A Clinical Microbiologist's Dilemma

More often now than ever before, clinical microbiologists are asked to perform minimum inhibitory concentration (MIC) for microbes that are resistant to most or all of the antimicrobial agents. These antimicrobial agents are not licensed to use against these microbes and moreover, the MIC data is not available to infer any conclusions. Patients are critically ill and limitations in our setting puts us in a dilemma.

Scenario

There is a neutropenic patient with fever and central venous lines in place. He developed central line associated blood stream infection and growing *Pseudomonas aeruginosa* from his blood culture which is resistant to every antimicrobial agent. The situation is becoming familiar. Antimicrobial resistance has reached an alarming level that nothing remains active against these microbes. And we face these dilemmas of being dependent on identification and susceptibility systems with long turn-around times. One health approach to slow down development of AMR seems attractive. It is defined as "a collaborative, multisectoral, and transdisciplinary approach — working at the local, regional, national, and global levels — with the goal of achieving optimal health outcomes recognizing the interconnection between people, animals, plants, and their shared environment".

The menace is already here and doom of modern medicine, on which lives of many depend, will be inevitable if the scourge of AMR is not slowed down.

Reference: https://www.cdc.gov/onehealth/basics/index.html

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