The Road to End Tuberculosis (TB)

Why in news?

India's G20 presidency this year and the Varanasi Stop TB board meeting could provide a perfect platform to end TB.

What is Tuberculosis?

- **About** - Tuberculosis is a serious infectious and contagious disease that generally affects lungs.
- **Cause** - TB is caused by a *bacterium* known as *Mycobacterium tuberculosis*.
- **Transmission** – TB bacteria spread through the air from one person to another
- When a person with TB disease of the lungs or throat coughs, speaks, or sings, TB bacteria can get into the air.
- **Symptom** -
  - Pain in the chest
  - Coughing up blood and sputum (phlegm from deep inside the lungs weakness or fatigue
  - Weight loss and loss of appetite
  - Chills and fever
  - Sweating at night
- **Treatment** - Drugs include Isoniazid (INH), Rifampicin, Pyrazinamide and Ethambutol (HRZE) in daily doses

Status of TB in India

- Most of the TB statistics for India are collected by the government National Tuberculosis Elimination Program
- The NTEP then passes their figures to the World Health Organisation (WHO).
- The WHO TB statistics for India for 2021 give an estimated incidence figure of 2,590,000 million cases

An estimate of 2.8 million TB cases with TB killing more than 4,00,000 occur in India every year

What are the measures taken by India to eradicate TB?

- **The National Tuberculosis Elimination Programme(NTEP) -** Aims to strategically reduce TB burden in India by 2025.
- It was previously known as Revised National Tuberculosis Control Programme

(RNTCP).
- The government reached over a billion people in 632 districts/reporting units.
- **The National Strategic Plan for TB Elimination –** It was launched to achieve the target of ending TB by 2025 in a mission mode.
- It is a multi-pronged approach which aims to detect all TB patients with an emphasis on reaching TB patients seeking care from private providers and undiagnosed TB in high-risk populations
- **Ni-kshay Poshan Yojana(NPY)(Nutritional Support to TB) -** It helps to meet the nutritional requirements of TB patients, especially the underserved
- From 2018 till present, around Rs. 1,707 crore has been disbursed to more than 65 lakh people on TB treatment across the country
- **Patient Provider Support Agencies (PPSA) -** To engage the private sector, Patient Provider Support Agencies (PPSA) have been rolled out across 250 districts through the domestic setup and JEET initiative
- **Universal Drug Susceptibility Testing (UDST) -** To ensure every diagnosed TB patient is tested to rule out drug resistance before or at the time of treatment initiation itself.
- **Pradhan Mantri TB Mukt Bharat Abhiyaan -** To bring together all community stakeholders to support those on TB treatment and accelerate the country's progress towards TB elimination**.**
- **Ayushman Bharat - Health and Wellness Centres -** To decentralize comprehensive primary healthcare including TB care services at the grassroots level.
- **Bedaquiline and Delamanid -**Newer drugs like Bedaquiline and Delamanid have also been made available for management of DRTB.

What are the global measures to eradicate TB?

- **End TB Strategy –** by World Health Organization (WHO)
- It serves as a blueprint for countries to reduce TB incidence by 80%, TB deaths by 90%, and to eliminate catastrophic costs for TB-affected households by 2030.
- **World Development Report (1993) –** Published by the World Health Organization (WHO).
- The 1993 World Development Report labelled TB treatment for adults as the best buy among all developmental interventions.
- **The Global Fund -** A worldwide movement to defeat HIV, TB and malaria and ensure a healthier, safer, more equitable future for all.
- **The Stop TB Partnership -** Brings together expertise from a broad spectrum of country, regional, and global partners in our shared mission to revolutionize the TB space and end TB by 2030
- **Sustainable Development Goal 3** - To end TB epidemic by 2030

What are the challenges to eradicate TB?

- Lack of clarity on definitions of 'end' TB
- Poor primary health-care infrastructure in rural areas
- Unregulated private health care leading to widespread irrational use of first-line and second-line anti-TB drugs

- Unpasteurized milk or dairy products made from raw milk is another potential source of TB for humans
- Lack of awareness
- Multidrug-resistant TB (MDR TB)

Multidrug-resistant TB (MDR TB) is caused by an organism that is resistant to at least isoniazid and rifampin, the two most potent TB drugs

What is the need of the hour?

- Development and wide use of an adult TB vaccine
- To lower production cost so as to make few available anti-TB drugs to everyone
- Inventing injection-free and oral pills for TB
- Use of AI-assisted handheld radiology with 90-second reporting and 95% accuracy for diagnosing TB.

References

1. The Hindu | Ending TB
2. PIB | Measures By India
3. The Quint | Definition Of TB

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