

ANTIMICROBIAL STEWARDSHIP PROGRAMME IN A GENERAL SURGERY SERVICE: ROLE OF THE PHARMACIST

Sopena L¹, Bonaga B¹, Gonzalo A², Obon B³, Gracia R¹, Fresquet R¹, Merchan A¹, Varela I¹, Allende M^a Angeles¹, Arenere M¹.

¹Hospital Clínico Universitario Lozano Blesa, Pharmacy Service, Zaragoza, Spain.

²Hospital Clínico Universitario Lozano Blesa, General Surgery Service, Zaragoza, Spain.

³Hospital Clínico Universitario Lozano Blesa, Intensive Care Unit Service, Zaragoza, Spain.

BACKGROUND AND IMPORTANCE

The **General Surgery Service (GSC)**, given its complexity, heterogeneity and need to treat varied and complex infections, is a service potentially benefiting from these interventions.

The aim of antimicrobial stewardship programmes (AMS) is to improve clinical outcomes, minimise associated adverse events and avoid the potential emergence of resistance.

AIM AND OBJECTIVES

Our objective is to **analyse the recommendations** issued by the pharmacist and evaluate the degree of acceptance by surgeons.

MATERIAL AND METHODS

Prospective study February – April 2021. Patients with **antimicrobial treatment for ≥ 4 days** were included.

Variables included

- Gender
- Age
- Previous Intensive Care Unit (ICU) stay and initiation of treatment
- Isolated microorganism
- Empirical versus targeted treatment
- Drug
- Recommendation category and their acceptance
- Mean of days from discontinuation of treatment to discharge
- Need to restart antimicrobial therapy at 7 days

Recommendations

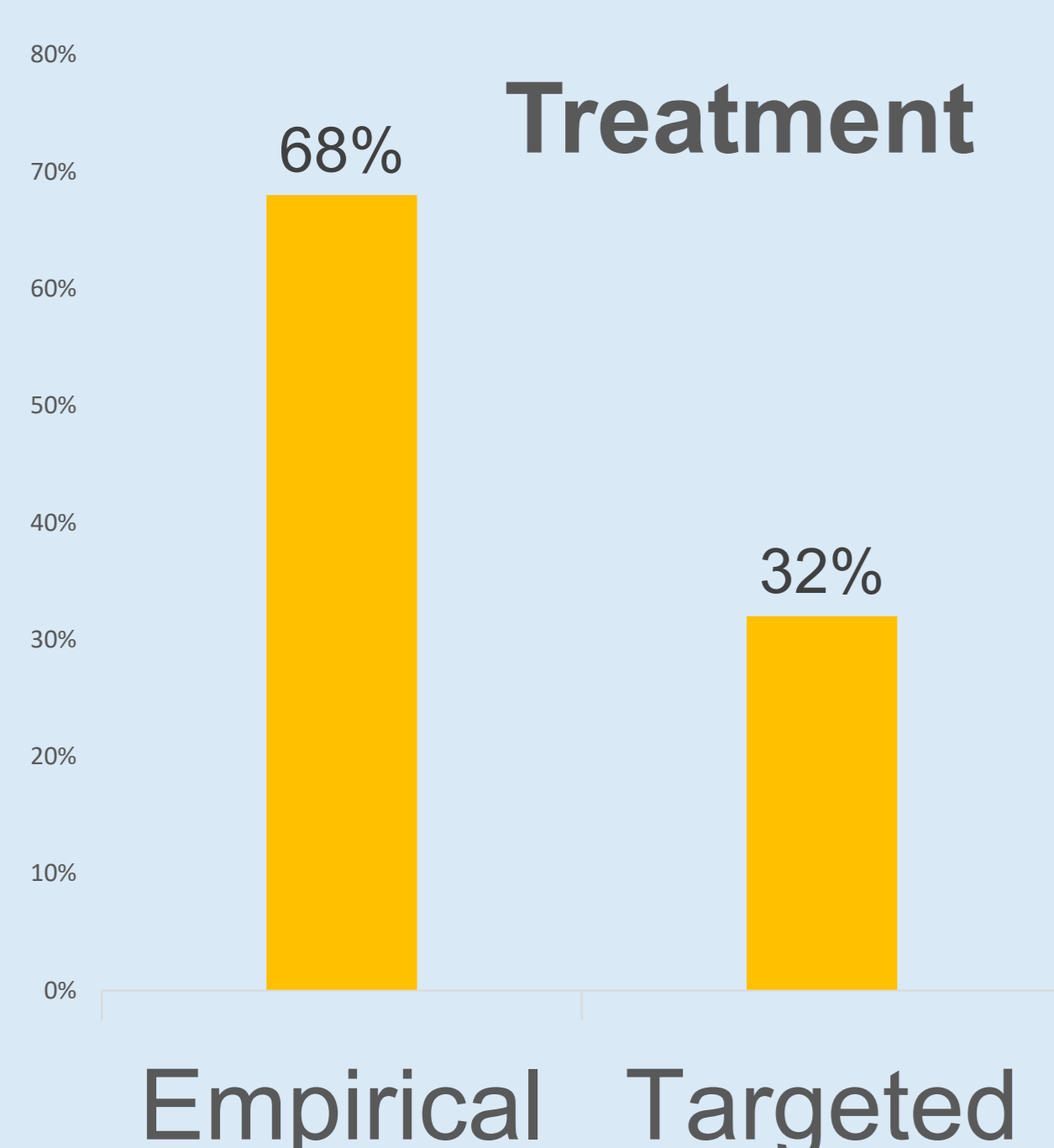
- Duration of treatment
- Dosage optimization
- Early sequential therapy (EST) (at 72 h if clinical stability criteria, availability of oral route and existence of antimicrobial for oral administration)



