

# UNSAFE SEXUAL PRACTICES PRIOR TO INCARCERATION, A HIGH-RISK FACTOR OF HEPATITIS B AND HIV INFECTION AMONG PRISONERS IN BLANTYRE, MALAWI.

## Authors:

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## Background and Aims:

Hepatitis B and C viruses (HBV/HCV) are the major causes of liver diseases. Both HBV and HCV are primarily transmitted through contact with infected blood, and body fluids. Low and middle-income countries have a disproportionately high rate of chronic HBV and HCV especially in the HIV infected population. Prison settings are associated with substantial risk of HBV, HCV, and HIV acquisition and are a significant driver of blood-borne viruses among prisoners during detention and after release. The primary aim of this study was to assess the prevalence of HBV, HCV and HIV among those detained at Chichiri prison, that would provide insights into the highest risk factors associated with acquisition of hepatitis infection among prisoners in Malawi.

## Method:

220 participants [86.4% males (n=190/220), 13.6% females (n=30/220)] were enrolled at Chichiri prison. A structured questionnaire was used for collection of demographic details, assessment of knowledge, and risk factors for transmission of viral hepatitis in prison environment in Malawi. Serum samples were prepared and analyzed utilizing HBV, and HCV rapid assays. All positive samples were run on sandwich enzyme immunoassay (EIA).

## Results:

The HBV prevalence was estimated at 8.6%; whereas HCV was not detected in the sample (0%). The HIV prevalence rate was 21%, and HBV/HIV co-infection prevalence was 11%. The majority (79.1%) of prisoners were incarcerated between 2017 and 2020. HBV/HIV co-infection was observed in 11% of the sample.

## Conclusion:

This study confirms high prevalence of HBV among prisoners at Chichiri. Findings suggest that intra-prison viral hepatitis transmission was very minimal, possibly due to criminalisation of high-risk practices (injecting drug use, sex between men) for exposure to blood-borne viruses. Sexual transmission prior to incarceration was the highest risk factor for viral hepatitis and HIV. Prison environments present both challenges and opportunities for prevention and treatment of viral hepatitis and HIV infections.