

Special Issue on
Antibiotic Resistance and Its Reversibility

CALL FOR PAPERS

Antibiotic resistance towards a wide spectrum of diseases induced by pathogens has been recognized globally as a major threat to human health. Environment was shown to play a major role either way in human health. Environment induced mutational alterations in genetic material of pathogens are well documented. This has shown the emergence of resistance to a wide spectrum of antibiotics. As a consequence, multidrug resistance (MDR) observed in tuberculosis, cancer chemotherapy, and so on has added more misery to human health. With an increased resistance to pharmaceutical antibiotics in people today, it is wise to eat foods that work on our defence on a daily basis. Natural compounds having antimycobacterium, antioxidant, anti-inflammatory, and anticancer properties have shown encouraging results in tackling pathogen-induced diseases. It is well documented that sulfur compounds in onions and garlic are key elements for use as an antibiotic. In one study, garlic tested on mice against an antibiotic-resistant strain of Staphylococci has shown protective effects on mice.

Thus, the aim of this special issue is to have a complete understanding of how resistance is developed against pharmaceutical antibiotics in pathogens and, thereafter, how such resistance can be countered by natural compounds. A complete understanding of the molecular mechanisms by which conventional drugs as well as novel natural compounds may function within and outside the host is a prerequisite for moving a step further towards clinical trials.

Thus, we would like to invite researchers to submit original research articles and reviews that may serve the purpose as mentioned above.

Potential topics include but are not limited to the following:

- ▶ Basics of antibiotic resistance
- ▶ Natural compounds from dietary materials, fruits, beverages, and so on, having medicinal value with respect to pathogen related diseases
- ▶ Various molecular mechanism of action of natural compounds on pathogens itself as well as in host infected with such pathogens
- ▶ Gene profiles of multidrug-resistant isolates: role of antibiotic resistance in the pathogenesis of chronic diseases and effect of natural compounds in reversal of antibiotic resistance

Authors can submit their manuscripts through the Manuscript Tracking System at <https://mts.hindawi.com/submit/journals/jpath/arre/>.

Papers are published upon acceptance, regardless of the Special Issue publication date.

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