

Antibiotic Awareness Week

We humans have a unique ability to shape the environment in which we live. Our lifestyle, based on material wealth, determines the extent of encounter with exogenous microorganisms in the environment including the potential pathogens. Poor nutrition, inadequately ventilated and overcrowded housing makes the encounter with pathogens much more likely and becomes a breeding ground for infectious diseases particularly when the immune defense system are weak. Antimicrobials become our "friend in need" when we suffer from infectious diseases. But we have to remember that microorganisms are versatile and that they develop mechanisms which make Antimicrobials ineffective. Now-a-days, this is happening even to the potent drugs such as the Carbapenams. Patients are dying of infections due to Carbapenamase producing bacteria such as Pseudomonas, E.coli, Klebsiella and others.

To tackle the ever-growing menace of antimicrobial resistance, World health Organization has endorsed a global action plan in the Sixty-third World Health Assembly in May 2015. As such every year "Antibiotic Awareness Week" is being observed globally. It was observed between 12-18th November, 2018 with the theme- Change Can't Wait. Our Time with Antibiotics are Running Out. Its aim was to increase awareness of global antibiotic resistance and to encourage best practice among general public, health workers and policy makers through effective communication, education and training. Knowledge about antimicrobial resistance, antimicrobial surveillance, community hygiene practices and infection control practices were highlighted. Right choice, Right dose, Right time interval and lastly for the Right duration of Antibiotics shall limit antibiotic resistance. Though this concept of Antibiotic awareness week is relatively new and DG Health Bangladesh has introduced this concept through a whole day seminar in BSSMU last year with participation of the major users of Antibiotics such as health care workers i.e. Doctors and Nurses and Veterinarians but this Antibiotic Awareness should be brought to the general public also.

In U.S. 20-50% of all antibiotics prescribed in acute care hospitals are either unnecessary or inappropriate. Improving the use of antibiotics is an important patient safety and public health issue as well as a national priority. Antibiotic Stewardship program has been introduced in Hospitals. A growing body of evidence demonstrates that hospital-based programs dedicated to improving antibiotic use, commonly referred to as "Antibiotic Stewardship Programs can both optimize the treatment of infections and reduce adverse events associated with antibiotic use. The core element of this Hospital Stewardship Program include Leadership commitment, Accountability, Drug expertise, Actions, Tracking, Reporting and Education. Stewardship programs can result in significant drug cost savings and reduction of antibiotic resistance which are important goals of Antibiotic awareness week.

Prof. Dr. Munir Hassan

Head, Dept. of Microbiology
Dhaka National Medical College

References

1. World Antibiotic Awareness week- nationaltoday.com
2. Dellit TH, Owens RC, McGowan JE, Jr., et al. Infectious Diseases Society of America and the Society for Healthcare Epidemiology of America guidelines for developing an institutional program to enhance Antimicrobial stewardship. *Clinical infectious diseases : an official publication of the Infectious Diseases Society of America.* Jan 15 2007;44(2):159-177.