

Antibiotic Resistance: A Real Threat to Life

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Madam, through your esteemed journal, I would like to draw the attention of public health care centers and authorities to the rapid increase in the resistance of antibiotics in the country. The development of antibiotic resistance is a growing issue in every country of the world. High doses of antibiotics prescribed by physicians leads to antibiotic resistance. Antibiotic resistance occurs when microorganism survives the effect of standard antibiotic that once killed them, and then they pass their resistance on to the next generation of organisms¹.

Infections that were regarded as simple illnesses and were easily treated with prescriptions are no longer responding to the medications². It is observed that most of the patients use antibiotics without any prescription or incorrect prescription and sometimes they do not even complete the course of treatment³. This frequent and inappropriate use of antibiotics causes microbes to change, so that antibiotics are ineffective against them. Those microbes are then treated by higher doses or stronger antibiotics⁴.

The Centre for Disease Control and Prevention (CDC) calls it "one of the World's most pressing public health problem" and estimates about 23,000 deaths per year in the United States of America¹. Overuse of antibiotics causes bacterial resistance to develop against even the most powerful anti-

biotic. Some of the common diseases that are gaining resistance to antibiotics are influenza, meningitis, tuberculosis and skin infections, moreover this antibiotic resistance results in diarrhoea, urinary tract infection, pneumonia, skin and blood infections⁵.

A study conducted at Oxford explained the danger of cross resistant bacteria; these bacteria are resistant to one form of antibiotic and show resistance to other forms as well⁶. It was estimated that 70% of antibiotics prescribed by doctors for flu, viral colds, cough or sore throats lead to antibiotic resistance². Martin Blaser, in 2011, highlighted the dangerous long-term consequences that arise from the antibiotic overuse. He reported that the changes in our microbiota promotes the transmission of harmful organisms, as microflora resist the colonization by pathogenic organisms⁷. Further studies showed that even a single inappropriate antibiotic course changes our microflora and leads to complications.

In "The Express Tribune", March 16th 2016, it was reported that in Pakistan, more than half of the antibiotics used are unnecessary and avoidable, and most of Pakistan's population is becoming resistant due to over or misuse of antibiotics.

Therefore, it is necessary to formulate effective policies on antibiotic prescription and highlight this issue at a higher level to secure lives from an unending vicious circle of infectious diseases and save people from the time when no antibiotic will be effective against infections. It is necessary to raise awareness in the public, emphasize the importance of using antibiotics that are only prescribed by a

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verified health professional and complete the prescribed course of treatment. Moreover, antibiotics that are leftover should not be reused or shared.

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