



Antimicrobial Resistance Mechanisms in Pathogenic Bacteria

Guest Editor:

Prof. Dr. Md. Tanvir Rahman

Department of Microbiology and Hygiene, Faculty of Veterinary Science, Bangladesh Agricultural University, Mymensingh 2202, Bangladesh

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Message from the Guest Editor

Antimicrobial resistant (AMR) is a global health crisis of the 21st century. Diseases caused by multidrug resistant (MDR) pathogens are difficult to treat, require long term attention and their treatment is expensive. Recent studies suggest that more people die from AMR related complications than any other disease that previously knew. AMR is a pandemic. It has no border or host limitation, affecting all the component of one health, e.g., humans, animals, plants, and the ecosystem.

Antimicrobials are the etiology of the development of AMR because of the selection pressure they exert on pathogens. The development of AMR is dynamic. Pathogens alter its cellular machineries, e.g., target molecules, enzymes, pathways, receptors, etc. so that antimicrobials are not able to exert their functions. To tackle AMR and related health hazards, we need to know the exact mechanism of AMR in pathogens. A clear understanding of the AMR phenomenon from pathogen prospective at molecular level is critical to develop, formulate and adopt strategies to combat AMR. This current issue aims to focus on the antimicrobial resistance mechanisms in pathogenic bacteria.

