

Drug resistance, a major threat

The problem of anti-microbial resistance created by indiscriminate, unnecessary and excessive use of antibiotics is emerging as a major health threat the world over. Medical scientists, researchers and organisations like the World Health Organisation (WHO) have warned about it for years. The problem may have assumed such serious proportions that the WHO organised an antibiotic resistance awareness week from November 16 to 22 to encourage the best practices to avoid emergence and spread of antibiotic resistance. Antibiotic resistance is the ability of disease-causing bacteria to resist the power of life-saving drugs. This happens naturally through natural selection but the process has speeded up now with the wrong and excessive use of antibiotics. The WHO has identified widespread misunderstanding about the use of antibiotics, their easy availability and overuse and abandonment of treatment midway as some reasons for the spread of antibiotic resistance.

Chinese scientists recently discovered a gene which makes bacteria resistant to last resort antibiotics for treating infections. Bacteria, which cause infections, may now be able to transmit to each other immunity to drugs also. It is feared that the gene may soon spread to other places because bacteria are not stopped by national boundaries. The problem is not a result of over-prescription and indiscriminate use of antibiotics by human beings only. Their use in animal farms



also leads to development of resistance. Antibiotic resistance is transferred from animals to humans who consume them. A recent study in Delhi had found that people who consumed chicken which were given antibiotics for faster growth and weight gain developed drug resistance even if they had not taken antibiotics. In India, there is no check on the use of antibiotics as feed supplements in poultry and animal farms. The IMA has called for regulations in the use of antibiotics in poultry. Many western countries have effective rules in this respect.

Experts even fear that we may return to a pre-antibiotic age. That will be a terrible prospect because even common infections, child births and processes like surgeries and chemotherapies may turn out to be fatal. No new antibiotic is discovered also, and old ones are losing their effect. The WHO wants co-ordinated efforts by all stakeholders including governments, medical companies, doctors etc to deal with the emerging threat. Doctors should minimise the prescription of antibiotics and medical shops should not sell them without prescription. Their use should be reduced as much as possible. The emergence of superbugs and antibiotic resistance is considered as the worst medical threat in history. It should not be taken lightly.

Misc -