OPTIMIZATION OF EMPIRICAL USE OF CEFTAZIDIME/AVIBACTAM IN A MEDIUM-COMPLEXITY HOSPITAL: IMPACT OF ANTIMICROBIAL STEWARDSHIP PROGRAM MULTIDISCIPLINARY TEAM INTERVENTIONS

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Background and Importance

Ceftazidime/avibactam (C/A) is essential for treating **multidrug-resistant Gram negative infections**, but its empirical use requires optimization to prevent resistance. **Antimicrobial Stewardship Programs** play a key role in guiding appropriate use.

Aim and Objectives

To assess the **appropriateness** of empirical ceftazidime/avibactam prescriptions and recommendations from the Antimicrobial Stewardship Program (ASP) team.

Materials and Methods

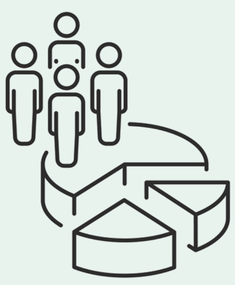
Retrospective observational study of **empirical prescriptions** of C/A

STATISTICS: SPSS 29.0® McNemar test

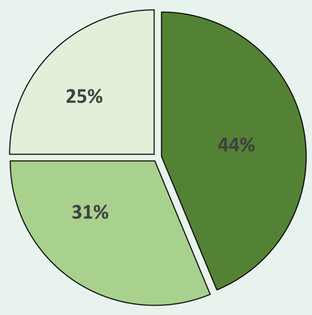
VARIABLES COLLECTED

- Sex
- Age
- Origin OR not from long-term care facilities or intermediate care hospitals (LTCF/ICH)
- Colonization by carbapenemase-producing microorganisms (CPMs)
- Treatment duration
- Infection focus
- Empirical treatment (ET) appropriateness based on Infectious Disease Commision guidelines
- ASP interventios and its acceptance

Results



45 empirical treatments
32 patients (19 ♂)
Median age 82,1 years (IQR 75,5-88,1)
46,9% (n=15) came from LTCF/ICH
Most common focus: urinary 48,9%
22,2% **bacteremia**



80% (n=36) ET analyzed (**all ET exceeding 3 days were reviewed**):

31,1% ET appropriateness before AST intervention vs 88,9% apropriateness post-ASP intervention (p<0,05)

Conclusion and Relevance

1. Most common C/A ET in our hospital comes from elderly patients from LTCF/ICH, often with CMP-related histories. Urinary infections are the most common focus.
2. ASP team's recommendations had an excellent acceptance rate.
3. ASP interventions significantly improved treatment appropriateness, underscoring the critical role of the ASP in enhancing clinical practice and patient safety.

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