

# PHARMACEUTICAL ROLE IN AN ANTIMICROBIAL STEWARDSHIP PROGRAMME

J. Barceló-Vidal, X. Fernández-Sala, D. Echeverría-Esnal, O. Ferrández, S. Luque, S. Grau  
Hospital del Mar, Parc de Salut Mar, Pharmacy Department. Barcelona

## Background

The emergence of multidrug resistant microorganisms is a serious threat to global public health that requires action. Thus, the implementation of antimicrobial stewardship programs aims to optimize antibiotic prescription and prevent antimicrobial resistance. Although these programs are multidisciplinary, there is a lack of data about the specific role of pharmacists.

## Purpose

To describe pharmacists' activity in an antimicrobial stewardship team.

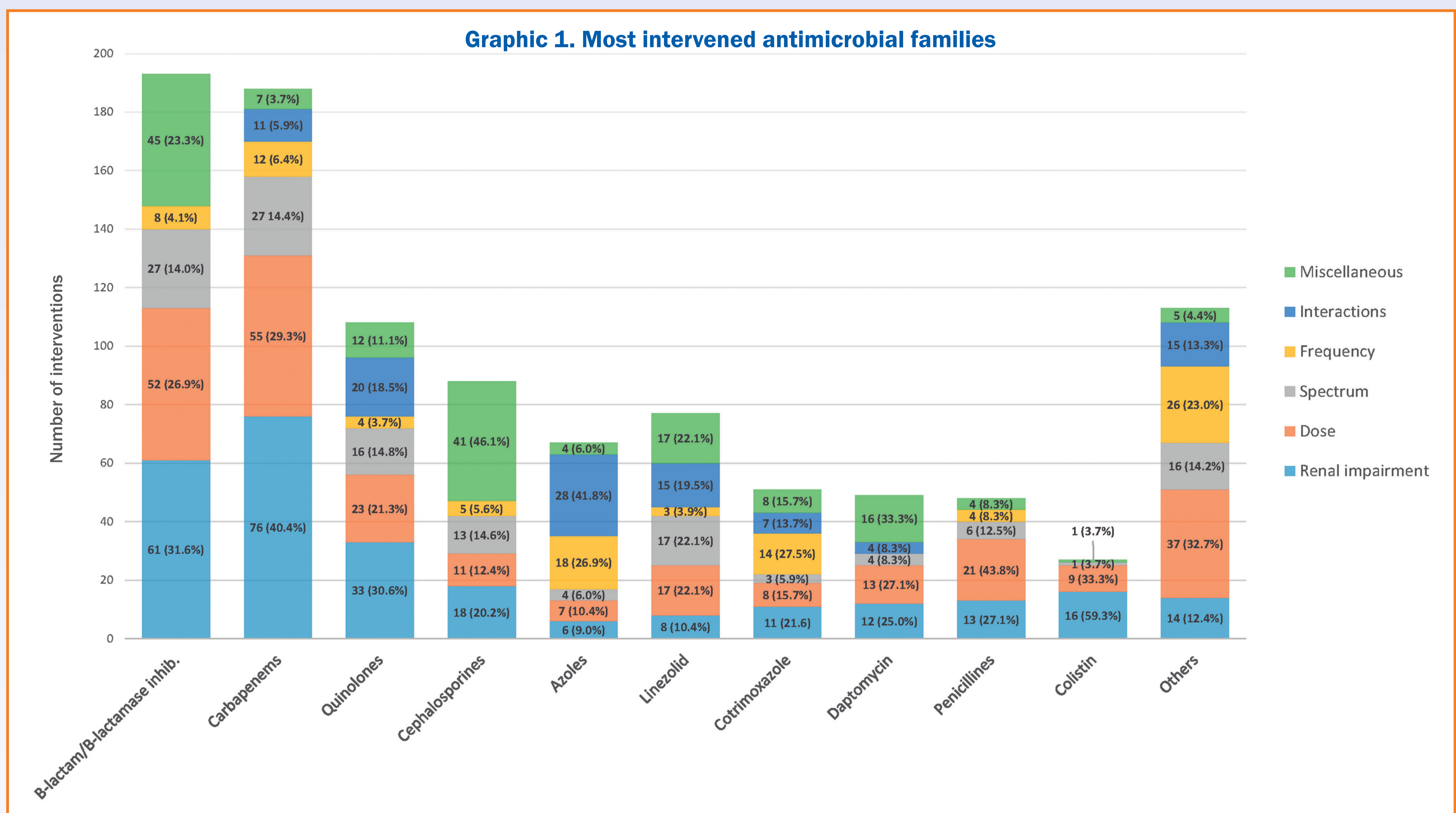
## Material and methods

Retrospective descriptive study performed in a 400-bed tertiary hospital.

