

Antibiotics are the backbone of allopathy and their almost miraculous potential to cure even potent infections have resulted in a dramatic reduction in communicable diseases and massive popularity of allopathy. So much so that people often self medicate themselves with antibiotics and physicians prescribe them almost prophylactically. Such measures appear to protect the community from infections today, but their silent effects have been ignored despite obvious indications.

A growing number of infections today are caused by bacteria that have become resistant to common antibiotics. This has occurred due to indiscriminate consumption of these antibiotics without any culture or sensitivity testing for those antibiotics. A study of over 12000 urinary culture tests showed that overall resistance to penicillins, one of the most common antibiotics prescribed, ranged as high as 73% in 2012 and further rose to 82% by 2015. This is in contrast to the common assumption by the medical community of antimicrobial resistance as a slowly evolving process over decades.

Resistance to amoxicillin-clavulanic acid in E.coli, the most common urinary pathogen, increased from 24% to 32% between 2012 and 2015, a mere span of 3 years. Resistance to norfloxacin in Klebsiella almost doubled from 24% to 46%. Klebsiella had often been in the news for its potential to become rapidly resistant to antibiotics, and spread globally. Many such strains of highly resistant bacteria, like the infamous New Delhi Metalloproteinase producing bacteria have been traced back to India. MRSA (Methicillin Resistant Staphylococcus Aureus), a highly resistant strain of Staphylococcus aureus, has often been considered to be found only in hospitals and highly sick patients. However, 35% of all Staphylococci isolated in urinary culture were methicillin resistant. In these cases, only few drugs like Vancomycin, Teicoplanin, Daptomycin and Lincosamides remain effective.

WHO in 2011 declared its World Health Day 2011 theme as Antimicrobial resistance: no action today, no cure tomorrow. India drafted its Antimicrobial policy, but the project remained unfunded and the Chennai declaration made by the medical community has far from achieved its objectives. Understanding changing sensitivity patterns of antibiotics, stressing on rapidly developing newer antibiotics and appropriate use of antibiotics is a priority. Neglecting these could send humanity back to the pre-antibiotic era where simple boils spread in the whole body and caused mortality. The medical community, government, laboratories and pharmaceuticals all need to take concerted action to prevent this bleak tomorrow from becoming reality.

**Antibiotic
resistance: Simple
infections could
become lethal
again...**

