

PROTOCOL

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Hepatitis C virus infection among HIV-positive men who have sex with men: protocol for a systematic review and meta-analysis

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Abstract

Background: Outbreaks of hepatitis C virus (HCV) infection have been reported in HIV-positive men who have sex with men (MSM) in North America, Europe and Asia. Transmission is believed to be the result of exposure to blood during sexual contact. In those infected with HIV, acute HCV infection is more likely to become chronic, treatment for both HIV and HCV is more complicated and HCV disease progression may be accelerated. There is a need for systematic reviews and meta-analyses to synthesize the epidemiology, prevention and methods to control HCV infection in this population.

Methods/design: Eligible studies will include quantitative empirical data related to sexual transmission of HCV in HIV-positive MSM, including data describing incidence or prevalence, and associations between risk factors or interventions and the occurrence or progression of HCV disease. Care will be taken to ensure that HCV transmission related to injection drug use is excluded from the incidence estimates. Scientific databases will be searched using a comprehensive search strategy. Proceedings of scientific conferences, reference lists and personal files will also be searched. Quality ratings will be assigned to each eligible report using the Newcastle–Ottawa scale. Pooled estimates of incidence rates and measures of association will be calculated using random effects models. Heterogeneity will be assessed at each stage of data synthesis.

Discussion: HIV-positive MSM are a key HCV-affected population in the US and other high-income countries. This review seeks to identify modifiable risk factors and settings that will be the target of interventions, and will consider how to constitute a portfolio of interventions to deliver the greatest health benefit. This question must be considered in relation to the magnitude of HCV infection and its consequences in other key affected populations, namely, young prescription opioid users who have transitioned to illicit opiate injection, and older injection drug users among whom HCV prevalence and incidence are extremely high. This review is part of a series of systematic reviews and meta-analyses that will synthesize the evidence across all these population groups and develop recommendations and decision tools to guide public health resource allocation.

Trial registration: PROSPERO registration number: CRD42013006462

Keywords: Hepatitis C virus, Men who have sex with men, HIV infection, Epidemiology, Systematic review

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