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Editorial

Antibiotic stewardship program: challenging threat of antimicrobial resistance

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In war against infectious diseases, antibiotics have proven its prime role in saving uncountable lives. However, their efficacy is now gradually threatened by the rise of antibiotic resistance among clinical isolates. This scenario might be due to overuse and misuse of antimicrobials across the community. In response to this looming threat, antibiotic stewardship programs (ASPs) have emerged as crucial strategies to promote the prudent use of antibiotics, safeguarding their efficacy for current and future generations. ASP encompass a range of strategies aimed at promoting appropriate antibiotic prescribing, minimizing unnecessary use, and preventing the emergence and spread of antibiotic-resistant bacteria.[1] These policies need to implemented not only in healthcare settings but must be extended to community settings also as in Indian scenario, direct use of antibiotics without prescription is major challenge to deal with.

Preparation of Protocols, Education and Training for physicians and pharmacist, Antibiotic Monitoring and Surveillance, Implementation of Antibiotic Restrictions, etc are key components of ASP. By implementing ASP in health care settings, not only we can Improved Patient Outcomes by reducing the risk of adverse drug reactions, we can decrease the cost of treatment and preserve the effectiveness of antibiotics in future for resistant isolates.[2]

Along with this program we need Enhanced surveillance systems for monitoring the prevalence and spread of resistant pathogens, identifying emerging threats, and guiding public health interventions. Timely and accurate data collection enables policymakers to make informed decisions and allocate resources effectively. Given the transnational nature of AMR, international cooperation is paramount in addressing this global threat. Collaborative initiatives, such as the Global Action Plan on Antimicrobial Resistance proposed by the World Health Organization (WHO), facilitate knowledge sharing, capacity building, and mutual support among countries.[3]

Despite their undeniable benefits, these programs face several challenges, including resource constraints, resistance from healthcare providers, and the global nature of antibiotic resistance. Addressing these challenges requires sustained commitment from policymakers, healthcare professionals, and the public.[4]

Antibiotic stewardship programs represent a keystone of efforts to combat antibiotic resistance and safeguard global health. By promoting responsible antibiotic use, these programs are urgent need in fight against the infectious diseases. In the face of a growing public health crisis, investment in antibiotic stewardship is not just prudent—it is imperative. By adopting a multifaceted approach that integrates surveillance, stewardship, research, collaboration, and One Health principles, we can mitigate the threat of AMR and ensure a healthier and more resilient future for generations to come.

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