COMMENTARY

The Prime Minister's Clarion Call on Antimicrobial Resistance: From Public Concern to System Action through Diagnostics, Stewardship and One Health

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CITATION

Gopal KM, Garg S. The Prime Minister's Clarion Call on Antimicrobial Resistance: From Public Concern to System Action through Diagnostics, Stewardship and One Health. Journal of the Epidemiology Foundation of India. 2025;3(4):335-340.

DOI: https://doi.org/10.56450/JEFI.2025.v3i04.008

ARTICLE CYCLE

Received: 15/12/2025; Accepted: 26/12/2026; Published: 31/12/2025

Abstract

Antimicrobial resistance (AMR) is a major and growing threat to health security. It weakens the treatment of common infections and undermines the safety of routine medical care. In his Mann Ki Baat message of 28 December 2025, the Prime Minister warned that indiscriminate antibiotic use is making common infections such as pneumonia and urinary tract infections harder to treat, and urged citizens not to use antibiotics as a 'quick fix'. This commentary takes that clarion call as a starting point. It proposes three practical system shifts for India: (i) diagnostic-led stewardship at the point of care, (ii) routine monitoring of antibiotic use and resistance with feedback to facilities, and (iii) operational One Health action at priority human–animal–environment interfaces. The goal is to make the right antibiotic decision the easy decision

Keywords

Antimicrobial Resistance, Stewardship, One Health, Point-Of-Care Diagnostics, India, Primary Care

Introduction

1. From the Prime Minister's clarion call to a health systems response

On 28 December 2025, in Mann Ki Baat, the Prime Minister of India issued a clear warning that indiscriminate antibiotic use is increasing antimicrobial resistance, making common infections harder to treat, and putting lives at risk. He reminded citizens that antibiotics are not a 'quick fix' and should be taken only on a doctor's advice. (3)

1. Why AMR needs a health systems response, not only clinical advisories

The antibiotic decision is shaped by the system in which care is delivered. High patient load, limited consultation time, diagnostic delays, and variable availability of standard treatment pathways push clinicians towards empiric prescribing. At the community level, patient expectations, informal care, and easy retail access can further amplify use. These drivers explain why AMR is not only a microbiology

problem; it is a governance, quality-of-care and health financing problem that requires aligned action across service delivery, laboratories, regulation and public communication.

AMR also threatens the reliability of modern medicine. Effective antimicrobials are essential for safe surgery, neonatal care, chemotherapy, intensive care, and management of sepsis and hospital-acquired infections. (1,2) When first-line antibiotics fail, patients face longer illness, greater risk of complications, prolonged hospital stays, and higher out-of-pocket expenditure. The public health implication is clear: AMR is a governance and delivery challenge, not merely an individual prescriber's choice.

Recent public communication in India, including an explicit warning that common infections such as pneumonia and urinary tract infection (UTI) are becoming harder to treat due to indiscriminate antibiotic use, has strengthened public salience and can support behaviour change. (3) However, messaging alone cannot substitute for system enablers,diagnostics, standard pathways, surveillance, and accountable regulation.

2. The global mandate and India's renewed policy window

In 2024, the UN General Assembly adopted a Political Declaration on AMR, including a target to reduce global deaths associated with bacterial AMR by 10% by 2030. (4–6) The Quadripartite (WHO, FAO, UNEP, WOAH) welcomed the declaration and called for accelerated action across human, animal, food and environmental sectors. (6)

India has responded by launching the National Action Plan on Antimicrobial Resistance 2.0 (NAP-AMR 2.0) for 2025–2029, articulating a One Health framework and multi-stakeholder roles. (7,8) This is an important shift from fragmented initiatives to a defined national roadmap. Yet, the success of NAP-AMR 2.0 will depend on whether it moves from strategy documents to routine practice,particularly at the point of care where most antibiotic decisions are made.

3. Why "diagnostic-led stewardship" is the hinge for point-of-care change

The most common driver of inappropriate antibiotic use is not malintent; it is uncertainty. In outpatient care and early hospital management, clinicians often have limited access to timely tests, face high patient load, and encounter patient expectations for "quick relief". This combination encourages empiric antibiotic prescribing, even for likely viral syndromes.

Evidence shows that strengthening diagnostics can reduce unnecessary antibiotic use without worsening clinical outcomes. A systematic review and meta-analysis found that point-of-care C-reactive protein testing significantly reduced immediate antibiotic prescribing in primary care compared with usual care (risk ratio ~0.79). (9) In hospitals, a Cochrane review found high-certainty evidence that stewardship interventions improve compliance with antibiotic policy and reduce antibiotic duration, likely reduce length of stay, and do not increase mortality. (10) These findings support a practical conclusion: stewardship works best when it is embedded into clinical workflows and supported by accessible diagnostics.

