

SURVIVAL OF PWID WITH AND WITHOUT HCV – A LONG-TERM, POPULATION-BASED STUDY FROM ICELAND, 2000-2022

Authors:

Einarsdóttir Þ¹, Rúnarsdóttir V², Rögnvaldsson G K^{1,3}, Hernandez U B³, Ólafsson S^{1,3}, Gottfreðsson M^{1,3}

¹ University of Iceland, ² Vogur Hospital, ³ Landspítali University Hospital

Background:

Hepatitis C virus (HCV) can spread among people who inject drugs (PWID) by sharing injection equipment. HCV can cause a chronic infection which may lead to liver failure, cirrhosis, and hepatocellular carcinoma. These complications are preventable through early detection and antiviral treatment. However, addiction also carries increased risk of premature death from multiple other causes. The aim of this study was to investigate survival among PWID with or without HCV infection who sought addiction treatment at Vogur Hospital, the main addiction center in Iceland, 2000-2022.

Methods:

If patients reported injection drug use, screening for HCV was performed on admission, providing information on HCV status (antibody status and HCV RNA by PCR if antibody was positive). Survival status was obtained from the national population registry. Binomial regression model was used to calculate the association between HCV infection and death. Survival was calculated using multivariate Cox analysis among the individuals who had two or more HCV test results, adjusting for age and sex.

Results:

Vogur Hospital treated 2,388 PWID as inpatients between January 1st 2000 and March 7th 2022. PWID with history of HCV were significantly more likely to die compared to PWID with no history of an HCV infection with an odds ratio of 1.99 (95% confidence interval 1.6 – 2.5; $p < 0.001$). By multivariate Cox analysis and adjustment for age and sex those with an active infection (positive HCV RNA) had a relative risk of death of 1.3 (95% confidence interval 1.02 – 1.67; $p = 0.036$).

Conclusion:

In this long-term, nationwide cohort, PWID in Iceland with HCV had a 30% higher risk of death compared to those who were uninfected. It is not known whether this increase is directly attributable to the HCV infection itself or if acquisition of HCV may be a marker for greater severity of their addiction.

Disclosure of Interest Statement:

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