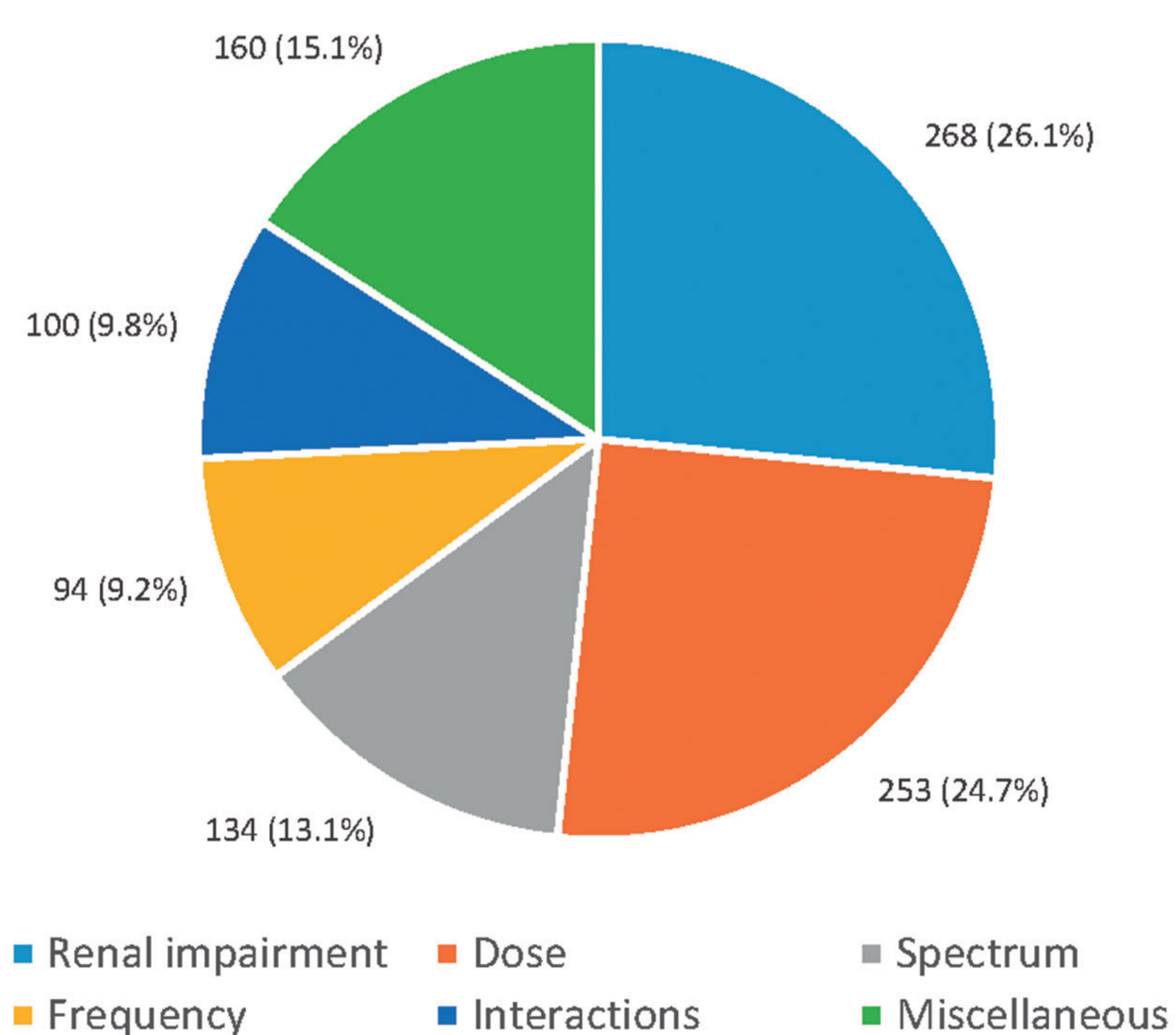
Antimicrobial prescriptions were reviewed every day through an electronic prescription program. Pharmaceutical interventions were gathered and registered in 6 different groups.

- Data collected: pharmaceutical interventions related to any antimicrobial prescription between January 2014-December 2015.
- Intervention groups: renal impairment adjustment, dose adjustment, frequency adjustment, drug-interactions, antimicrobial spectrum and miscellaneous (adverse events, therapeutic drug monitoring, monitoring of biochemical parameters...). Acceptance by physicians was evaluated.

## Results



**Graphic 2. Type of intervention**



Total interventions	Accepted	Rejected	Not evaluable
1026	825 (80.4%)	119 (11.6%)	82 (8.0%)

## Conclusions

- Adjustments due to renal impairment and dose adjustments were the main actions performed. Interestingly, a 13.0% of interventions were related to antimicrobial-spectrum, mainly in antibiotics of high ecological impact.
- Interventions by pharmacists were highly accepted among physicians.
- The high number of interventions performed highlight the role of hospital pharmacists in antimicrobial stewardship programs.