India's policy ecosystem already recognises this direction. ICMR's Treatment Guidelines for Antimicrobial Use in Common Syndromes (2nd edition, 2019) aim to rationalise antibiotic use and standardise syndromic management. (11) ICMR's National Essential Diagnostics List (NEDL) (2019) positions diagnostics as an essential health system component, supporting procurement planning, laboratory capacity and quality systems. (12)

4. India's risk profile: consumption trends and resistance surveillance

Antibiotic consumption is a major upstream driver of resistance. A landmark analysis reported that India's antibiotic consumption increased from about 3.2 to 6.5 billion defined daily doses (DDDs) between 2000 and 2015 (≈103% increase). (13) This reflects expanding access to medicines, but also signals the urgency of infection prevention and rational use. Consumption growth without stewardship will inevitably increase selection pressure.

On resistance patterns, India has strengthened surveillance through both the National Centre for Disease Control (NCDC) and ICMR networks. NCDC's National Programme on AMR Containment coordinates the National

AMR Surveillance Network (NARS-Net) and annual reporting. (14,15) ICMR's Antimicrobial Resistance Surveillance Network (AMRSN) has reported national resistance trends from participating tertiary hospitals since 2013, publishing annual reports. (16) These surveillance systems are critical, but they must increasingly support frontline decision-making,through facility antibiograms, feedback to clinicians, and linkage with antibiotic consumption monitoring.

India is also building antibiotic consumption monitoring capacity. NCDC established the National Antibiotic Consumption Network (NAC-NET), enabling facility-level reporting of antibiotic use as part of AMR containment. (17) This is important because "what gets measured gets managed". Without routine consumption metrics, stewardship remains aspirational.

5. NAP-AMR 2.0: three implementation pivots that can convert intent into impact

5.1 Sustainable governance and financing that outlast pilots

AMR programs frequently remain pilot-driven and fragmented across disease programs, hospitals and laboratories. NAP-AMR 2.0 provides a strategic backbone, but operational success requires: (i) dedicated budget lines at national and state levels for surveillance, microbiology strengthening, IPC and stewardship; (ii) defined accountability for deliverables; and (iii) transparent reporting. (7,8)

A practical approach is to integrate a small set of AMR indicators into routine health reviews and hospital quality mechanisms, such as:

proportion of key syndromes managed using standard treatment pathways (e.g., acute respiratory infection, acute undifferentiated fever, UTI) (11)

culture-before-escalation rates for bloodstream infection/sepsis in hospitals

turnaround time for culture/susceptibility reporting (lab-to-clinician)

facility antibiogram availability and use for empiric protocols

antibiotic consumption metrics through NAC-NET (DDDs, AWaRe categories where feasible) (17)

These are not "extra reporting"; they are essential performance signals for a system that is attempting to preserve lifesaving medicines.

5.2 Operationalising One Health at the interfaces

AMR does not respect boundaries between hospitals, farms, food systems and water bodies. The UN declaration and Quadripartite guidance emphasise One Health action. (4–6) NAP-AMR 2.0 also adopts a One Health approach. (8) The implementation challenge is to move from concept to operational design,by identifying high-risk interfaces and creating sentinel surveillance and response loops.

Three practical One Health actions are feasible in the near term:

Sentinel surveillance in animal and aquaculture clusters linked with veterinary stewardship and alternatives such as vaccination and biosecurity. (6,8)

Environmental monitoring in selected high-risk wastewater sites (e.g., dense hospital clusters, pharmaceutical manufacturing zones, large livestock areas) to detect resistant organisms and antimicrobial residues, aligned with national data governance. (6,8)

Integrated reporting and joint review at state level, enabling joint risk assessment across human–animal–environment sectors under a defined governance mechanism. (8)

5.3 Diagnostic-led stewardship at point of care

Diagnostic-led stewardship is the operational bridge between policy and prescribing practice. The key is to make diagnostic confirmation feasible and affordable where it most influences decisions,OPDs, emergency rooms, and primary care facilities.

