

## GLOBAL OVERVIEW OF BACTERIAL RESISTANCE: AN INTEGRATIVE LITERATURA REVIEW

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The use of antibiotics represented an evolution in the treatment of bacterial infections, which culminated in the improvement of pharmacological therapies and increased life expectancy. Despite the benefits, the indiscriminate and experimental use of antimicrobial has promoted structural changes, mutations and adaptations that corroborate pharmaco-resistance. Soon, the index of resistant infectious diseases grew, which made the control of bacterial strains even more laborious, aggravating the conditions of immunocompromised and the elderly. Thus, antibiotic resistance has become a recurring and serious problem in the context of global public health. The study aims to evaluate the global panorama of bacterial resistance between 2018 and 2023. Integrative review of a descriptive character. As database, were used 20 articles found in the following sites: National Library of Medicine and National Institutes of Health (PUBMED), Literatura Latino-America e do Caribe em Ciências da Saúde (LILACS) and Scientific Electronic Library On-line (SciELO). The keywords used were “Antibacterianos”, “Farmacorresistência Bacteriana” and “Prática Médica Geral”. The inclusion criteria were: articles available free of charge with full text, studies with clinical, epidemiological and pathophysiological data in different populations and articles published and indexed in the database. The articles point to an increase in antibiotic consumption, with values of up to 65% increase between the years 2000 and 2015 and a projection for growth of another 15% by 2030. However, the study exposes the differences between such growth in developed and underdeveloped countries. In this light, due to the primary economy and the high rate of infectious diseases, less developed countries increased consumption by 114%, while first world countries have obtained a reduction in the use of these medicines. In this way, authors highlighted *Klebsiella pneumoniae* as one of the most resistant bacterium. In addition, after the Covid-19 pandemic the rates grew, so this period was responsible for accelerating the process of antimicrobial resistance (AMR) and, according to this, other studies expose the lack of supervision in the sale of antibiotics as the main stimulating factor. Finally, it is worth mentioning that the penicillin class is spotted in the literature as a drug of greater resistance and polymyxin as a more effective drug in combating hospital infections. Throughout this study, it was possible to analyze microbial resistance in different places and age groups. So, evidence has shown that indiscriminate use increases antibiotic resistance and increases morbidity and mortality. Thus, it is important that the different levels of health care carry out preventive measures, by promoting care in the prescription and administration of medicines.

**Keywords:** Antibacterials; Bacterial Pharmaco-resistance; General Medical Practice.

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