

Antibiotic stewardship: implication in the management of the elderly's infections

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Introduction:

The major role of antibiotic stewardship teams is to rationalize the use of antibiotics [1]. They contribute in the prescription in collaboration with the attending physician to manage infections in the different departments.

Aim of the study:

The aim of this study is to analyse our antimicrobial management team (AMT) advices in elderly's infections.

Material and methods:

- It is a descriptive study concerning advices about antibiotic prescriptions for patients aged 65 years or more, given by the AMT in the infectious diseases department of Monastir University Hospital, between 01.07.2017 and 31.08.2019 (2 years and 2 months period).
- Information was collected during the antibiotic management request on a pre-established form.

Results:

- Total= 461 requests (consisting of 28% of the AMT activity).
- Age= 75 +/- 6.5 years.
- Sex ratio= 0.86.
- Patients had **renal failure** in 134 cases (29%), consisting of an indication to adapt the antibiotic dose.

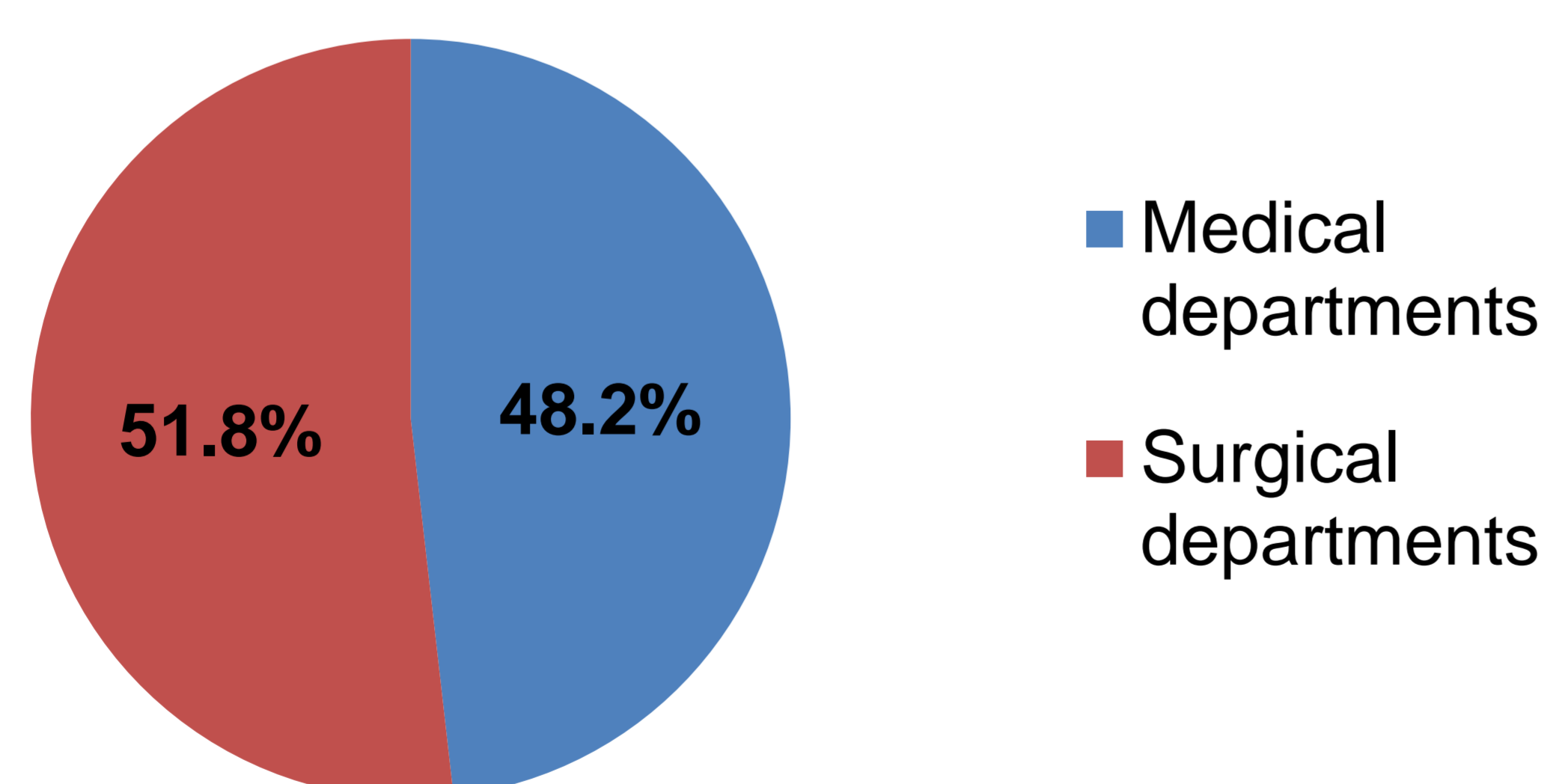


Figure 1: Distribution of departments' types.

