



Conflicts of Antibiotic Resistant Bacteria

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Abstract

Antibiotics have been used to successfully treat the patients infected with microorganisms. But many times infection causing microorganisms have adopted and make less effectiveness of the antibiotics that are used to kill them. This incidence is known as resistance of microorganisms to antibiotics. Less effectiveness or non-function of antibiotics to the infected microorganisms lead to patients to fatal results even consequences death may occurs. This is a burning problem in medical science all over the World. In United State, about two million people are identified with antibiotic resistant microorganism's infection every year. The principal cause of antibiotic resistance in microorganism is improper and inappropriate use of antibiotics.

Keywords: Antibiotic Resistant Microorganism; Transmission; Precautions

Antibiotic resistant bacteria are able to survive and multiply in host even after the treatment of antibiotics. Most bacteria that causes infection in human become resistant to at least one traditional and conventional antibiotic but a few bacteria are resistant to a series of antibiotics. Such bacteria are known as multidrug resistant (MDR) bacteria. In past infections caused by *Staphylococcus aureus* and *Neisseria gonorrhoeae* were treated by penicillin; but at present these microorganisms are resistant to benzyl penicillin. Multidrug resistant bacteria causes serious illness and commonly it is a major public health problem [1].

It is alarming that most of the bacteria are becoming resistant to almost all commercially and traditionally used antibiotics. Antibiotic resistant may be prevented by:

- (i) Minimizing unnecessary prescribing of antibiotics
- (ii) completing the entire dose of prescribed antibiotics
- (iii) Practicing good personal hygiene to avoid microbial infection and
- (iv) Using appropriate infection control procedures [2].

There are several modes of bacterial transfection from one person to another person but the principal mode is considered as direct contact with contaminated hands, surfaces and instruments. These contaminations are mainly happen in hospital and health caring centres. To avoid microbial contamination in hospital and health caring centres a series of precautions should be taken such as:

- (i) Using aseptic condition
- (ii) Providing good personal hygiene
- (iii) Using gloves, gowns, masks, goggles and
- (iv) Appropriate degradation of clinically waste products. Transmission of microorganisms especially that are resistant to antibiotics may be prevented by above mentioned precautions [3].

In conclusion, resistant of microorganisms to antibiotic is becoming more common and it is a serious public health related problem globally. In a community such microorganisms passes from one person to another for poor personal hygiene. Antibiotic

resistance can be prevented by lowering the unnecessary and irregular use of antibiotics and improving the good personal hygiene and infection control mechanisms.

Declaration of interest

The authors report no conflicts of interest. The authors alone are responsible for the content and writing of the paper.

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