MEDICAL CHANNEL

Short Note is Important

'ANTIBIOTIC RESISTANCE A THREAT TO PUBLIC HEALTH'

By Faiza Ilyas

Increasing incidence of antibiotic resistance poses a serious threat to public health and there is an urgent need that people, particularly health professionals, exercise caution and do not use or prescribe the drugs unless their need is indicated by relevant laboratory tests, said experts while speaking to *Dawn* on Monday.

According to them, though antibiotic resistance is a global phenomenon, the problem in Pakistan is compounded by an acute lack of awareness in the general public as well as doctors and pharmacists, about the hazards of antimicrobial resistance. This ignorance spills over to absence/lack of infection control measures at health facilities, increased over-the-counter sale of antibiotics and poor drug quality assurance/testing programmes.

"The resistance occurs when bacteria change in a way that reduces or eliminates the effectiveness of drugs, chemicals or other agents designed to cure or prevent infections. The bacteria survive and continue to multiply causing more harm," said director labora-tory services and consultant microbiologist at The Indus Hospital Dr Altaf Ahmed, adding that drug resistance meant' that a patient's hospital stay could be prolonged and treatment would become costlier.

Seconding his opinion, Dr Shamvil Ashraf of Children Cancer Hospital, now part of the Indus Hospital, said that antibiotic resistance developed increased chances of mortality and morbidity.

"Cancer patients are already vulnerable to infec-tions due to multiple factors and this problem (drug resistance) aggravates their sufferings. We have been noticing a fast increase in drug resistance over the past three years," he said, adding that the phenomenon was a huge economic burden on patients as well as on institutions running on dona-tions, like his. .

According to the website of the Centre for Disease Control and Prevention, repeated and improper use of antibiotics is the primary cause of increase in drug-resistant bacteria. While antibiot-ics should be used to treat bacterial infections, they are not effective against viral infections like the common cold, most sore throats, and the flu. Smart use of antibiotics is important in controlling the spread of resistance in germs.

Once bacteria become resistant, experts point out it could spread, especially in healthcare set-tings that lack infection control checks.

WHO warning

The World Health Organisation's (WHO) first global report on antibiotic resistance reveals it as serious, worldwide threat to public health. According to the report, antimicrobial resistance is happening right now in every region of the world and has the potential to affect anyone, of any age, in any country.

"Antibiotic resistance is now a major threat to public health. Without urgent, coordinated action by many stakeholders, the world is headed for a post-antibiotic era, in which common infections and minor injuries which have been treatable for decades can once again kill.

"Effective antibiotics have been one of the pil-lars allowing us to live longer, live healthier, and benefit from modern medicine. Unless we take significant actions to improve efforts to prevent infections and also change how we produce, prescribe and use antibiotics, the world will lose more and| more of these global public health goods and the implications will be devastating," says Dr Keiji Fukuda, WHO'S Assistant Director General for Health Security.

In the context of the situation in Pakistan, Dr Rumina Hasan, professor at the department of pathology and microbiology, Aga Khan University, said that most of the bacteria that has been isolated? so far (in the country) had showed resistance.

"For instance, more than 90 pc of Salmonella typhi (the bacteria causing typhoid) are resistant to ofloxacin or ciprofloxacin, which were common used oral antibiotics for typhoid fever.

"Most of the Staphylococcus aureus isolated in. our laboratory are Methicillin Resistant Staphylococcus aureus (MRSA), which means that infections with these germs require injectable and more expensive antibiotics," she stated.

In many cases, she pointed out, E. coli associated with urinary tract infections were now found to be resistant to multiple antibiotics including some of second line agents that used to be specially reserved for such cases.

"Antimicrobial resistance is particularly high in bacteria associated with hospital-related infections such as Pseudomonas aeruginosa or Acinetobacter baumannii, though antimicrobial resistance amongst community-acquired infectious agents in Pakistan is also frequent and increasing."

In her opinion, the trend in drug resistance in Pakistan is similar to what is happening in other countries but the gravity of the situation increases, due to a weak health system with poor access to quality diagnostic facilities.

"Besides, we have an increasing use of antibiotics in the food and agriculture sectors, particularly in the diary and meat industries that add to the overall antimicrobial burden," she added.

Courtesy: Daily Dawn, Karachi.