

COMMENT

## End of Antibiotics?

SINCE PENICILLIN WAS INVENTED in 1928, antibiotics have spread rapidly around the world. In India over-use of antibiotics is rife, but in most cases patients do not need them. Doctors now prescribe antibiotics to treat everything from toothache to fever. Despite growing side-effects and ineffectiveness doctors and patients continue to ignore the danger. But stories relating to how antibiotics damage organs, cause disorders in the body's normal bacteria and increase the resistance of disease-causing germs abound.

Meanwhile, a warning by the head of the WHO that anti-biotic resistance is so serious, it may head to an end to modern medicine.

In March 2012, the head of the World Health Organisation (WHO) sounded a large alarm bell on how antibiotics may in future not work anymore, due to resistance of bacteria to the medicines.

Antibiotic resistance has been a growing problem for some time now. From time to time, there will be news reports of the outbreak of diseases, old and new, that cannot be treated because the bacteria have grown more powerful than the antibiotics used against them.

And experts have been warning about how the wrong use of antibiotics has given the bacteria the opportunity to develop resistance, enabling them to become immune to the medicines.

What is needed, of course, is a multi-prong strategy to prevent the abuse and wrongful use of antibiotics. Drug companies should not over-market their products. Doctors should not over-prescribe. And antibiotics should not be used for animals that are not sick but to fatten them and thus enable higher profits.

“Anti-biotics residue left in animal products are invisible time bombs that enter human body.... When they accumulate to a certain level they can cause pathological changes in the body, resulting in alarming symptoms from allergies to serious intoxication.”

It takes about 10 years to develop a new anti-biotic but bacterial resistance emerges within only two years. The days are not far when there will be no effective anti-biotics left. The discovery of a gene known as NDM-1 that has the ability to alter bacteria and make them highly resistant to all known drugs, including the most potent anti-biotics is, no doubt a worrisome development. In 2010, there were reports of many 'NDM-1 cases' in India and Pakistan and in some European countries. At the time, only two types of bacteria were found to be hosting the NDM-1 gene—E-coli and Klebsiella pneumonia. In October 2010, NDM-1, a multi-drug resistant strain of bacteria, was detected in a sample taken from an 83-year-old

Chinese cancer patient in Fujan province. This bacterium is resistant to all anti-biotic drugs and is referred to as a 'superbug'.

Then there is nobody to bell the cat. The governments and opinion-makers throughout the world refuse to police drug multinationals who in any case won't stop marketing of useless anti-biotics. □□□