Accepted if the prescription was modified after 24 hours.

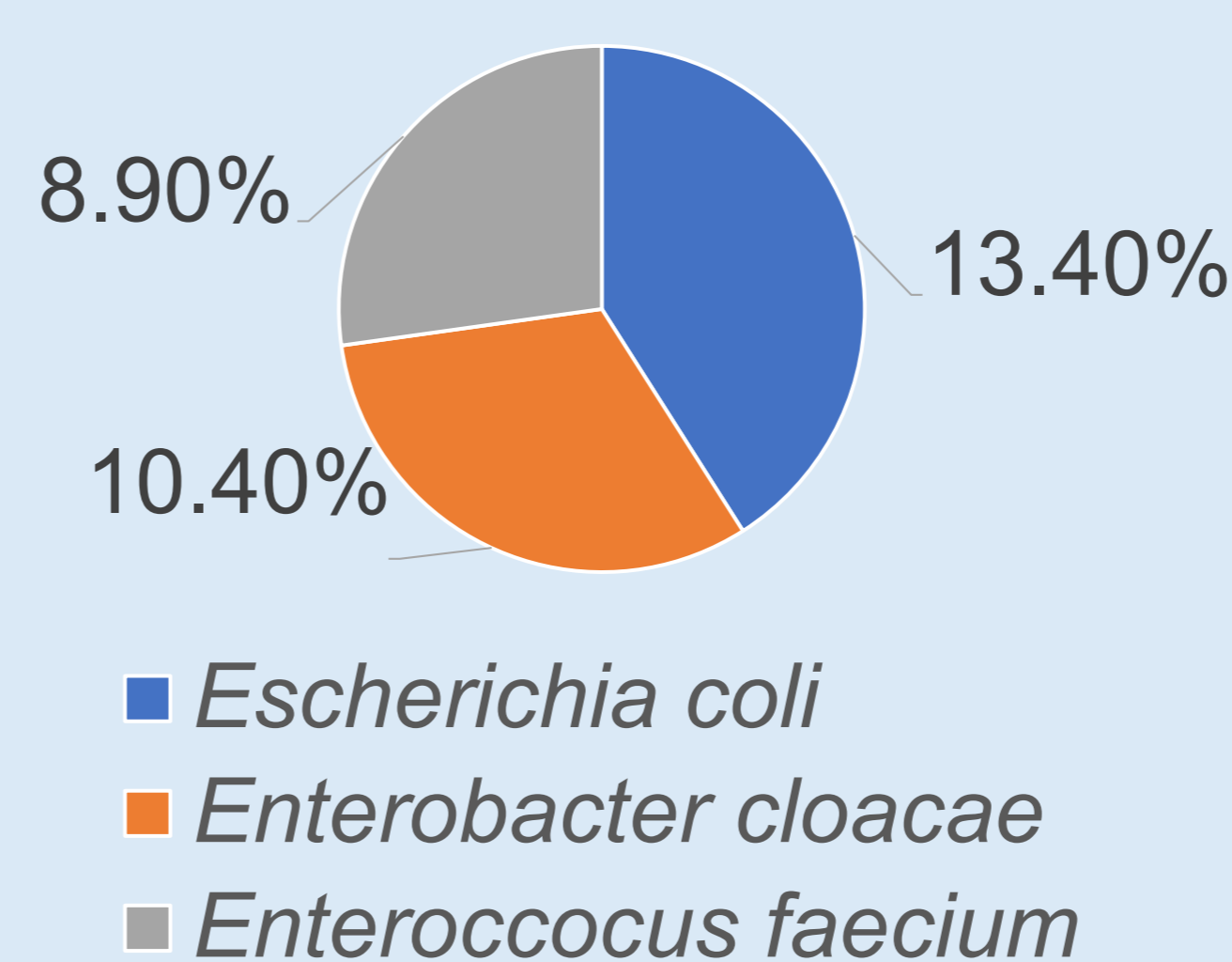
RESULTS

- ✓ **58 patients**; Mean age (SD) was 69 (15.8) years
- ✓ 58.7 % men
- ✓ 36% were admitted from the ICU