

## **Unpacking Antimicrobial Resistance: A Silent Pandemic**

The discovery of antibiotics was a watershed moment in human history. It enabled us to prevent rampant infectious diseases and significantly prolong our average life expectancy. For about two decades, several varieties of novel antibiotics were discovered, which had a major impact on the quality of life of people. However, since then, further advancements in the field have relied on modifying existing drugs, as opposed to developing novel varieties.

As the usage of antibiotics gained momentum, a new challenge emerged — antimicrobial resistance, or AMR. In simple terms, AMR happens when a given organism develops resistance against a drug it was previously sensitive to. Sensitivity here refers to the ability of the drug to kill the microbe, and therefore, treat the infection caused by it. In such cases, a higher, more toxic, dosage of the same drug is needed to kill the organism. In some cases, a few organisms may even become resistant to higher dosages or several different varieties of antibiotics. Organisms that develop AMR pose a unique challenge to healthcare as medicines specifically developed to kill them become ineffective, and in turn, even the simple infections caused by them could become potentially life threatening.

Given the severity of the situation, AMR can be called a 'silent pandemic', one that is slowly but surely creeping upon us, and has the potential to impact the lives of millions of people across the globe. Therefore, there is an urgent need for action - people need to be made aware of the proper usage of antibiotics and the pitfalls of self-medication, the availability of antibiotics needs to be regulated and most importantly, there needs to be a national action plan to tackle antimicrobial resistance in place.

The latest report on the AMR by CSE focuses on the challenges faced by low and middle-income countries with respect to AMR. It delves into the multifaceted dimensions of the issue by referring to CSE's work in the field and offers potential solutions and recommendations.

Access the full report here: Challenges and Possibilities to Prevent and Control AMR