Drug-Resistant Infections Emerging as Major Public Health Problem in India

Context

- Event: CIDSCON 2025 (Conference of Infectious Diseases Society of India)
- Location: Mumbai
- Focus: Antimicrobial resistance (AMR) and its growing threat to India's health system

Scale of the Problem

- Estimated annual deaths in India due to AMR: ~300,000
- Drug-resistant infections are now among the leading causes of preventable deaths.
- Hospital-acquired infections are showing rising resistance to commonly used antibiotics, making treatment increasingly difficult.

Key Insights from Experts

1. Misuse of Antibiotics

- Rampant over-prescription without proper diagnostic tests.
- Self-medication and easy over-the-counter antibiotic purchase by the public.
- Widespread use of antibiotics in animal husbandry and agriculture, contributing to resistance.

2. Weak Infection Control Measures

- Inadequate hospital infection control practices (hand hygiene, sterilization, isolation wards).
- Poor public awareness of AMR dangers.
- Resistance often spreads silently in communities due to poor sanitation and overcrowding.

3. Educational & Training Gaps

- Medical education in India still gives limited emphasis to infection prevention and antimicrobial stewardship.
- Experts at CIDSCON called for revised medical curricula to include:
 - Rational use of antibiotics
 - AMR surveillance practices
 - Patient education on medication adherence

4. Global & National Implications

- AMR could become a bigger health crisis than cancer or diabetes if unchecked.
- India's role is critical since it is a major producer and consumer of antibiotics.
- Experts stressed the need for India to strengthen its National Action Plan on AMR, aligned with WHO's global strategy.

Suggested Interventions

- Public Awareness Campaigns: Educate people about not demanding antibiotics unnecessarily.
- Regulations: Stricter control on over-the-counter antibiotic sales.
- Hospital Stewardship Programs: Rational prescribing, audits, and monitoring of antibiotic use.
- Surveillance Networks: Strengthen AMR surveillance at district and state levels.
- Investment in Research: Encourage development of new antibiotics and alternative therapies.

Broader Impact

- AMR poses risks not only to infectious disease treatment, but also to routine medical care like:
 - Organ transplants
 - Chemotherapy
 - Complex surgeries
 - Neonatal care
- Without effective antibiotics, these treatments carry much higher risk of fatal infections.