting drug use. The odds ratio for sexualised drug use - a potential mediator for increased sexual risk taking - was 5.90 (2.44, 16.05). Condomless anal intercourse with non-steady partners showed varying sensitivity in relation to the other risk behaviours examined (66.7-88.2%).

CONCLUSIONS

Although condomless anal intercourse with non-steady partners was fairly sensitive in detecting other HCV relevant risk behaviours, using it as the only screening criterion could lead to missing a proportion of HIV-positive men at risk for HCV re-infection due to other behaviours. This work also points to the importance of providing access to behavioral interventions addressing other sexual and drug use practices as part of HCV treatment.

TRIAL REGISTRATION

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