

**Therapeutic strategies for chronic hepatitis B in countries with limited resources**

Although hepatitis B virus (HBV) infection is a global health problem, some parts of the world are more severely affected. The areas with moderate to high endemicity are, in a great extent, low-income parts as well. The diagnosis, treatment, and management of complications such as liver failure and hepatocellular carcinoma are costly. Asia is a high endemicity area of chronic HBV infection, which is usually acquired perinatally or during early childhood. Due to the lack of adequate reimbursement for treatment and diagnostics, adherence to treatment guidelines is unlikely. Lamivudine is still widely used in Asia. HIV co-infection is a big concern since 10% of the 40 million people with HIV are estimated to be co-infected with HBV. The majority of these co-infected patients live in resource-limited regions of the world; Asia and Africa. Middle East is a moderately endemic part for HBV. The predominant genotype is D and associates with a low rate of response to interferon treatment. The problem is complicated by hepatitis D virus in some patients. In Turkey, HBsAg prevalence is around 4%. Although the drugs are reimbursed to all patients, there is a viral load-based stratification. Lamivudine and telbivudine are reimbursed for those with a “low” viral load (<2 million U/L), and tenofovir and entecavir are reimbursed for “high” viral load. Interferon is paid for those with low viral load and high (>2xnormal) ALT levels. The management problem of the countries with limited resource can be summarized as diagnostic (virology, especially HBV-DNA measurement, liver biopsy) and therapeutic (unavailability of drugs, high cost of drugs, absence of reimbursement) constraints. The absence of screening policy for viral hepatitis (and HIV), and absence of a local guideline for HBV management are the other challenges. Strategies for increasing access to HBV treatment need to be structured. Patients with cirrhosis (compensated or decompensated) due to HBV infection (if HBsAg is positive practically) should be treated with priority. Quantitative HBV DNA assays and liver biopsy (or alternatively a non-invasive test) should be provided. Tenofovir or entecavir should be the first-line monotherapy. If these drugs are not available, lamivudine, adefovir or telbivudine can be used by close monitoring and an access to the monitoring of viral resistance should be maintained.