where antimicrobial treatment was started in 66.8%

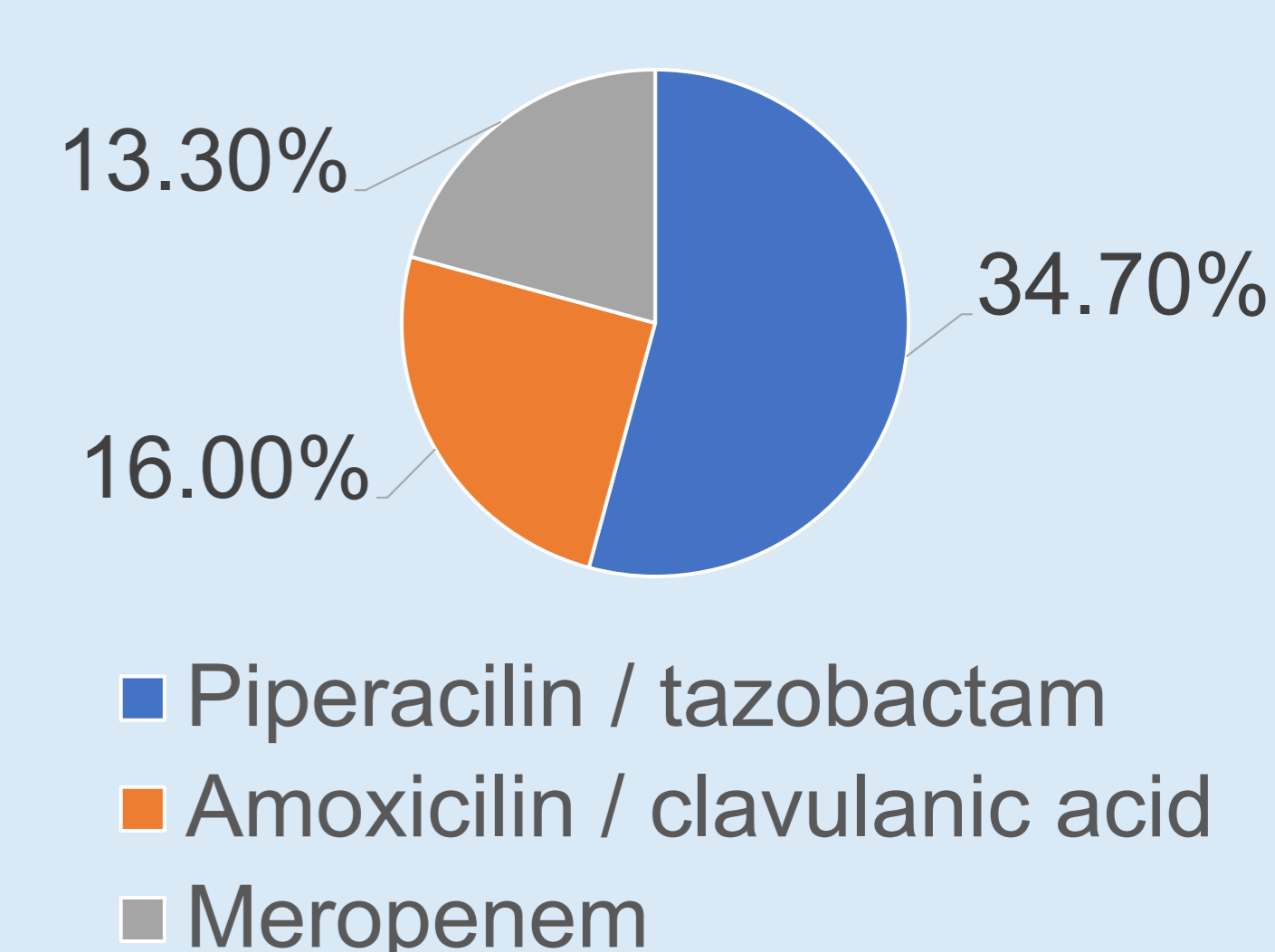


- Mean of 5 days from discontinuation of treatment to discharge
- Need to restart antimicrobial therapy at 7 days (4%)