India already has enabling platforms:

ICMR treatment guidelines for common syndromes to support rational prescribing. (11)

NEDL to guide availability of essential tests and laboratory strengthening. (12)

Ayushman Bharat Health and Wellness Centres (AAM/HWCs) emphasising access to free essential medicines and diagnostics, and use of STGs and referral protocols. (18)

Free Diagnostics Services Initiative (FDSI) guidance to ensure minimum test menus at different facility levels and to reduce out-of-pocket expenditure. (19)

The practical agenda is to align these elements so that frontline clinicians have:
a defined clinical pathway (what to test, when to treat, when to refer)
a basic diagnostic package that reduces uncertainty (aligned with NEDL/FDSI) (12,19)
access to microbiology at district level and sample transport with predictable turnaround (14–16)
regular audit and feedback on prescribing patterns (10)

6. Regulation and access: addressing the OTC paradox without harming equity

India must manage a real tension: reducing inappropriate antibiotic access while preserving access to essential medicines. Regulatory tools exist. Schedule H1 of the Drugs and Cosmetics Rules restricts retail sale of listed antimicrobials without prescription and requires record-keeping; it came into force in March 2014. (20,21) India has also implemented the Red Line campaign to increase public awareness that medicines marked with a red vertical line (including key antimicrobials) should not be used without a prescription. (22)

However, regulation works best when combined with system alternatives. If primary care lacks diagnostics and patients face barriers to consultation, strict enforcement alone may shift behaviour in unintended ways. A balanced implementation package should include:
targeted audits for high-risk antimicrobials (Schedule H1 focus) (20,21)
pharmacy engagement and training, supported by simple counselling tools
public messaging that differentiates viral from bacterial illness (aligned with treatment guidelines) (11,22)
strengthened public sector access to consultation and basic diagnostics (18,19)

This approach supports rational use while protecting equity.

7. Strengthening infection prevention and control: the often-underused "antibiotic-sparing" lever

Preventing infections reduces antibiotic use and resistance pressure. Infection prevention and control (IPC) is a core AMR containment strategy. India's National Guidelines for Infection Prevention and Control in Healthcare Facilities (2020) provide a comprehensive framework, including linkages between antimicrobial use policies, stewardship, surveillance, microbiology support, and evaluation with monitoring and feedback. (23) Operationally, IPC improvements,hand hygiene, device-associated infection prevention, environmental cleaning, sterilisation, and HAI surveillance,can reduce infection incidence, reduce antibiotic demand, and improve patient outcomes. IPC should therefore be treated as a foundational investment for AMR, not an optional add-on.

8. A practical 24-month roadmap (2026–2028) for measurable progress

To translate NAP-AMR 2.0 into action, the next 24 months should prioritise a limited set of deliverables that are feasible, measurable and scalable:

1) State implementation cells and quarterly scorecards: Create/strengthen state AMR implementation units with quarterly reporting on surveillance coverage, antibiotic consumption, and facility stewardship/IPC indicators. (8,14,17)

2) District microbiology strengthening plus sample transport: Ensure district-level microbiology capacity (or hub-and-spoke linkage) with defined sample transport pathways and turnaround time targets for key syndromes. (14–16)

3) OPD stewardship pilots anchored in diagnostics: Implement standard pathways for acute respiratory infection, UTI and acute undifferentiated fever, with diagnostic triggers and rational antibiotic choices aligned with ICMR guidelines. (11)

4) Facility antibiograms and prescriber feedback loops: Institutionalise antibiogram generation and integrate into empiric protocols, supported by audit-feedback. (10,14–16)

5) Antibiotic consumption monitoring (NAC-NET scale-up): Scale participation in NAC-NET and use consumption data to target stewardship support and regulatory attention. (17)

6) Pharmacy engagement package: Combine Schedule H1 enforcement with pharmacist

training and public education, aligned with Red Line awareness. (20–22)

7) One Health sentinel pilots in high-risk districts: Select a small number of high-risk districts to implement integrated surveillance at human–animal–environment interfaces and document learning for scale. (6,8)

This roadmap can create "proof of routine",turning AMR work from episodic campaigns into embedded system practice.

Conclusion

The Prime Minister's clarion call has moved AMR into mainstream public discourse and created a rare policy window for decisive system action. India has also entered a stronger phase of AMR response through NAP-AMR 2.0 and expanding surveillance platforms. (10–14) The central implementation insight is that AMR will not be solved by awareness alone. The system must reduce diagnostic uncertainty, make guideline-based care feasible in busy settings, and provide routine feedback on antibiotic use and local resistance patterns to prescribers and managers.

If India aligns diagnostics, clinical pathways, surveillance, stewardship, infection prevention and control, and smart regulation, the Prime Minister's message can translate into measurable reductions in avoidable antibiotic use and better outcomes for patients. The practical goal should be simple: make the right antibiotic decision the easy decision, while protecting access for those who genuinely need antimicrobials.

Authors Contribution

All authors contributed equally.

Financial Support and Sponsorship

Nil

Conflict of Interest

There are no conflicts of interest.

Declaration Of Generative AI And AI Assisted Technologies In The Writing Process

The authors haven't used any generative AI/AI assisted technologies in the writing process.

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