

## INFLUENCE OF THERAPEUTIC REGIMENS ON BACTERIAL RESISTANCE TO ANTIBIOTICS

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Bacterial resistance to virtually all antimicrobial agents constitutes a major risk for human health and greatly limits the success of Pharmacology in the therapy and prevention of infectious diseases. Surveillance of bacterial resistance nowadays involves important financial and intellectual resources worldwide, and the co-ordination and harmonisation of these resources is beginning to rank increasingly high among the priorities of scientific societies, public health officers and legislators.

It must be emphasised that the increasing burden of antimicrobial resistance constitutes a disquieting development in the field of antibacterial therapy and makes it mandatory to ensure extremely careful management of the drugs used to treat bacterial infections and the adoption of rigorous infection-control precautions to prevent transmission, striking a critical balance between the distinct potential for selecting resistance and the invaluable role of antibiotics in therapy.

In this light, it should be reminded that non-compliance with antibiotic therapy is widespread. It directly affects efficacy, with reductions in clinical success rates, but can also result in failure to achieve optimum drug concentrations, which has been linked with the development of antibiotic resistance, also affecting clinical efficacy and increasing direct healthcare costs, particularly in patients requiring hospitalisation.