

The Bulletin from the Clinical Pharmacist

Author: Hasna Raihanath, Clinical Pharmacist, Kauvery, Hospital, Marathahalli



Pharma Today

- The information below is an example of AMR that depletes the “pool of effective antibiotics” available to treat bacterial infections.
- Inappropriate use of antibiotics occurs when they are used inappropriately, either by being overprescribed, underused, or taken incorrectly. This can contribute to the development of **antimicrobial resistance (AMR)**, a global health threat.
- A blood culture from one of a patient isolated a gram negative bacteria, *Enterobacter Cloacae*. The antibiotic susceptibility profile shows a worrying pattern. Susceptibility reports shows:

Resistant to: Amoxicillin +Clavulanic acid, Amikacin, Cefepime, Ciprofloxacin, Co-trimoxazole, Ceftriaxone, Gentamicin, Piperacillin-tazobactam.

Intermediate to: Cefoperazone/Sulbactam, Colistin.

Susceptible to: Imipenem, Meropenem.

Discussion:

- The above report shows that only two antibiotics, Imipenem and Meropenem, are effective and are the last -line antibiotics available in case of severe MDR infection.
- This report highlights the extent of AMR in the community consequent of the inappropriate use and use of antibiotics, and leaving us with no further options for treatment.
- Inappropriate use of antibiotics has led to bacteria developing resistance at an alarming rate, faster than new drugs being developed, and made available for treatment, in the market
- It is a high time that we take all necessary steps to prevent antibiotic resistance. A few steps are:
 - Putting a complete ban on selling the antibiotics Over-the Counter.
 - Prescribing antibiotics based only on culture and sensitivity reports.
 - Limiting the use of high- end antibiotics initially.
 - Avoiding the use of antibiotics for viral infections

- Educating the people to complete the course of antibiotics.