CHARACTERIZATION OF A POPULATION WITH HEPATITIS C INFECTION IN A U.S. STATE PRISON

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Background: The prevalence of Hepatitis C virus (HCV) infection in correctional settings is more than 10 times that of the general population. Yet, there is limited information on the population with HCV behind bars. This study characterizes the population of people with HCV identified by opt-out HCV screening at entry to the Washington State (WA) Department of Corrections (DOC).

Methods: Retrospective cross-sectional study using data collected 1/1/2012-7/7/2016 on individuals tested for HCV while in prison at the DOC. Descriptive analyses compared demographics and drug use history among HCV+ versus HCV-, and for a subset of individuals with chronic HCV and appropriate laboratory testing, we describe liver fibrosis stage based on Aspartate aminotransferase to Platelet Ratio Index (APRI) scores.

Results: The sample consisted of 24,731 incarcerated individuals who were screened for HCV, of which 4,951 (20%) were HCV seropositive. Compared to negatives, HCV seropositive individuals were older (42 v. 35, p<0.001) and more likely to be white (77 v. 60%, <0.001). A history of drug use was more common among HCV seropositive v. negative (51% v. 38%, p<0.001). Of those with a reactive HCV screening antibody test, 2407 (47%) had HCV RNA performed; of those, 1730 (72%) had a positive test indicating chronic HCV infection. Among those with chronic HCV, APRI results demonstrated that the vast majority (71%) had minimal fibrosis (F0-1).

Conclusions: Universal screening in a correctional setting in WA State resulted in identifying that one-fifth of the population had been exposed to HCV. Given the high burden of HCV infection, correctional settings should consider offering routine voluntary HCV testing. Non-invasive fibrosis testing showed minimal fibrosis for most, suggesting many may have been infected more recently. Correctional settings need to be a priority to influence the spread of HCV in the U.S.

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