Re-emergence of Leprosy

Mains Syllabus: GS II - Issues relating to development and management of Social Sector/Services relating to Health.

Why in the News?

Recently, the rise of new leprosy cases and its transmission has been observed.

What is the status of leprosy in India?

- **Leprosy** – It is a chronic infectious disease caused by the Mycobacterium leprae bacteria.
- **Infection** - The disease predominantly affects the skin and peripheral nerves and if left untreated, it may cause progressive and permanent disabilities.
- **Two Types** - In leprosy, paucibacillary (PB) leprosy refers to a milder form with fewer than five skin lesions and negative skin smears.
- Multibacillary (MB) leprosy is a more severe form with six or more skin lesions, potentially positive skin smears, and a weaker immune response
- PB patients have fewer bacteria visible and show no signs of advanced disease in biopsies, while MB patients have visible bacteria and may show signs of more advanced disease in biopsies.
- **Transmission** - The bacteria are transmitted via droplets from the nose and mouth during close and frequent contact with untreated cases.
- **Treatment** - Leprosy, reported from all the six WHO regions, is curable with multi-drug therapy (MDT).

3 Drug Multi Drug Therapy (MDT) Regime
• The WHO's recommended treatment regimen consists of three drugs — dapsone, rifampicin and clofazimine. • The duration of treatment is six months for PB and 12 months for MB cases. MDT kills the pathogen and cures the patient.

- **Elimination in India** - Leprosy was eliminated as a public health problem in India as per the World Health Organization's criteria of less than 1 case per 10,000 population, at the national level, in 2005.
- **Reemergence** - Experts say, it is quietly resurfacing, particularly in climate stressed States including West Bengal and Bihar.
- The majority of new cases detected annually are from South East Asia.
- India reported over 1 lakh(1,03,819) new leprosy cases for the year 2022-23 out of which grade 2 disability (G2D) cases were 2,363 (2.28%), amounting to 25% of the new G2D cases of the world.

What are the causes of recent rise in leprosy?

- **Climatic Condition** - Leprosy is a tropical disease and in tropical areas, there is a higher chance of this bacteria multiplying at a very rapid pace, and it is quite possible that it will multiply quickly.
- **Extreme Climate Events** - floods, cyclones and droughts increase risk factors like malnutrition, limit access to clean water and poor hygiene which are known to contribute to leprosy spread.
- **Poverty** - States including Bihar, Jharkhand, Uttar Pradesh, Odisha and Chhattisgarh are also home to the largest proportion of people living in multidimensional poverty, meaning poverty that goes beyond money and wealth.
- Kishanganj in Bihar, Raigarh in Chhattisgarh and Nuapada in Odisha have reported leprosy prevalence rates above 3% coexisting with poverty levels that exceed 60% in some cases.
- **Displacement** - When residents of rural areas face climate shocks like floods or droughts, they tend to migrate to urban areas.
- Many can only afford to live in overcrowded slums and high population density increases the transmission risk.
- **Tribal Vulnerability** - Even in relatively better-off states like Maharashtra and West Bengal, vulnerability in clusters exists especially in tribal areas like Nandurbar and Jhargram.

How do climate -induced disasters disproportionately affect leprosy-affected communities?

- India is ranked amongst the most climate-vulnerable nations globally and the intersection of disease, climate change and economic deprivation can further deepen the gaps.
- **Extreme Weather Events** - They do not affect all communities equally, and people affected by leprosy often face risks far beyond those encountered by the general population.
- **Increased Vulnerability to Climate Effects** - Leprosy affects the peripheral nervous system, which can lead to temperature sensitivity issues.
- Exposure to extreme heat or cold (more common in climate-induced disasters) can be dangerous for people with leprosy, as they may not feel pain or discomfort, leading to burns or frostbite.
- **Loss of Shelter** - Floods cause the loss of homes, crops and in some cases even access to shelters.
- **Discrimination** - Those with leprosy-related disabilities are often left behind in evacuation efforts and many face discrimination at relief camps.
- **Loss of Access to Healthcare** - People with leprosy typically rely on long-term treatment, including multi-drug therapy (MDT), to manage their condition and prevent disabilities.
- When these services are disrupted due to disasters, it can result in the interruption of treatment and worsening of the disease.

Initiatives on Leprosy Elimination
• Global Leprosy Strategy 2021-2030 – This WHO strategy has a vision of zero disease, zero disability and zero stigma and discrimination. • National Leprosy Elimination Programme – Launched in 1983, it focuses on early detection, free of cost treatment to prevent development of disabilities and deformities, and medical rehabilitation of those with existing deformities. • National Strategic Plan & Roadmap for Leprosy (2023-27) and National Guidelines for Antimicrobial resistance (AMR) Surveillance in leprosy were also released during the event along with launch of Nikusth 2.0 Portal. • ABSULS - ASHA-based Surveillance for Leprosy Suspects where grassroot level workers constantly engaged in examining and reporting suspects. • Leprosy Mukt Bharat – It is a national campaign launched by the Indian government to eradicate leprosy by 2027, three years ahead of the Sustainable Development Goals (SDGs) target. • New Drug Regime - Ministry of Health and Family Welfare has decided to introduce a three-drug regimen for Pauci-Bacillary (PB) cases in place of a two-drug regimen.

What lies ahead?

- Community resilience need to be built alongside awareness programmes on climate-adaptive health behaviour.
- Strengthening health systems in leprosy endemic districts to mitigate climate shocks as well as hyper-local climate and health risk assessments are essential.
- As the triple burdens often affect specific districts and not entire States, These districts should receive prioritised resources and support.
- Investments need to be made in local health systems to make them capable of reading and reacting to climate data.

Reference

[The Hindu | The link between leprosy and climate-change]