

Burden of Viral Hepatitis Among People Living with HIV in Bangladesh: A Cross-Sectional Study of Adults Aged 40–65 Years

Background:

Bangladesh has an intermediate endemicity for hepatitis B virus (HBV) ($\approx 4\text{--}5\%$ in the general population) and a lower but persistent hepatitis C virus (HCV) prevalence ($\approx 0.5\text{--}2\%$). While national HIV prevalence remains below 0.1%, viral hepatitis represents a major cause of chronic liver disease and non-AIDS-related mortality. Data on HIV–hepatitis coinfection among aging people living with HIV (PLHIV) remain limited. This study assessed the burden and clinical consequences of HBV and HCV coinfection among PLHIV aged 40–65 years.

Methods:

A cross-sectional study was conducted among 350 confirmed HIV-positive adults receiving care at HIV treatment centers in Bangladesh. Participants were screened for HBV (HBsAg) and HCV (anti-HCV antibody). Clinical records and liver function tests were reviewed to evaluate hepatic complications.

Results:

Among 350 participants (mean age 52.3 ± 6.5 years), 220 (62.9%) were coinfecting with viral hepatitis. Of the total cohort, 140 (40.0%) had HBV coinfection, 60 (17.1%) had HCV coinfection, and 20 (5.7%) had dual HBV/HCV infection. The prevalence of HBV and HCV among PLHIV in this study was substantially higher than national background estimates, indicating a concentrated epidemic within this population.

Elevated liver enzymes were observed in 58% of coinfecting individuals compared to 23% among HIV-monoinfected patients. Clinical evidence of chronic liver disease was documented in 36% of coinfecting cases, while 15% demonstrated features consistent with cirrhosis. Participants aged ≥ 50 years showed significantly higher rates of hepatic complications than those aged 40–49 years.

Conclusion:

This study reveals a markedly high burden of viral hepatitis coinfection (62.9%) among aging PLHIV in Bangladesh, with substantial liver-related morbidity. The predominance of HBV highlights the need to strengthen HBV vaccination, routine hepatitis screening within HIV programs, and access to antiviral therapy. Integrated HIV–hepatitis care is essential to reduce preventable liver-related mortality in Bangladesh’s aging HIV population.

Keywords: HIV, Hepatitis B, Hepatitis C, Coinfection, Liver Disease, Bangladesh