Health

What is Antimicrobial resistance? How does it affetc the overall health of the country?

 $n\n$

Answer

 $n\n$

Antimicrobial resistance

 $n\n$

۱n

- According to WHO, Antimicrobial resistance (AMR) is resistance of a microorganism to an antimicrobial drug that was originally effective for treatment of infections caused by it.
- \bullet Antimicrobial resistance is an important concern for the public health authorities at global level. $\ensuremath{^{\backslash n}}$
- Antimicrobial resistance is a serious threat to global public health that requires action across all government sectors and society and is driven by many interconnected factors.
- \bullet In India, there are increase in burden of antimicrobial resistance. $\ensuremath{^{\backslash n}}$

 $n\$

Reasons for AMR

 $n\n$

\n

- Irresponsible use of antibiotics.
- Food adulteration.

\n

 \bullet Excessive insecticides, and pesticides, fungicides on human and animal. $\ensuremath{\backslash n}$

 $n\n$

Prevention of AMR

 $n\n$

۱n

• Proper usage of prescribed antibiotics.

۱r

• Reduced use of pesticides and insecticides.

۱n

• Good hygiene and suitable infection control procedures.

\n

• New vaccines, infection treatment options for combating antibiotic resistance.

\n

 $n\n$

Challenges for India in containing AMR

 $n\n$

\n

 No clear data and awareness about this medical condition among the masses.

\n

• India is lagging in Research related to antimicrobial use.

• Development of antimicrobial resistance strategies are in primary scale.

 $n\n$

Effects on India

 $n\n$

\n

• AMR has huge implications for India. \n

 $n\n$

Public Health

 $n\n$

· Multidrug Resistant-Tuberculosis (MDR-TB), a version of the disease where patients do not respond to first-line drugs, is becoming more common in India.

 $n\$

• The report projects that, by 2040, the percentage of MDR-TB will make up 12.4% of the TB cases in India.

 $n\$

Economy

 $n\n$

\n

- In India expenditure on health care is on medicines, but longer treatments, with ineffective drugs and/or second line expensive antibiotics is pushing the treatment costs higher.
- Index contributing to achieve SDG's are in a deep fall due to the impact of AMR.

۱n

 \bullet New Regulations of medical sector involves infrastructural investments. $\ensuremath{^{\text{h}}}$

 $n\n$

Society

 $n\n$

\n

- \bullet Low priced drug, which are easily available without any prescriptions contributes to the AMR among Indians. $\$
- Children and Women are more likely to affect by AMR, due to unhygienic and undernourished environment.

 $n\n$

Governance

 $n\n$

\n

• Improved management of the health care delivery systems, both public and private will need multi-layered stakeholders.

\n

• More resources need to be created for the dedicated R&D in AMR.

 $n\n$

Measures initiated by the government

 $n\n$

\n

- Health and family welfare ministry has finalized a comprehensive and multi-sectoral National Action Plan on AMR containment.
- \bullet It pledges to adopt a holistic and collaborative approach towards prevention and containment of antimicrobial resistance (AMR) in India. \n
- It calls on all stakeholders including UN, WHO, FAO and other UN
 agencies, civil society organizations etc., to support the development and
 implementation of the national and state action plans on AMR.
 \(\)\n
- Health Ministry is planning to set up a National Surveillance System for AMR, enacted regulations (Schedule-H-1) to regulate sale of antibiotics.
- India's action plan has objectives of enhancing awareness, strengthening surveillance, improving rational use of antibiotics, reducing infections and promoting research.
- In addition, India aims to support neighbouring countries in collective fight against infectious diseases.

\n

