

Self-Testing of HIV

Source: IE

Why in News?

A study by the Indian Council of Medical Research-National Institute of Translational Virology and AIDS Research (ICMR-NITVAR) and Mizoram University has highlighted the success of https://example.com/html/mmunodeficiency-virus (HIV) self-testing in Mizoram.

What are the Key Findings of the Study?

- **HIV Self-Testing:** The study examined HIV self-testing implementation in Mizoram, which has India's highest HIV prevalence (2.73%), **13 times the national average**.
 - The epidemic in the state is largely driven by injecting drug use and commercial sex work.
 - Lack of early testing and stigma prevents many from accessing timely treatment.
 - HIV self-testing allows individuals to collect their own blood or saliva samples and interpret the results using a test kit.
- Stigma-Free & Private: The study found self-testing to be a convenient, confidential, and more effective way for high-risk groups to know their HIV status than traditional campaigns, with potential for replication in other states.

Note: The <u>World Health Organization (WHO)</u> endorsed self-testing in 2016, and **41 countries** have since adopted it. India has **not yet introduced formal guidelines** for HIV self-testing.

What are the Key Facts About Human Immunodeficiency Virus?

- About: HIV is a virus that attacks the immune system by targeting CD4 cells (white blood cells). If untreated, it can lead to <u>AIDS (Acquired Immunodeficiency Syndrome)</u> and making the body prone to infections and cancers.
- Transmission: HIV spreads through direct contact of infected bodily fluids like blood, semen, breast milk, vaginal fluids, and via unprotected sex, tattooing, and shared needles but not through casual contact.
- Symptoms: Early stage (fever, rash), Later stage (swollen lymph nodes, weight loss, diarrhea), and Severe stage (tuberculosis, meningitis, cancers (e.g. lymphoma)).
- **Risk Factors:** Multiple sexual partners or having sexually transmitted infections (STIs), Unsafe blood transfusions.
- **Diagnosis: Rapid diagnostic tests** for same-day results, **Self-testing kits**, and Confirmatory **virological tests**.
- **Prevention:** Regular **HIV testing**, **STI screening**, safe blood transfusions, and using sterilized needles for tattoos are essential for prevention.
- Treatment: No cure for HIV, Antiretroviral Therapy (ART) helps control the virus. ART must be

- taken daily for life to maintain health.
- Advanced HIV Disease (AHD): WHO defines AHD as CD4 <200 cells/mm³. People with AHD are at high risk of death, even after starting ART.
- Global Response: End HIV epidemic by 2030 (UN Sustainable Development Goal 3.3).
- India's Progress: India HIV Estimations 2023 reports 2.5 million people living with HIV, with 0.2% adult prevalence. New infections dropped 44% since 2010, surpassing the global 39% decline.
 - The <u>National AIDS Control Programme (NACP)</u>, launched in 1992, remains key in India's fight against HIV/AIDS.

UPSC Civil Services Examination Previous Year Question (PYQ)

- Q. Which of the following diseases can be transmitted from one person to another through tattooing? (2013)
 - 1. Chikungunya
 - 2. Hepatitis B
 - 3. HIV-AIDS

Select the correct answer using the codes given below:

- (a) 1 only
- **(b)** 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

Ans: (b)

- Q. Which one of the following statements is not correct? (2019)
- (a) Hepatitis B virus is transmitted much like HIV.
- (b) Hepatitis B unlike Hepatitis C, does not have a vaccine.
- **(c)** Globally, the number of people infected with Hepatitis B and C viruses arc several times more than those infected with HIV.
- (d) Some of those infected with Hepatitis B and C viruses do not show the symptoms for many years.

Ans: (b)

- Q. With regard to the transmission of the Human Immunodeficiency Virus, which one of the following statements is not correct? (2010)
- (a) The chances of transmission from female to male are twice as likely as from male to female
- (b) The chances of transmission are more if a person suffers from other sexually transmitted infections
- **(c)** An infected mother can transmit the infection to her baby during pregnancy, at childbirth and by breast feeding
- (d) The risk of contracting infection from transfusion of infected blood is much higher than an exposure to contaminated needle

Ans: (a)

Q. Consider the following statements: (2010)

- 1. Hepatitis B is several times more infectious than HIV/AIDS
- 2. Hepatitis B can cause liver cancer

Which of the statements given above is/are correct?

- (a) 1 only
- **(b)** 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

Ans: (c)

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