

# 2<sup>nd</sup> Annual Congress on Antibiotics and Bacterial Infections

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### **How far is the effect of Subminimal Inhibitory Concentration (Sub MIC) on virulence factors expressed by bacteria?**

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Antibiotic medications are widely used in the treatment and prevention of various infections. An increase in the rate and extent of antibacterial action can be ranged over a wide of antimicrobial concentration but should be within minimum inhibitory concentration where this concentration represents the minimum effective of antibacterial agent (MIC). Sub inhibitory antimicrobial concentration (Sub MIC) may produce antibacterial effect.

The major virulence factors associated with infections are the ability to adhere to tissue and initiates interaction of bacterial cell with tissue. It is potential in the pathogenesis of certain infectious disease. Agents interfering with the process of bacterial adhesion may have beneficial prophylactic or therapeutic effects.

Many studies indicate that certain antibiotics affect bacterial adhesion at low concentrations. Sub inhibitory concentrations (Sub MIC) of some antibiotics may have an effect on bacterial structure and influence the adhesion of bacterial adhesion to epithelial cells. It has been observed that the pili play an important role in the attachment and an important prerequisite factor for the pathogenesis of the bacteria. Various antibiotics in Sub MIC concentrations markedly impair adhesion of Streptococcus pyogenes and Escherichia coli to human cells like loss of lipoteichoic acid that binds the organism to host cells.

### **Biography**

She has practiced as lecturer in Medical College and Sr. lecturer Pharmacy College for several years. She has many contributions as speaker, poster presenter as well as published some articles. She teaches in the graduate pharmacy program different pharmacy subjects and she is chairperson of training program for national and international training coordinator with West Virginia pharmacy college, USA & JSS India. Her interest of research on antibiotic resistance (Beta Lactamases) and formulation and evaluation of local delivery system.

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