



Letter to Editor



A SWOT Analysis of the Implementation of Diagnostic Stewardship Practices

Deepa Pandey*

Department of Microbiology, Northern Railway Central Hospital, Basant Lane, New Delhi, India.

* **Corresponding author:** Deepa Pandey, Department of Microbiology, Northern Railway Central Hospital, Basant Lane, New Delhi, 110055, Delhi, India.

Email: deepalohanio2lhmc@gmail.com

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Dear Editor,

Diagnostic stewardship refers to properly utilizing diagnostic tests for patient management to improve clinical outcomes and reduce the spread of antimicrobial resistance (AMR).¹ SWOT (strengths, weaknesses, opportunities, and threats) analysis is often used as a business strategy tool, which is a method for identifying and analyzing the internal strengths and weaknesses and external opportunities and threats.² This was an attempt to identify the Strengths, Weaknesses, Opportunities, and Threats that can be encountered in effectively and adequately implementing Diagnostic Stewardship practices. Implementation of diagnostic stewardship practices can prove beneficial in the long run. Strengths include more justified use of antibiotics, which reduces drug toxicity, adverse drug reactions like antibiotic-associated diarrhea (AAD), selection pressure on microbes, antimicrobial resistance, and promote teamwork of clinicians including microbiologists and pharmacists where "Everyone Contributes." It optimizes the clinical outcomes as the right drug directed for the right patients can be administered at the right time. Also, the availability and utilization of point-of-care tests (POCTs) are other real

tools that can be of immense help if used judiciously. These measures will reduce economic costs, improve hospital stays, and improve patient safety and satisfaction.

The weaknesses include lack of teamwork, inadequate 24 x 7 operational labs, antimicrobial susceptibility testing (AST) reporting by unexperienced personnel, no minimum mandatory standards for microbiology labs, lack of enthusiasm to adopt updated practices on AST reporting, lack of stringent regulatory checks, lack of microbiologists, untrained laboratory staff, higher test costs. Implementing diagnostic stewardship practices includes opportunities like developing a national regulatory body dedicated only to AMR and making standards at par with the Clinical and Laboratory Standards Institute (CLSI) or European Committee on Antimicrobial Susceptibility Testing (EUCAST) standards. We need certain mandatory practices for all microbiology labs and annual training programs for all microbiologists and clinicians. Encouraging behavior change practices is also one of the most essential activities without which change in work practices is unlikely. The opportunity to regulate the supply of antibiotics, ensure the availability of testing kits at all levels of health care, and encourage microbiologists to issue local antibiograms are potential areas that may be developed.

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Potential threats to these stewardship practices are unwarranted testing and reporting of unnecessary antimicrobials, inappropriate testing, irrational use of antimicrobials, over-the-counter availability of antimicrobials, lack of proper hospital infection control (HIC) practices in place in most settings, ignorance of the importance of intrinsic resistance and local antibiograms. This was an attempt to identify the possible factors and increase awareness regarding better implementation of diagnostic stewardship practices efficiently. better implementation of diagnostic stewardship practices efficiently.

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CONFLICT OF INTERESTS STATEMENT

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