Eliminating hepatitis C virus among HIV-positive men

Routine testing and prompt treatment uptake can significantly reduce hepatitis C prevalence among HIV-positive men who have sex with men in Australia.

THE ISSUE

It is estimated that over two million people are HIV/hepatitis C co-infected worldwide.¹ In Australia, the population group most affected by HIV/hepatitis C co-infection is HIV-positive men who have sex with men. Direct-acting antivirals (DAAs) for hepatitis C are highly effective² and have the potential to eliminate hepatitis C amongst this population.

WHAT OUR WORK FOUND

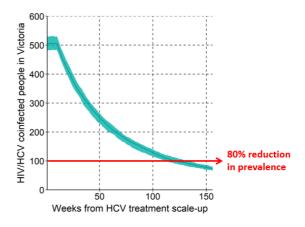
Burnet Institute modellers examined the benefit of early hepatitis C treatment following diagnosis in HIV-positive men who have sex with men in Victoria, Australia. It is estimated that there are approximately 500 HIV/HCV co-infected men who have sex with men living in Victoria.

Modelling results indicated:

- An 80% reduction in prevalence can be achieved in 2.3 years if the average time from hepatitis C diagnosis to treatment is six months (see graph) and testing patterns stay the same.
- An 80% reduction in prevalence can be achieved even more quickly - 1.5 years - if the average time from hepatitis C diagnosis to treatment was reduced to 16 weeks, holding testing patterns stable.
- In populations with very high-risk behaviours, effective diagnosis and treatment will reduce infection transmission even faster if this high-risk group was targeted with timely access to treatment.
- Frequency and consistency of condom use with casual partners are key behavioural factors likely to influence epidemic projections among men who have sex with men, so more reliable estimates for these parameters should be prioritised in future studies.

CONCLUSION

Significant reductions in the number of hepatitis C infections amongst HIV-positive men can be achieved effectively and quickly with routine hepatitis C testing and prompt treatment initiation.



Graph showing decrease in hepatitis C prevalence if time from hepatitis C diagnosis to treatment is 6 months

Policy Implications

- As most HIV-positive men are already engaged with healthcare services, hepatitis C testing and treatment scale-up is achievable with minimal additional health service delivery costs.
- Prompt hepatitis C treatment as part of HIV care can significantly reduce hepatitis C prevalence and prevent new infections amongst HIV-positive men who have sex with men.
- Routine testing and treatment of hepatitis C should be part of standard HIV care amongst men who have sex with men.
- ▶ Education stressing the importance of routine hepatitis C testing and consistent condom use with casual partners, for HIV-positive men who have sex with men and their healthcare providers, is critical.

For complete details, contact **Dr Nick Scott (nick.scott@burnet.edu.au).** Full publication: Scott N, Stoové M, Wilson D, Keiser O, El-Hayek C, Doyle J, Hellard M. Eliminating hepatitis C virus as a public health threat among HIV-positive men who have sex with men: a multi-modelling approach to understand differences in sexual risk behaviour. *Journal of the International AIDS Society* 2018; 21:e25059.



- 1. Platt et al Lancet Infect Dis. 2016;16(7):797-808.
- 2. Sacks-Davis et al. Journal of the International AIDS Society. 2018; 21(S2):e25051.

