2020 ANTIMICROBIAL CONSUMPTION INDICATORS: ANALYSIS COMPARED WITH PREVIOUS YEARS

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BACKGROUND AND IMPORTANCE A reference panel of antimicrobial consumption indicators was published in 2019 by a committee from the Spanish Society of Hospital Pharmacy (SEFH) and the Spanish Society of Infectious Diseases and Clinical Microbiology (SEIMC).

AIM AND OBJECTIVES
To calculate 2020 hospital antimicrobial consumption indicators and carry out a comparative analysis of these consumption indicators with those observed in the previous two years.

MATERIALS AND METHODS
Based on the panel, ten antimicrobial consumption indicators were selected. The unit of measurement for the consumption was the number of defined daily doses per 100 stays (DDD/100e)

RESULTS

- **2018 vs 2019 vs 2020**
  - **Antibacterials Overall Consumption**
  - **Carbapenems Consumption**
  - **Fosfomycin Consumption**
  - **Colistin Consumption**
  - **Amoxicillin-clavulanate/piperacillin-tazobactam Ratio**

- **2018 vs 2019 vs 2020**
  - **Antifungals Overall Consumption**
  - **Fluoroquinolones Consumption**
  - **Aminoglycosides Consumption**
  - **Anti-pseudomonal cephalosporins**
  - **Flucanazole/equinocandins ratio**

**CONCLUSION AND RELEVANCE**

- During 2020, a change in trend has been perceived in a series of antimicrobial consumption indicators, with higher antibacterials and antifungals OC, carbapenems and colistin consumption; and a decreased fluconazole/equinocandins ratio. This change in trend could be related to the increase of multi-resistant bacterial and fungal infections associated with COVID-19.

- The downward trend in the consumption of fluoroquinolones and aminoglycosides and the upward trend in anti-pseudomonal cephalosporins and fosfomycin was maintained. Interventions carried out through the Antimicrobial Stewardship Programme aimed at optimizing and/or de-escalating empirical antimicrobial treatment may be behind this trend.

- The amoxicillin-clavulanate/piperacillin-tazobactam ratio may have been influenced by frequent piperacillin-tazobactam stock-outs in the years studied.