

Viral Hepatitis-HIV Co-Infection and their associated factors in Negeri Sembilan - a cross sectional study from HIV Case Registry

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ABSTRACT:

Background: Viral Hepatitis HIV co-infection is an important and preventable cause of chronic liver disease. It is a significant health issue in the communities because by having them may lead to many consequences, especially for patient living in the wrenched conditions. This study aimed to determine the prevalence of Viral Hepatitis-HIV co-infection and determine the associated variables with this co-infection.

Methods: A cross-sectional study was done by using HIV Case Registry (Anti Retroviral (ARV) line listing). We included 1274 patients who were seen under the HIV Clinic services and screened for Hepatitis B Virus (HBV) and Hepatitis C Virus (HCV) upon registration to the service. Bivariate and multivariate logistic regression analysis with SPSS were used to determine the factors that contribute to HBV-HIV and HCV-HIV co-infection, with odds ratios being used as the measures of association. A p-value of less than 0.05 was considered statistically significant for all the tests.

Results: From the 1274 HIV patients, the prevalence of HBV-HIV co-infection was 5.6% (71 cases), while the prevalence with HCV co-infection was 14.8% (189 cases). For the frequency of multiple HIV co-infection (N=238), the majority of 167 cases (70.17%) were HCV-HIV co-infected followed by 49 cases (20.5%) were HBV-HIV co-infected. In comparison, another 22 cases (9.24%) were co-infected with HBV-HCV-HIV. In the final model of HBV-HIV co-infection, only male gender, CD4 count category less than 199 cells/mm³ and primary care type of facilities were significantly associated with the disease. Whereas in the HCV-HIV co-infection, only male gender, Malay race, Intravenous Drug User (IVDU) modes of transmission, and source of the case from high-risk screening program were associated with the disease.

Conclusion: Co-infection with HCV-HIV was more prevalent than HBV-HIV in our study population. A more frequent screening of HCV post HCV treatment shall be done as reinfection is anticipated in these patients if the high-risk behavior continues. Regarding patients with HBV-HIV co-infection, the HBV revaccination program should be carried out on those who are vulnerable to contracting this co-infection. Additionally, we should increase our primary care preventive efforts, as primary care clinics were the main healthcare facilities that most accessible to HBV-HIV co-infected patients.

KEYWORDS: HBV, HCV, Viral Hepatitis HIV Co-Infection, HIV