Antibiotic Awareness

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In the age old battle between the microbial agents and humans –the bugs are becoming winner or at least giving tough time to the persons affected. A growing number of infections such as Pneumonia, Tuberculosis, Gonorrhea, Salmonellosis are becoming harder as the antibiotics used to treat them becoming less effective. It is due to development of rapid resistance of microbial agents.

The World health Organization has given highest priority to tackle the worldwide alarming antibiotic resistance. World Health Organization felt that Antibiotic Awareness is very important to tackle the situation. Every year 'World Antibiotic awareness Week' are being observed under guidance of World Health Organization.

In 2018 antibiotic awareness week was observed from 12-18 November.

Antimicrobial agents try to inhibit or destroy microorganisms and microorganisms also try to survive by any means. Those who can survive become more and more resistant to antimicrobial agents already used. This is very natural.

If we look back the history of development of antibiotics we will observe the alarming facts as under:

In 1936 Sulphonomides were discovered and it is said that the modern era of antimicrobial started. Now where is the position of this antimicrobial agent? What is the clinical status of this drug? The fact is that its use has become very much limited. In 1941 golden age of antimicrobial started with Penicillin but now most of the Penicillin's are resistant. Alexander Fleming rightly warned about it when he discovered this wonderful and effective agent. In 1948 Tetracycline's discovered but it has also lost its effectiveness.

We are always looking for newer and effective antibiotics to treat patients. Finding new antibiotics is hard and payoff is low. Patients take antibiotics for short period but drugs for chronic illnesses are taken for longer period. In last 20 years no antibiotics with newer mechanism of action has been discovered.

In different studies it is revealed that 30% of hospitalized patients receive one or more course of antibiotic. About 50% of antibiotics given in hospitals are unnecessary. About 80% of the antibiotics sold in US every year are for farm animals. At present seven lac people die every year by superbugs.

So we must be aware of the problem and we will have to make people aware of the problem.

Antibiotic resistance is not a personal problem. It is a community as well as global problem. It can affect anyone of any age of any country. It is a reality of evolution but we have put it on high speed by misuse.

In the year 1916 a Canadian lady was treated for wound infection and fever with 14 antibiotics one after another but she died. The bacteria Klebsiella Pneumonea was resistant to all 26 available antibiotics in the United States. Resistance to the antibiotics Azithromycin for Gonorrhea has reached 77 countries. Antibiotic resistance leads to longer hospital stays, higher medical cost and increased mortality.

If all antibiotics stop working then world would return to the era when an accidental cut or simple surgery could cause unfortunate death. Scientists are afraid that it may happen by 2050.

To prevent this alarming situation we must use antibiotics prescribed by a certified health professional and never demand antibiotics if health workers say it is not required. We should

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also try to reduce infection by regular washing hands, prepare food hygienically, avoiding close contact with sick persons, practicing safer sex and by proper vaccination.

As health professionals we should prescribe and dispense antibiotics when needed according to current guidelines. We will have to ensure rational use of antimicrobial agents by following rules of Right. Rules of right demands right drug, right indication, right dose, right dosage formulation, right duration, right interval etc.

Lastly the level of awareness and engagement about antibiotic resistance within the public, health professionals, and policy makers around the world must be at the highest.