

PREVALENCE OF VIREMIC HEPATITIS C VIRUS, HEPATITIS B VIRUS, OR HIV INFECTION, AND VACCINATION STATUS AMONG SWEDISH PRISONERS

Authors:

Gahrton C^{1,2}, Lindahl K^{1,2}, Öhrn F³, Dalgard O^{4,5}, Duberg AS⁶, Lidman C^{1,2}, Said K^{2,7}, Aleman S^{1,2}

¹Department of Infectious Diseases, Karolinska University Hospital, Stockholm, Sweden

²Department of Medicine Huddinge, Karolinska Institutet, Stockholm, Sweden

³Center for Innovation, Karolinska University Hospital, Stockholm, Sweden

⁴Department of Infectious Diseases, Akershus University Hospital, Lørenskog, Norway

⁵Division of Medicine and Laboratory Sciences, University of Oslo, Oslo, Norway

⁶Department of Infectious Diseases, Örebro University, Örebro, Sweden

⁷Department of Upper Gastrointestinal Diseases, Karolinska University Hospital, Stockholm, Sweden

Background:

In Sweden knowledge about the general prevalence of anti-HCV or HCV RNA positivity among incarcerated is absent. The aim of this study was therefore to evaluate the prevalence of anti-HCV and HCV RNA positivity among Swedish detainees, and also to estimate the prevalence of hepatitis B virus (HBV), human immunodeficiency virus (HIV), and vaccination against HBV.

Methods:

A cross-sectional study of all incarcerated persons (n=667) in the nine prisons in Stockholm county was conducted in May 2017 (seven prisons) and October 2017 (two prisons). New prison inmates are recommended tests for anti-HCV, HCV RNA, HBsAg, anti-HBs, anti-HBc and HIV Ag/Ab at the time of admittance. The results of these tests and demographic data was collected from the medical records at the prison facilities. Also, the number of HBV vaccine doses received in prison was registered.

Results:

The mean age was 37.2 years (range 18-77), and the majority (93.4%) were men. 71% (n=471) had been tested for anti-HCV, 70% (n= 465) for HBsAg and 71% (n=471) for HIV. The prevalence of positive anti-HCV, HCV RNA, HBsAg and HIV was 17.0%, 11.3%, 1.9%, and 0.2%, respectively among tested persons. 40.6% (n=271) had evidence of HBV vaccination among all incarcerated.

Conclusions:

The prevalence of viremic HCV infection among Swedish prisoners is high in comparison to the general population. Therefore, when aiming for the WHO's goal of HCV elimination, prisons could suite as a platform for identification and treatment of HCV infection. Although a rather high rate of testing for blood-transmitted viruses compared to other countries, there is still a need to increase the rate of testing, and also vaccination coverage against HBV in Swedish prisons.

Disclosure of interest:

Dalgard O: research grants from MSD, Abbvie and Gilead. Advisory board: MSD, Abbvie and Gilead.

Duberg AS has given lectures with honoraria or been consultant to AbbVie, BMS, Gilead, Janssen and MSD.

Lindahl K has lectured for MSD, Abbvie, Gilead, BMS, Medivir and Roche.

Aleman S has lectured for AbbVie, Bayer, BMS, Gilead, MSD, and has received research grants from AbbVie and Gilead