

## **Superbugs**

- U.N. Interagency Coordination Group (IACG) report on **Antimicrobial Resistance (AMR)** calls for greater action by stakeholders at all levels lest so-called "superbugs" claim 10 million lives a year.
- **Superbugs** is a term used to describe strains of bacteria that are resistant to the majority of antibiotics commonly used today. Resistant bacteria that cause pneumonia, urinary tract infections and skin infections are just a few of the dangers we now face.
- AMR is the ability of a microorganism (like bacteria, viruses, and some parasites) to stop an antimicrobial drug (such as antibiotics, antivirals and antimalarials) from working against it. As a result, standard treatments become ineffective, infections persist and may spread to others.
- Findings of IACG Report
  - Alarming levels of resistance have been reported in countries of all income levels, with the
    result that common diseases are becoming untreatable, and lifesaving medical procedures
    are riskier to perform.
  - The problem is not limited to low and middle-income countries, it is global in its reach.
  - In high-income countries alone, 2.4 million people could die between 2015 and 2050 due to antimicrobial drug resistance, which is being exacerbated by the abuse and overuse of existing antimicrobials agents such as antibiotic, antiviral, antifungal as well as antiprotozoal drugs.
  - There is also problem of inequity and lack of affordable access, which the report links to the
    deaths of nearly 6 million people annually, including a million children who die of
    preventable sepsis and pneumonia.
  - The economic damage of uncontrolled AMR could be comparable to the shocks experienced during the 2008-2009 global financial crisis as a result of dramatically increased healthcare expenditures; impact on food and feed production, trade and livelihoods; and increased poverty and inequality.

## Recommendations

- The report recognize that antimicrobials are critical to safeguard food production, safety and trade, as well as human and animal health, and it clearly promotes responsible use across sectors.
- To stop the use of antimicrobials for growth promotion in healthy animals, increased investment in new antimicrobials, improved waste management tools, and the development of alternatives to antimicrobials.
- Preparing and implementing national antimicrobial resistance action plans is the first step towards tackling the drug resistance, but there is a need to address the financing and capacity constraints faced by many resource-poor countries.

## **Global Efforts**

- In 2017, the World Health Organization, in an effort to address these challenges, classified antibiotics into three groups and issued guidance for how each class of drugs should be used to treat 21 of the most common infections.
  - The first of these groups consists of medicines that should always be available to patients, preferably by prescription. Amoxicillin, the preferred medicine for respiratory-tract infections in children, is in this group.

- The second tier includes carbapenems, which are increasingly getting ineffective.
- Third group, including colistin and other "last resort" antibiotics, are drugs that must be used sparingly and only for medical emergencies.
- Clearly, guidelines are an important first step in addressing the global AMR challenge. But governments, medical associations, and hospitals must also commit to tackling the antibiotic crisis together.
- India's medical societies in 2012, adopted the Chennai Declaration, a set of national recommendations to promote antibiotic stewardship. Last year, the Prime Minister used his monthly radio address to urge doctors to join the effort.
- India's Red Line campaign which demands that prescription-only antibiotics be marked with a red line, to discourage the over-the-counter sale of antibiotics- is a step forward.

