

# Prevalence of Hepatitis Virus Infection in Prisoners

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Hepatitis B is a viral infection is transmitted through contact with the blood or other body fluids of an infested person. An estimated 257 million people are living with Hepatitis B Virus infection (defined as Hepatitis B surface Antigen positive) Hepatitis B is an important occupational hazard for health workers or social workers and social behaviors anomalies. This diseases can be prevented by education of transmission mode and vaccination.<sup>1</sup>

The endemicity of HBV in Indonesia is moderate to high, ranging from 2.5% to 10%, according to Hepatitis B surface Antigen (HBsAg) positive. The prevalence of Hepatitis B infection in general population is higher than Hepatitis C infection (2%) and varies according to the geographic region.<sup>2</sup> Mulyanto<sup>3</sup> found the prevalence of HBsAg in the other island of Java (8.5%) was significantly higher than Java island (4.9%), the opposite result was seen in HCV prevalence, the prevalence of Hepatitis C virus was higher in the Java island than the others island.<sup>3</sup>

Prevalence of the HBV infection is not only the geographic factor but also risk group, which is related to social behaviors, occupation factors and medical condition. Commercial sex workers (CSW), MSM population (Man who have Sex with Man), prisoners, health care workers, jail workers and Hemodialysis patient are at high risk for HBV and HCV infection. Prisoners are considered to be at high risk for Hepatitis B and Hepatitis C virus infections do to social behaviors, such as drug addiction, low social economic level and risky of sexual practice, bad prison infrastructure and over crowding prison cells also plays an important role<sup>2,4</sup>

Epidemiology publication of prevalence Hepatitis prisoners population in Indonesia was not available yet. The world wide study of prevalence Hepatitis B and C in prisoners showed 5.17%, This study found that the prevalence Hepatitis C Virus in prisoners was higher then Hepatitis B prevalence (13,22%).<sup>4</sup> Study by Syifa et al found that prevalence Hepatitis Virus B infection (HBsAg) among male prisoners in Malang

was 7.8% with highest risk factors are injecting drug users (24.32%) followed with permanent tattoo (11.32%), family history of Hepatitis (9.37%) multiple sex partners (6.67%) and history of blood transfusion (4.76%). This is a cross sectional study among 165 male prisoners, the prisoners were screened using rapid test (DiaSpot test kit).<sup>5</sup> The prevalence of Hepatitis B and Hepatitis C infection in prisoners was greater than in general population, and prevalence in men was greater than that in woman were respectively 6.7% and 4.34%.

Prisoners population are person that the most hard to reach in the community, the detection system has responsibility facing the challenge of control these diseases. A targeting testing and vaccination approach based on the prisoners is a potential control strategy. Education to the prisoners on HBV transmission mode and to modify their risk behavioral practices should be offered.<sup>6,7</sup>

## REFERENCES

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