- It concerned **community acquired** infections in 252 cases (54.7%).
- **Microbiology documentation** was available only in 127 cases (27.5%).
- **Multi-resistant bacteria** were isolated in 52 cases (41%).

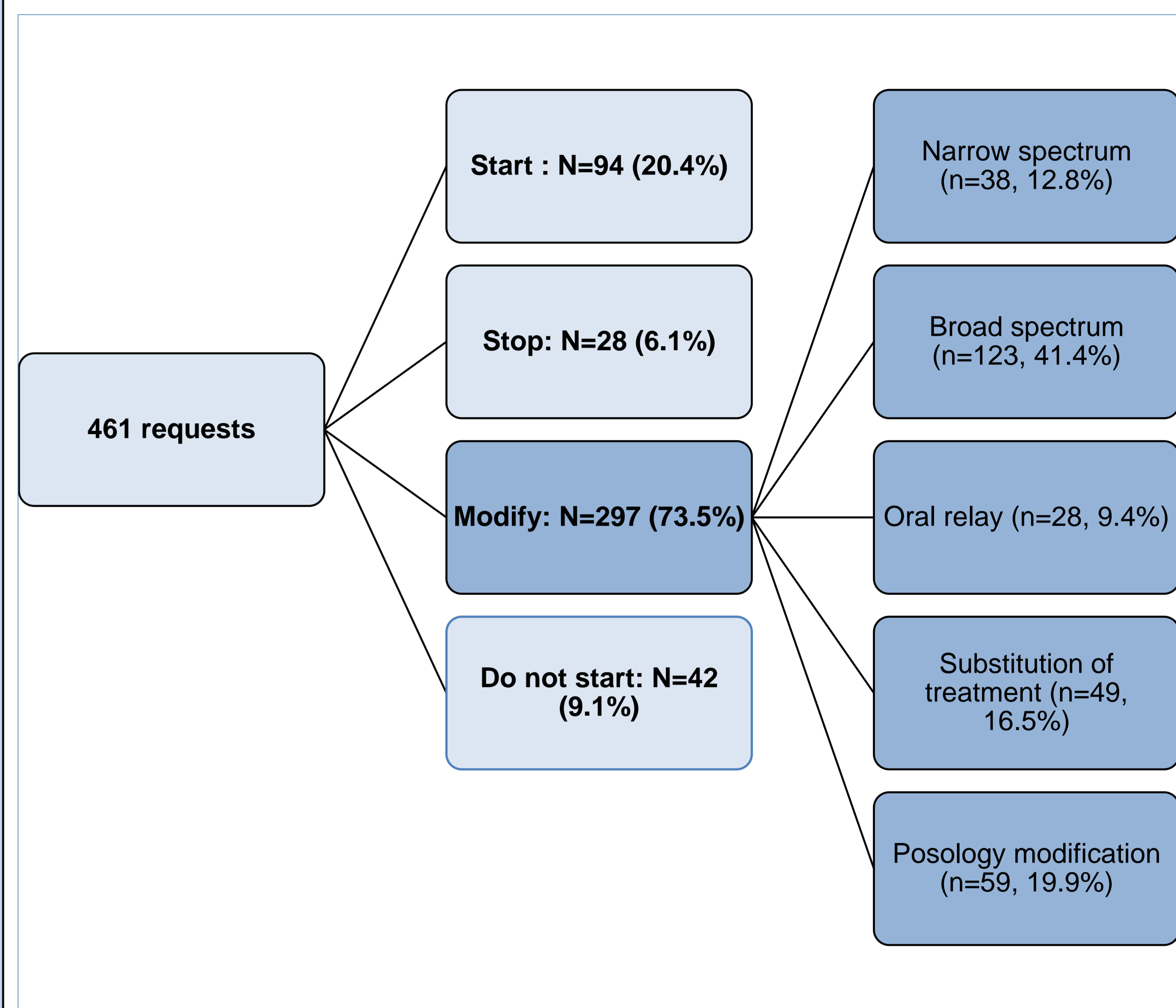


Figure 2: Analysis of the AMT's advice

Discussion and conclusion:

- The AMT advice were requested from every department of the hospital, both medical and surgical.
- Our AMT participated actively in the management of the elderly's infections; many advice were given in order to improve antibiotic prescription and help manage infections. The main intervention was modifying an ongoing treatment.
- Many factors such as underlying conditions, poor microbiological documentation and relatively high prevalence of multi-resistant bacteria could make it difficult to come up with the appropriate prescription adapted to each patient [2].
- Therefore, attending physicians requested the AMT's assistance to collaborate and find the more suitable prescription to treat the infection and minimise side effects.

1. Dyar OJ, Huttner B, Schouten J, Pulcini C. What is antimicrobial stewardship? Clin Microbiol Infect . 2017;23(11):793–8.
 2. Garo B. How can the physician contribute to improving the quality of antibiotic use? Med Mal Infect. 2003;33(SUPPL. 1):50–60.