
Students' Corner

Letter to the Editor

Microbes fight for survival, are we aware of the danger?

Madam, in this age when our western friends are protected from deadly infectious diseases, we are still surrounded by the microbial world, which claims millions of lives every year. Since the appearance of Antibiotics in early twentieth century, they had been a great service to the human race.¹ These drugs are among the most important tools which enabled man to get rid of Infectious diseases. A recent issue regarding these drugs is the emergence of resistance by microbes, and it is now becoming a challenge for the 21st century.

Microbial struggle to survive underlies the basis of this resistance. Being a mode of adaptation it is inevitable, and every time an antibiotic drug and microbe interacts (selective pressure), there are chances of development of resistance. Among the many causative factors, Antibiotic use remains the primary factor in the emergence and spread of antibiotic resistant organisms.² As these resistant strains become prevalent in the population the previously effective antibiotics lose their effectiveness. This calls for the use of newer high potency drugs which are more costly, adding heavily to the health budget of the population.

In an effort to control this problem, hospitals around the world have adopted "Antibiotic use policies."³ These policies involve guidance to the physicians about using appropriate drug in the light of local prevalent disease and susceptibility of microbes. This means using the appropriate drug, for the appropriate disease, with an appropriate dose and for an appropriate period. Soon after implementation, these policies have started to show their effectiveness by

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decreasing the prevalence of resistant strains.⁴ In most health institutions of Pakistan there is no antibiotic policy.⁵ Once the resistance develops there is no way back, except to shift on higher generation antibiotics. This not only adds to the health cost of an individual and country as a whole, but it also increases the risk of resistance against these newer antibiotics. Steps should be taken as:

- ◆ Studying the local prevalence and susceptibility patterns of microbes
- ◆ Making Antibiotic use policies
- ◆ Educating the physicians as well as the medical students about the issue
- ◆ Condemning self medication
- ◆ Restricting over the counter availability of drugs
- ◆ Preventing quacks from playing with this valuable tool.

By taking these steps as early as possible we can delay or even stop the emergence of resistant organisms in our community. This will be very helpful in eradicating infectious diseases from this part of world.

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