



## Emerging Antibiotic Resistance - It is high time for an Antibiotic policy in our Country

We live in a world surrounded by Microbes. Some of them are the part and parcel of the skin and the mucous membrane of the human - the normal flora. They exist as friendly normal commensals but sometimes they can cause harm among which is their ability to contribute to the spread of antimicrobial resistance. Of the pathogenic microbes such as bacteria, viruses, fungi, protozoa and the worms, we want to know how they cause harm to the humans and what can be done to counter these bugs. Among the antimicrobials, the anti-bacterial drugs far exceed the anti-viral and others antimicrobial drugs in relation to the volume of use in human. Features of bacterial anatomy and metabolism have pointed out to the selection of targets for the development of powerful antibiotics but we have to remember that bacteria are very resilient organisms. They are developing new mechanisms day by day to counteract the drugs we are using to kill them thus giving rise to what we call as antimicrobial resistance. Indiscriminate, injudicious and irrational use combined with the over-the-counter availability of antibiotics is the foremost and biggest challenge facing the emergence of resistance among the bacteria. Now-a-days, bacteria such as *E.coli*, *Klebsiella*, *Acinetobacter* and the *Pseudomonas* are increasingly gaining upper hand to even the last resort drugs such as the Carbapenams and the Colomycins ultimately resulting in the death of patient. This scenario has become common in the ICU's and hospitals in our country especially Dhaka city. Even a few cases of all drug resistance bacteria have been reported in the Western developed world with the ultimate loss of the patient.

To add to the woe, new researches for antibiotics are not being carried out as before by the Pharmaceutical Companies due to high cost. Time has come where drastic actions are needed to be taken urgently. Some of the measures which are needed to be adopted may be as follows:

1. Over the counter sale of antibiotics without the prescription of BMDC registered doctor should be stopped altogether. If needed a law can be enacted to this effect.
2. Limits should be placed on the empirical use of higher antibiotics especially by the General practitioners.
3. Hospitals should have an antibiotic policy in place which should be strictly adhered to.
4. Patients with Multi-drug resistant bacteria should be treated in an isolated setting so as to prevent the spread of resistance to other persons. Infection control practices should be strictly implemented.

These suggestions are but a few steps in the measures to be taken in combating antibiotic resistance. We have to start somewhere otherwise it may get too late.

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