

Editorial



Public Health Perspective of Integrated Antimicrobial Stewardship Programs: A Reality Check on the Indian Scenario

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BACKGROUND

In recent years, the global healthcare community has been grappling with the rising threat of antimicrobial resistance (AMR), a phenomenon that poses a significant risk to public health.¹ In response to this growing concern, Integrated Antimicrobial Stewardship Programs (iASPs) have emerged as a critical tool to optimize antimicrobials, enhance patient outcomes, and mitigate the impact of AMR.² However, as we evaluate the public health perspective of iASPs, it becomes evident that the reality in the Indian scenario presents unique challenges and opportunities.³

CONTEXTUAL APPROACH

The diversity in healthcare practices across urban and rural settings in India necessitates a contextual approach to iAMSP interventions.⁴ Recognizing the variability in healthcare infrastructure, knowledge dissemination must be tailored to address different regions' specific needs and constraints. This approach acknowledges that a one-size-fits-all solution is inadequate, and interventions must be adapted to the cultural, social, and economic contexts in which they are implemented. Moreover, considering the prevalence of informal healthcare providers in rural areas, integrating iAMSP strategies into community health

programs becomes crucial.⁵ Empowering local healthcare providers with the knowledge and tools to practice responsible antimicrobial use can contribute significantly to the success of stewardship initiatives in remote and underserved areas.

FEASIBILITY ASSESSMENT

Feasibility hinges on several factors, one being the integration of iAMSPs into routine clinical workflows.⁶ Streamlining interventions within existing healthcare processes ensures sustainability. This integration can be facilitated by leveraging electronic health records and digital platforms to monitor and guide antimicrobial prescribing practices.

Furthermore, feasibility is contingent on the availability of diagnostics. Strengthening laboratory infrastructure for rapid and accurate microbial identification is pivotal. Point-of-care diagnostics can provide timely information to guide antimicrobial prescriptions, particularly in resource-constrained settings where traditional microbiological facilities may be limited.²

COMMUNITY ENGAGEMENT

The success of iAMSPs is contingent on the active involvement of the community.⁴ Public awareness campaigns, tailored to local languages and cultural

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nuances, can enhance understanding and foster responsible antimicrobial use at the grassroots level. Engaging community health workers and local leaders as advocates for stewardship initiatives can amplify their impact.⁵

In conclusion, navigating the intricate landscape of antimicrobial stewardship in India demands a harmonized effort that integrates contextual awareness, feasibility considerations, and active community engagement. By embracing tailored interventions, streamlining within existing workflows, and empowering local healthcare providers and communities, India can not only address the unique challenges posed by antimicrobial resistance but also forge a sustainable path toward a healthier and more resilient future for its citizens. Integrated Antimicrobial Stewardship Programs' success lies in the strategic deployment of interventions and in fostering a collective commitment to responsible antimicrobial use at all levels of the healthcare spectrum.

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CONFLICTS OF INTEREST

The authors declare no conflict of interest.

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Not applicable

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AI DECLARATION

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REFERENCES

1. World Health Organization (WHO). Global Action Plan on Antimicrobial Resistance. Accessed December 2, 2023. <https://www.who.int/publications/i/item/9789241509763>
2. Laxminarayan R, Duse A, Wattal C, et al. Antibiotic resistance-the need for global solutions. *Lancet Infect Dis.* 2013;13(12):1057-98. DOI: [10.1016/S1473-3099\(13\)70318-9](https://doi.org/10.1016/S1473-3099(13)70318-9)
3. Ministry of Health and Family Welfare, Government of India. National Policy for Containment of Antimicrobial Resistance, India. Accessed December 2, 2023. https://main.mohfw.gov.in/sites/default/files/containment%20of%20AMR%20%2802-06-2011%29_1.pdf
4. Chandy SJ, Mathai E, Thomas K, Faruqui AR, Holloway K, Lundborg CS. Antibiotic use and resistance: perceptions and ethical challenges among doctors, pharmacists and the public in Vellore, South India. *Indian J Med Ethics.* 2013;10(1):20-7. DOI: [10.20529/IJME.2013.005](https://doi.org/10.20529/IJME.2013.005)
5. Mendelson M, Røttingen JA, Gopinathan U, et al. Maximising access to achieve appropriate human antimicrobial use in low-income and middle-income countries. *Lancet.* 2016;387(10014):188-98. DOI: [10.1016/S0140-6736\(15\)00547-4](https://doi.org/10.1016/S0140-6736(15)00547-4)
6. Kotwani A, Gandra S. Strengthening antimicrobial stewardship activities in secondary and primary public healthcare facilities in India: Insights from a qualitative study with stakeholders. *Indian J Med Microbiol.* 2023;41:59-63. DOI: [10.1016/j.ijmmb.2022.12.011](https://doi.org/10.1016/j.ijmmb.2022.12.011)