

# Hepatitis C treatment among patients at the Seberang Perai prison

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## ABSTRACT

**Introduction:** Hepatitis C remains a worldwide public health problem and places a significant burden on the healthcare system. Imprisonment provides unrivalled opportunity for screening and treating hepatitis C who may not have access to mainstream health service in the community. Hepatitis C infection has a higher prevalence among the prisoners driven by injecting drug use among prisoners. However, in Penang Correctional Institutions, prisoners are not routinely screened for Hepatitis C or treated inside the prison. Advancement of DAA medication for hepatitis with a short duration of treatment and high efficacy, provide an excellent platform to study initiation opportunities to start hepatitis C treatment inside the prison. The aims of this study are to determine 1) the prevalence of hepatitis C and risk factor among prisoners in Seberang Perai Prison and 2) the proportion of hepatitis C treatment started inside the prison. **Materials and Methods:** A cross sectional study was conducted from January to September 2022. In conjunction with World Hepatitis C Day 2022, a mass screening program was done in the Seberang Perai prison in collaboration with the Seberang Perai Health District Office, Hospital Pulau Pinang and Hospital Sungai Bakap. All prisoners who were sentenced for more than one year with risk factors such as intravenous drug use or had tattoos were selected for this program. Prisoners with reactive HCV antibody blood tests were asked to complete a questionnaire and their blood samples were sent for HCV RNA PCR test to be confirmed as positive. Data was analysed descriptively using Microsoft Excel. **Results:** A total of 218 (185 males and 33 females) prisoners were screened in this program. A total of 25 prisoners were found to be reactive and 19 confirmed to be positive with Hepatitis C prevalence of 8.7% (95% CI 5.3%-13.3%). 63% (12/19) positive Hepatitis C prisoners had history of drug injection. 14 prisoners with the proportion of 73.7%% (95% CI 48.8%-90.9%) started treatment inside the Seberang Perai Prison itself, 5 prisoners with positive HCV RNA refused for Hepatitis C treatment. **Conclusion:** A high prevalence of Hepatitis C infection in a correctional institution signifies a community health issue. Prisons may serve as reservoirs that would amplify transmission of Hepatitis C in the general population after inmates were released from prisons. Restrictive nature of prison provides a good opportunity for Hepatitis C treatment which has a short duration of treatment. The hepatitis C treatment in prison has good efficacy and is a cost-effective strategy. Despite various challenges, the implementation of hepatitis C treatment in prison is expanding globally and is already underway in Pulau Pinang.