

# Antibiotic Stewardship Interventions in a Geriatric Hospital by Clinical Pharmacists

Renggli L<sup>1,2</sup>, Bühlmann C<sup>1</sup>, Studer A<sup>2</sup>

1. University Department of Geriatric Medicine FELIX PLATTER and University of Basel, Basel, Switzerland

2. Hospital Pharmacy, University Hospital Basel, Basel, Switzerland

## Background & Aim

The national strategy to combat antimicrobial resistance <sup>3</sup> is currently focusing on the implementation of antibiotic stewardship in Swiss Hospitals and is supported by associations of various professional groups [1].

The aim of this project was to assess the potential of antibiotic stewardship interventions by clinical pharmacists in geriatric medicine.

## Methods

Over a period of three months (01/2024 - 03/2024), each antibiotic prescription was assessed by a clinical pharmacist. Interventions were suggested orally to the physician and the implementation rate was calculated. Indication and choice of substance were described. A survey was sent to involved physicians to evaluate the handshake stewardship activity.

## Results

- 🔍 409 antibiotic prescriptions were evaluated (Figure 1).
- 💬 For 16 % (67/409) prescriptions, recommendations were communicated.
- ✅ 61 % of recommendations were implemented and 6 % lead to other therapy adjustments.
- 📝 The main indications were pneumonia (32 %), urinary tract infection (27 %) and bacteremia including (uro)-sepsis (10 %).
- 🦠 54 % of antibiotics were used for empirical therapy, 38 % for targeted therapy and 8 % for prophylaxis at time of evaluation.
- 💊 Substances used were mainly ceftriaxone (26 %), amoxicillin-clavulanic acid (24 %), piperacillin-tazobactam (17 %) and trimethoprim-sulfamethoxazole (8 %).
- 📈 Call for a continuation of handshake stewardship service in future (N=6, 100 %).
- 💡 Rating of the service according to survey (N= 6):
  - Optimizes therapy (100 %)
  - Improves patient safety (80 %)
  - Increases knowledge (80 %)
  - Time saving (50 %)

## Conclusion

- ▶ Clinical pharmacists can contribute to optimize antibiotic therapy, especially in wards with mainly uncomplicated infections.
- ▶ The high implementation rate highlights the acceptance of this interprofessional treatment approach.
- ▶ Existing structures of various professional groups should be expanded for antimicrobial stewardship activities.

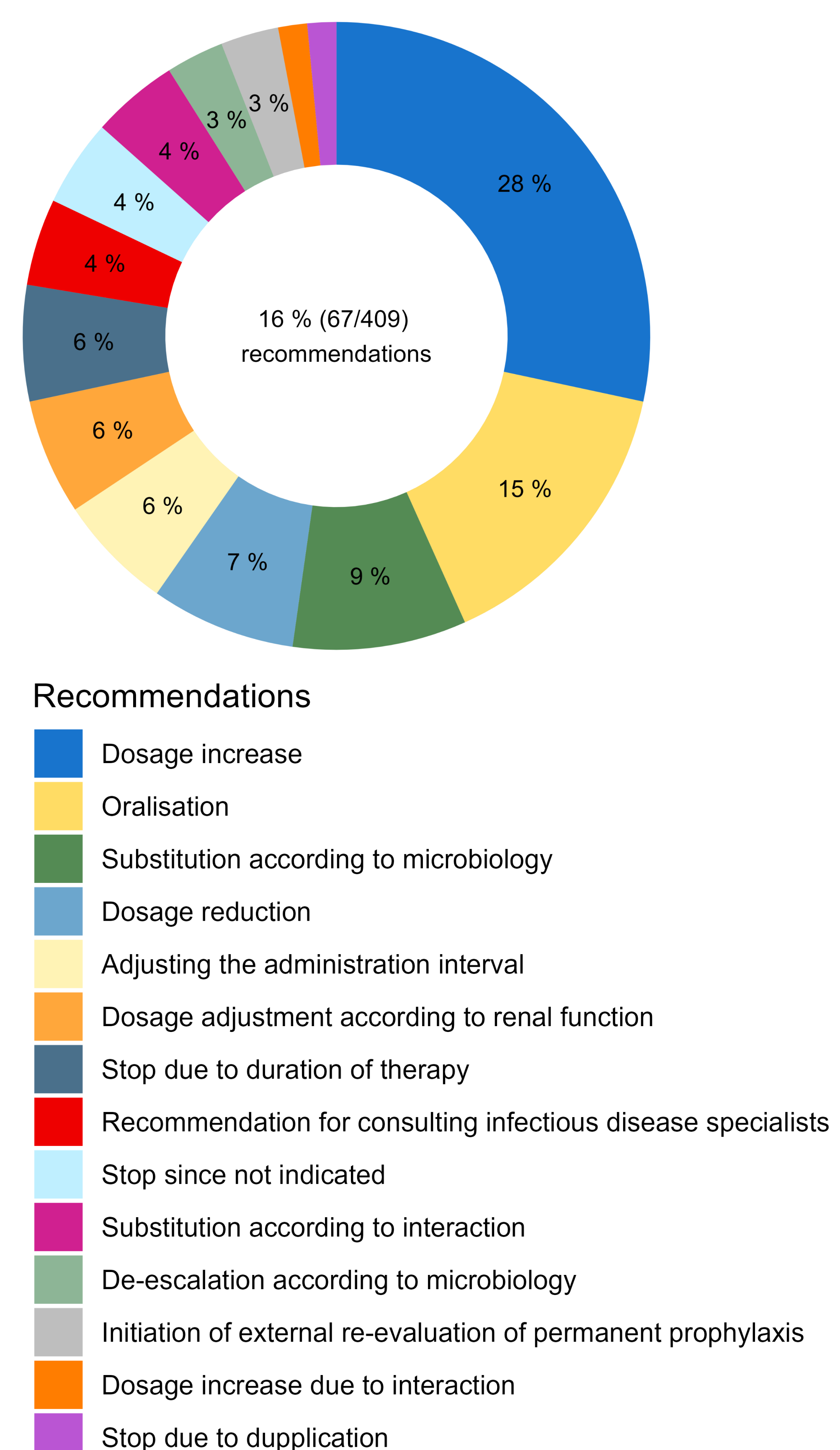


Figure 1: Handshake stewardship recommendations.