Tuberculosis (TB): Recent Figures, Ongoing Challenges & Drug Supply Status

- According to data presented to Parliament, India recorded around **2.2 million TB cases and 300,000 deaths in 2024**.
- Despite the burden, the government says there is **no shortage of essential anti-TB drugs** (like Rifampicin and Ethambutol) in central or state warehouses, ensuring continuity of treatment under National Tuberculosis Elimination Programme (NTEP).
- Meanwhile, new research from IIT Bombay shows that the TB bacteria Mycobacterium tuberculosis can survive antibiotic treatment by altering their outer membrane — making them more tolerant to standard drugs.
- This suggests that even with treatment availability, TB remains hard to eliminate — especially latent or "dormant" infections.

Antimicrobial Resistance (AMR) — Growing Concern Over Antibiotic Misuse

- A recent study from Asian Institute of Gastroenterology (AIG), Hyderabad, has flagged that **around 83% of patients undergoing routine procedures in India carry multidrug-resistant bacteria (MDROs)**.
- This high rate of resistant organisms indicates that antibiotic resistance is widespread — not limited to hospitals, but community-wide.
- Experts and some municipal authorities are urging people to avoid over-the-counter (OTC) use of antibiotics, and to use them only when prescribed — to slow down the rise of AMR.

Use of Advanced Diagnostics & Evolving Treatment Strategies — Mixed Prospects for Disease Control

- The fight against TB has seen progress: control programmes like NTEP claim improved detection and coverage.
- But the survival strategies of TB bacteria (e.g., "dormant cells" resisting antibiotics) highlight the need for improved diagnostic and therapeutic strategies — beyond standard clinical treatment, especially for latent infections.

- The dual challenge of persistent infections and increasing antimicrobial resistance raises concerns over India's ability to sustainably manage infectious diseases.

🔎 What This Means for Public Health in India

- While detection and drug supply for TB are being maintained, TB remains a “moving target” because of bacterial survival strategies. This means long-term vigilance, follow-up care, and possibly newer diagnostic or drug strategies will be needed.

- The high prevalence of drug-resistant bacteria among regular patients suggests AMR is no longer a niche issue — it's a mainstream public-health emergency. Judicious use of antibiotics, strict prescription practices, and public awareness are increasingly critical.

- Surveillance, early detection, and community-level diagnostics — especially for latent infections — will be as important as treatment.

- Combined, TB, AMR, and infection-control pose a complex challenge to India's healthcare system, underlining the need for robust public health policies, investment in research, and widespread health-education efforts.