# Viral Hepatitis Fact Sheet

#### Introduction

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Hepatitis B and C are prevalent among psychiatric inpatients, often transmitted through shared needles and sexual contact. This fact sheet serves as a concise guide on the pathophysiology, diagnosis, and treatment of these conditions, tailored for the psychiatric setting.

## Hepatitis A (HAV)

- Transmission: Through contaminated food or water.
- Nature of Infection: Acute, presenting with fever, malaise, jaundice, nausea, and abdominal discomfort. Does not progress to chronic liver disease. Not commonly seen in psychiatric units but presented here for context, as many patients will not know the differences among the various types of hepatitis.

## Hepatitis B (HBV)

- **Transmission**: Via infected blood and semen, through needle sharing and sexual contact.
- **Symptoms**: The **acute illness** typically occurs within 2 weeks of exposure and causes flu-like symptoms, including fever, joint pain, fatigue, and sometimes jaundice. While most patients eventually clear the virus and develop life-long immunity, about 5% of patients develop **chronic HBV**. Of these, about 10% will develop liver cancer or cirrhosis which will often be fatal.
- Labs for HBV
  - o **HBsAg** (Hepatitis B surface antigen): This is a protein on the surface of the virus. If present, the virus is in the blood and the person is contagious.
  - o **Anti-HBs**: This antibody against the Hepatitis B surface antigen signifies immunity to hepatitis B, either from previous infection or vaccination. It indicates that the person is not currently infected.
  - o **IgM** (Immunoglobulin M): Indicates a recent infection, generally within the last 6 months.
- Treatment
  - o Vaccine: There is a vaccine to prevent HBV.
  - Active infections: There is no specific treatment for active infections other than supportive care.
    Chronic infections: Unlike hepatitis C there is no cure for chronic HBV, but daily use of oral antiviral medications significantly reduces liver damage and the risk of liver cancer. These medications must be taken daily for about a year (or sometimes for longer, depending on response to treatment) and include Tenofovir disoproxil, Tenofovir alafenamide, and Entecavir. In some cases, pegylated interferon (weekly injections for 6 months to 1 year) is used for younger patients with good liver function.

## Hepatitis C (HCV)

- **Transmission**: Primarily through needle-sharing among intravenous drug users, but also through sexual contact and perinatal transmission.
- **Symptoms:** Acute infection is mild and usually without symptoms, but it is much more likely to convert to a chronic infection than HBV, with 75% of patients developing chronic HCV. HCV has historically been a major cause of liver cirrhosis, cancer, and eventual need for liver transplantation.
- Labs
  - o Anti-HCV antibodies: Indicates past or current exposure to the virus.
  - o **HCV RNA:** Detects the presence of the virus in the blood, indicating an active infection.
- Treatment
  - o No vaccine is available for HCV.

o **Direct-acting antivirals (DAAs):** These medications, including combination pills like Harvoni and Zepatier, offer a cure rate of approximately 90%, with treatment durations ranging from 12-24 weeks.

#### Psychiatric implications of HBV and HCV

- Screening: Consider routine screening for viral hepatitis in patients with a history of intravenous drug use, high-risk sexual behaviors, or known exposure to the viruses. Include HIV screening due to overlapping transmission routes.
- Stigma: Address and combat the stigma associated with HBV and HCV, particularly for infections acquired through needle sharing or unprotected sex. Supportive, nonjudgmental care encourages treatment adherence and disclosure.
- **Substance Use**: Educate substance using patients about the high risk of transmitting viruses through needle sharing and unprotected sexual encounters. Encourage moderation of alcohol use to avoid further liver damage.
- **Medication Management**: Obtain liver function tests to assess whether you will need to decrease dosages of psychiatric medications.

