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News: Hepatitis

- A recent study by Sir Ganga Ram Hospital, New Delhi, indicates that public awareness and knowledge regarding Hepatitis B, a potentially fatal disease leading to liver cirrhosis and cancer, is insufficient in India.

Hepatitis

- Hepatitis is an **inflammation of the liver**.
- The condition can be self-limiting or **can progress to fibrosis (scarring), cirrhosis or liver cancer**.
- It **can be acute** (inflammation of the liver that presents with sickness — jaundice, fever, vomiting) **or chronic** (inflammation of the liver that lasts more than six months, but essentially showing no symptoms).
- Hepatitis viruses are the most common cause of hepatitis in the world but other infections, toxic substances (e.g., alcohol, certain drugs), and autoimmune diseases can also cause hepatitis.
- There are **5 main hepatitis viruses, referred to as types A, B, C, D and E**.
- **Other viruses may also cause it**, such as the varicella virus that causes chicken pox.

- Other causes include drugs and alcohol abuse, fat buildup in the liver (fatty liver hepatitis) or an autoimmune process in which a person's body makes antibodies that attack the liver (autoimmune hepatitis).
- Hepatitis is the only communicable disease where mortality is showing an increasing trend.
- Hepatitis A and E are typically caused by ingestion of contaminated food or water.
- Hepatitis B, C and D usually occur as a result of parenteral contact with infected body fluids.
- Common modes of transmission for these viruses include receipt of contaminated blood or blood products, invasive medical procedures using contaminated equipment and for hepatitis B transmission from mother to baby at birth, from family member to child, and also by sexual contact.
- Hepatitis D virus (HDV) infections occur only in those who are infected with HBV.
- The dual infection of HDV and HBV can result in a more serious disease and worse outcome.
- Hepatitis E virus (HEV) is mostly transmitted through consumption of contaminated water or food.

- **HEV is a common cause of hepatitis** outbreaks in developing parts of the world and is increasingly recognized as an important cause of disease in developed countries.
- **Hepatitis C virus (HCV) is mostly transmitted through exposure to infective blood.**
- This may happen through transfusions of HCV-contaminated blood and blood products, contaminated injections during medical procedures, and through injection drug use. Sexual transmission is also possible but is much less common.

Treatment

- Hepatitis **A and E are self-limiting** (i.e., they go away on their own) and **do not require antiviral treatment.**
- Hepatitis **A and B vaccines are available**, but Hepatitis **C and D vaccines are not.**
- Hepatitis **B vaccines provide protection from Hepatitis D virus infection.**
- For **Hepatitis E**, a promising vaccine is in the works.
- Effective **medications for Hepatitis B and C are available.**
- **Antiviral medications can be used to treat chronic hepatitis B infection.**

- Treatment can slow cirrhosis progression, lower the risk of liver cancer, and improve long-term survival.
- Hepatitis B is included under **India's Universal Immunization Programme (UIP)** which provides free of cost vaccination **against eleven (excluding Hepatitis B) vaccine preventable diseases**. i.e., Tuberculosis, Diphtheria, Pertussis, Tetanus, Polio, Pneumonia and Meningitis due to Haemophilus Influenzae type b (Hib), Measles, Rubella, Japanese Encephalitis (JE) and Rotavirus diarrhoea.
- **Bangladesh, Bhutan, Nepal and Thailand** became the first four countries in the World Health Organization's South East Asia region to have **successfully controlled Hepatitis B**.
- World Hepatitis Day is commemorated **yearly on 28th July** to increase **awareness and understanding of viral hepatitis as a global priority**.
- Recently, an automated coronavirus **testing device named 'COBAS 6800'** was launched which can also detect viral Hepatitis B & C, among others.
- It can be noted that **only for four diseases** viz. **HIV-AIDS** (1st December), **TB** (24th March), **Malaria** (25th April), and **Hepatitis**, the World Health Organization (WHO) **officially endorses disease-specific global awareness days**.

Global Scenario

- **Approximately 354 million people are suffering from hepatitis B and C.**

- Southeast Asia has 20% of the global morbidity burden of hepatitis.
- About 95% of all hepatitis-related deaths are due to cirrhosis and liver cancers caused by the hepatitis B and C virus.

Indian Scenario

- Viral hepatitis, caused by hepatitis viruses A through E, still remains a major public health problem in India.
- India has “intermediate to high endemicity” for Hepatitis B surface antigen and an estimated 40 million chronic HBV infected people, constituting approximately 11% of the estimated global burden.
- Population prevalence of chronic HBV infection in India is around 3-4 %.