

# **Overuse of antibiotics**

## **Let's prevent a terrible disaster**

AHM Masum Billah

Medicines are essential for health, but wrong use of medicines can cause serious harm. So, it is essential to prevent uncontrolled use of medicine to stay healthy. It is malpractice that many people buy medicines without doctor's prescription from the pharmacy. It is dangerous for human health. Because no individual who takes the medicine this way is being affected by it, but a lot of people are likely to be affected this way. In particular, the unregulated use of critical antibiotics will jeopardize antibiotic efficacy in the future, as the experts say. Because in this way bacteria are acquiring antimicrobial resistance. Antimicrobial resistance occurs when bacteria develop resistance to the antibiotics. This makes the antibiotic ineffective against the bacteria.

The Government of Bangladesh has taken the issue of antibiotic resistance very seriously and is working to overcome it. On September 22, Prime Minister Sheikh Hasina drew the attention of world leaders to the issue at a meeting on antimicrobial resistance in New York. Because, it can take the lives of millions of people worldwide. In her speech she emphasized on a sustained political will and action to prevent antimicrobial resistance from happening.

Pointing out that nearly 150 countries have national action plans on this issue, Sheikh Hasina said that low- and middle-income countries need meaningful support to implement them. The Prime Minister called for a robust investment framework for antimicrobial resistance at the global and national levels.

The urges by the Prime Minister have correctly been made because several studies have shown that antibiotic-resistant bacteria account for a large proportion of deaths in the hospitals' intensive care units in Bangladesh. Most of them had antibiotic-resistant bacteria or 'superbugs' in their bodies. Studies have also shown that many drugs contain nephrotoxic components which increase the risk of developing chronic kidney diseases. Medical experts said that both the patients and the doctors should be aware of the use of drugs.

As a result of excessive use and misuse of antibiotics, microbes are changing their structure and improving adaptability by themselves. Antimicrobial resistance is such a problem at present that could turn into a serious crisis in the future. Experts fear that this could lead to millions of deaths worldwide in the future. Therefore, global sustained political will and actions are needed now to prevent this crisis. Because, antimicrobial resistance has become a global problem in the current situation. So, this problem has to be tackled by global initiative.

Medicines are used uncontrollably not only for humans but also for animals and fish. Antibiotics enter the human body when people consume these animals and fishes. According to the World Health Organization, half of the antibiotics produced in the world are used in animal production. Antibiotics are being used in most animal feed, beef feed, poultry feed. It has been found that antibiotics contained in chicken meat, milks and meats from cows and goats enter into human body.

Most of the drugs used in fisheries are to protect water quality and prevent disease of fishes. Most of the farmers do not have proper knowledge about the rules of using medicines. So, they use medicine as much as it seems adequate to them.

Bangladesh government is taking various steps against antibiotic resistance. One of which is the introduction of 'model pharmacy' and 'model pharmacy shop' in the National Drug Policy 2016, where the sale of antibiotics

without a specific doctor's prescription is completely prohibited. The policy prohibits the sales and purchase of drugs in pharmacies without pharmacists (Grade A, B and C) licensed by the Pharmacy Council of Bangladesh. Antibiotic resistance can be stopped to a large extent if the above policy is strictly implemented. Directorate General of drug Administration may consider developing a system like the Global Antimicrobial Resistance surveillance system (GLASS) by WHO.

All of us need to be aware of the use of drugs to prevent antimicrobial resistance. The trend of buying preferred medicines by the patients from pharmacy without consultation of a doctor must be stopped. At the same time, doctors also need to be more careful about preventing patients from taking unnecessary drugs. Pharmacists should be appointed in all hospitals to prevent drug overdose. A pharmacist gives medicines to patients on the advice of a doctor. But most hospitals do not have pharmacists. Medicines are given by the doctors which add burdens of duties to the doctor. Moreover, we have fewer doctors in proportion to the population.

Administering antibiotics to poultry or cattle at will by the farmers should be stopped. If the animals are feed so many antibiotics without any infection, the bacteria in the animals' body will gradually develop the ability to resist the antibiotics. Using antibiotics should be stopped 15 days before the day they are slaughtered. It will prevent reaching the antibiotics to human body. This practice needs to be confirmed through strong supervision. Considering public health, it is necessary to continue the discovery of new antibiotics to combat infectious diseases. For this, the world's leading medical research institutions should conduct more research for developing new antibiotics. Adequate funds should be ensured for them.

Without a global initiative, it is not possible for any country alone to fully control antimicrobial resistance. But we need to strengthen our national activities alongside global initiatives. Bangladesh government is working to stop antimicrobial resistance by controlling the use of antibiotics. Earlier we were able to control the illegal use of acid and formalin with the concerted efforts of all. Hopefully, awareness and active participation of all concerned will make us successful in prohibiting the unnecessary use of antibiotics. In this way, we will be able to control antimicrobial resistance locally to greater extent.

Writer: Senior Information Officer

PID Feature