Tuberculosis in India

Why in news?

Recently, a senior Health Ministry official said that India's progress towards rapidly reducing TB cases and deaths, aiming for elimination by 2025, has stalled.

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. • **Symptoms-**   • **Treatment** - Drugs include Isoniazid (INH), Rifampicin, Pyrazinamide and Ethambutol (HRZE) in daily doses.

What is the current status of Tuberculosis (TB)?

- India has been engaged in TB control activities for *more than 50 years*, yet the disease continues to be the country's severest health crisis.
- TB kills an estimated *480,000 Indians every year or over 1,400 patients every day*. The country also has more than a million 'missing' TB cases annually, which are not notified.
- With an estimated 2.64 million cases in 2021, India accounts for about ***25% of the world's TB burden.***
- The Indian government ambitiously ***aimed to eliminate TB by 2025.***
- The World Health Organization (WHO) reports over 10 million new cases of TB every year and India alone accounts for 27% of the global TB burden.

- 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 major challenges in eradicating TB?

- **Inefficiency-** Most of the cases remain either undiagnosed, or unaccountably and inadequately diagnosed and treated in the private sector.
- **Lack of will-** While treating more than 10 million TB patients under the Revised National TB Control Programme (RNTCP), the rate of decline is too slow to meet the 2030 Sustainable Development Goals (SDG) and 2035 End TB targets.
- **Socio-economic challenges-**The complexity of TB in India is further exacerbated by factors such as drug resistance, co-infections with HIV and disparities in healthcare access.
- **Lack of regulation-** Unregulated private health care leading to widespread irrational use of first-line and second-line anti-TB drugs.
- **Multidrug-resistant TB (MDR TB)-** It is caused by an organism that is resistant to at least isoniazid and rifampin, the two most potent TB drugs.
- **Concerns with dairy products**- Unpasteurized milk or dairy products made from raw milk is another potential source of TB for humans.

What are the measures taken by India to eradicate TB?

- **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).
- **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
- **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** – It is implemented by World Health Organization (WHO) which 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.
- **The Global Fund** - A worldwide movement to defeat HIV, TB and malaria and ensure a healthier, safer, more equitable future for all.
- **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 could be the way forward?

- There are *several new technologies* which can help in early detection and the government should also be better prepared to address TB.
- India has *mandated the notification of all TB cases*, and has integrated TB programmes with general health services under the National Health Mission.
- **Government expansion**- There has been an expansion of diagnostic services, service expansion in programmatic management of drug-resistant TB (PMDT), single-window service for TB-HIV cases, national drug resistance surveillance, and the revision of partnership guidelines.
- **DTPB strategy-**The requirements for moving towards TB elimination should be integrated into the four strategic pillars of 'Detect – Treat – Prevent – Build' (DTPB).
- **Low cost-**To lower production cost so as to make few available anti-TB drugs to everyone.

References

1. The Hindu- India’s TB elimination drive
2. PIB- Measures taken by India to control TB