Medicine Nobel

Why in news?

The 2020 Nobel Prize in Physiology or Medicine is given to three scientists who peeled the layers off the Hepatitis C virus (HCV).

Why they were awarded?

- The Nobel Committee has decided to give the 2020 Medicine Nobel to Harvey J. Alter, Michael Houghton and Charles M. Rice.
- These scientists peeled the layers off the virus that confounded generations of physicians - the HCV.
- The Nobel Committee chose researchers who went after a pathogen, and succeeded in unwrapping the whole puzzle.
- It cannot be a coincidence that this comes at a time when researchers are fighting fatigue in a daily battle against the SARS-CoV-2 virus.

What was their work?

- The accolades went to the three for identifying the viral origin of HCV.
- The Nobel statement said that the scientists' work characterised this form of hepatitis to be a distinct clinical entity.
- They said that it was caused by an RNA virus of the Flavivirus family, now known as HCV.

To whom was the 1976 Medicine Nobel given?

- The 1976 Medicine Nobel was awarded for the discovery of the Hepatitis B virus (HBV), and the development of the first-generation HBV vaccine.
- However, the isolation of the HBV only partially eliminated the risk of contracting this severe liver disease transmitted through blood.
- The circle was only complete with the discovery of HCV.

What did the Global Hepatitis report say?

- According to the WHO Global Hepatitis report, HBV and HCV are major causes for mortality and morbidity.
- Around 1.34 million deaths was reported in 2015, a 63% increase from 1990, mainly due to HCV.

- The number of deaths is also comparable to that caused by TB and higher than that caused by AIDS.

What is the importance of the discovery?

- The discoveries of HBV and HCV, and the development of effective screening routines, have virtually eliminated the risk of transmission via blood products.
- With the development of effective drugs against HCV, it is possible that the threat of this viral infection would be eliminated soon.
- The Nobel Committee called it among the most impactful scientific accomplishments of the 20th century.

What is next?

- The triumph of humanity, over the pathogens that weaken and kill people is certainly a singular achievement that is worth celebrating.
- Showcasing this achievement will send a deeply inspiring message at a time when SARS-CoV-2 virus is holding the world to ransom.

Source: The Hindu

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