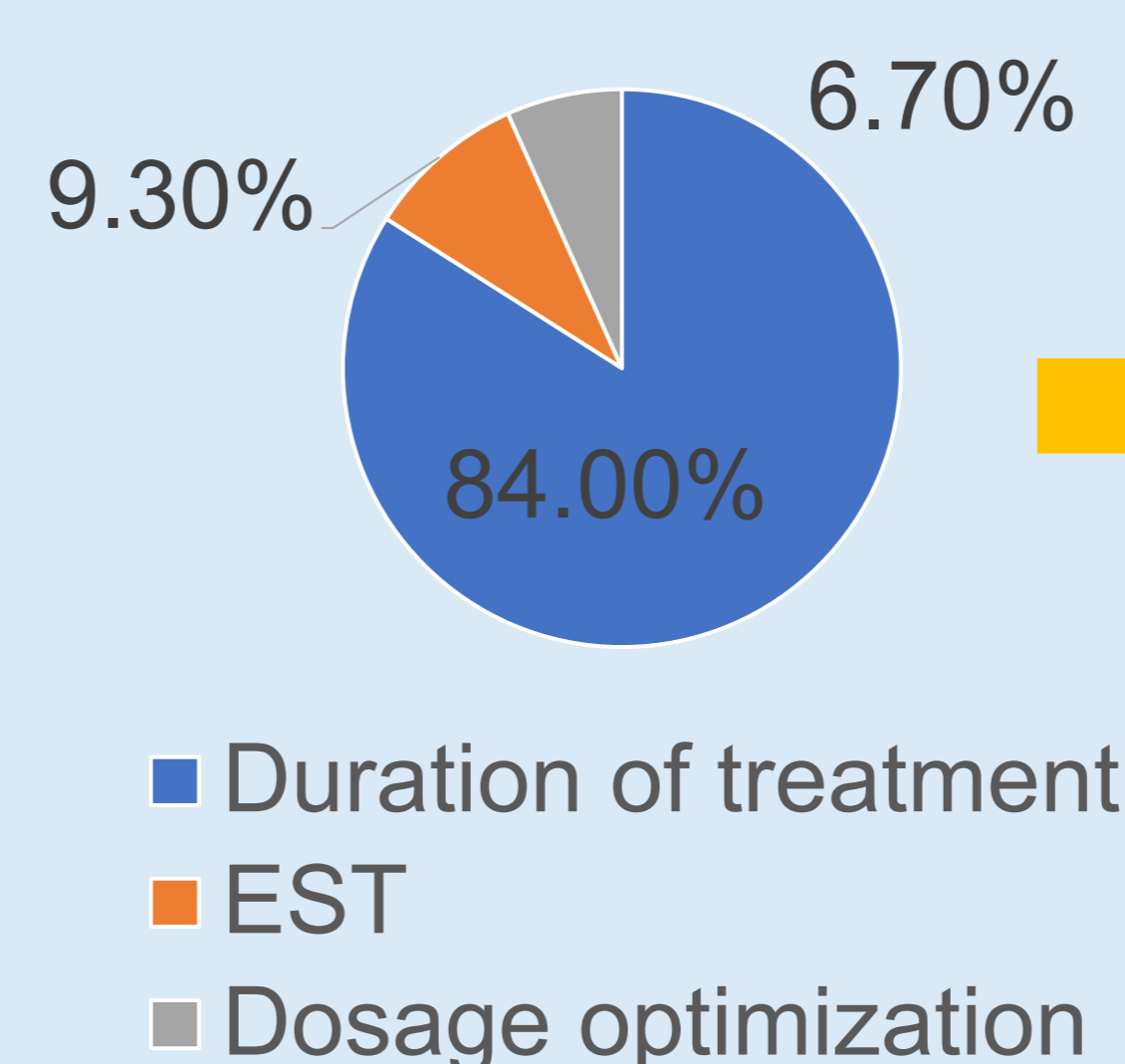
Isolated microorganism



Most drug prescribed



Recommendations



- ✓ **75 recommendations were made**
- ✓ **66.6 % accepted**

CONCLUSION AND RELEVANCE

The duration of **antimicrobial therapy** was one of the main reasons for an **inappropriate use** in the GSC. A third of patients came from the ICU. All of these make the participation of the **pharmacist as a cornerstone of ASP**. Recommendations were well accepted. However, periodic communication between pharmacists and physicians could be a strategy to optimize treatment improving efficiency and security.