India joins the Global Antimicrobial Resistance Research and Development Hub

News

India has joined the Global Antimicrobial Resistance (AMR) Research and Development (R&D) Hub as a new member. This was announced by the Department of Biotechnology, Ministry of Science & Technology in New Delhi. This expands the global partnership working to address challenges and improve coordination and collaboration in global AMR R&D to 16 countries, the European Commission, two philanthropic foundations and four international organisations.

Antimicrobial Resistance

- Antimicrobial resistance is one of the greatest threats we face as a global community. This report reflects the depth and scope of the response needed to curb its rise and protect a century of progress in health.
- Antibiotics are only effective against bacteria, not viruses. This is because viruses lack the physical structures and cellular machinery that antibiotics interfere with in order to prevent bacterial growth and replication.
- Antibiotic resistance is when certain bacteria are no longer eliminated by certain antibiotics.
- For example, in the case of Methicillin-Resistant Staphylococcus aureus (MRSA), the bacterium, S. aureus, is no longer killed by the antibiotic, methicillin.
- The term antibiotic resistance is a subset of antimicrobial resistance or AMR which is the ability of a microbe to resist the effects of medication.
- Antimicrobial resistant-microbes occur naturally and are found in people, animals, food, and the environment (in water, soil and air). They can spread between people and animals, including from food of animal origin, and from person to person.
- AMR is facilitated by the inappropriate use of medicines, for example, using antibiotics for viral infections such as the flu.
- Inadequately treated sewage waste containing resistant bacteria which mixes in the environment also magnify the burden of AMR.
- Poor infection control, inadequate sanitary conditions and inappropriate food handling encourage the spread of AMR.
- In 2015, WHO launched the global antimicrobial surveillance system (GLASS) to work closely with WHO collaborating centres and existing antimicrobial resistance surveillance networks.