

## **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 climateadaptive 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

