

M. QUESTEL¹, M. DUBERT², C. WEMMERT², C. HUMBERT², A. FERAL¹, J.L. PONS¹

1 : Pharmacy department, Victor Dupouy Hospital, Argenteuil

2 : Mobile infectiology department, Victor Dupouy Hospital, Argenteuil

Keywords : Pharmaceutical Consultations, Long-term antibiotic therapies, Patient adherence, Prevent bacterial resistance



Background

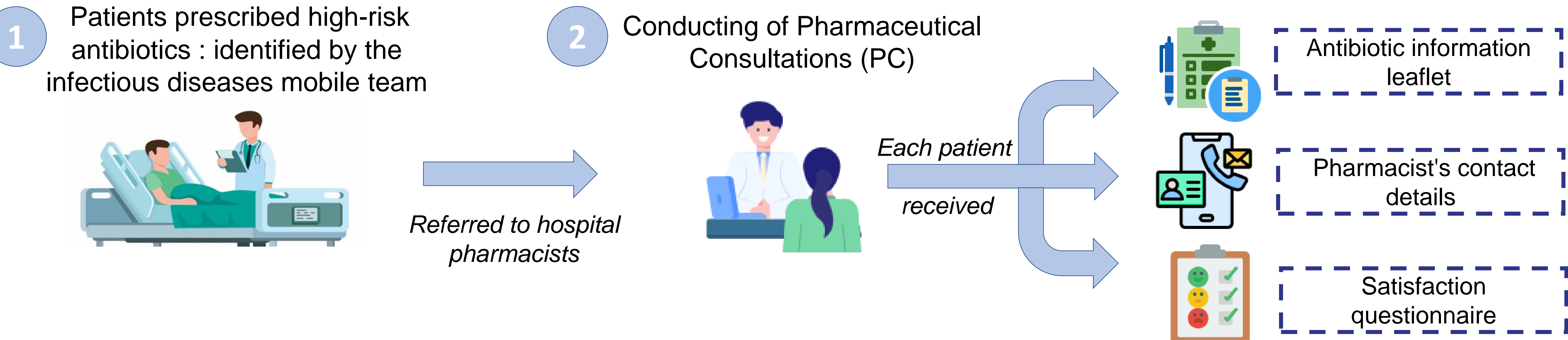
Objectives

Long-term antibiotic therapies require strong patient adherence to ensure efficacy and prevent bacterial resistance. Pharmaceutical consultations (PCs) were implemented to educate patients, address treatment-related concerns, and promote active involvement in home-based care.

This study aimed to evaluate the impact of PCs on the management of patients receiving long-term (>14 days) antibiotic (AB) therapies.

Material and methods

A prospective monocentric study was conducted from May 2024 to April 2025



Results

Population characteristics :

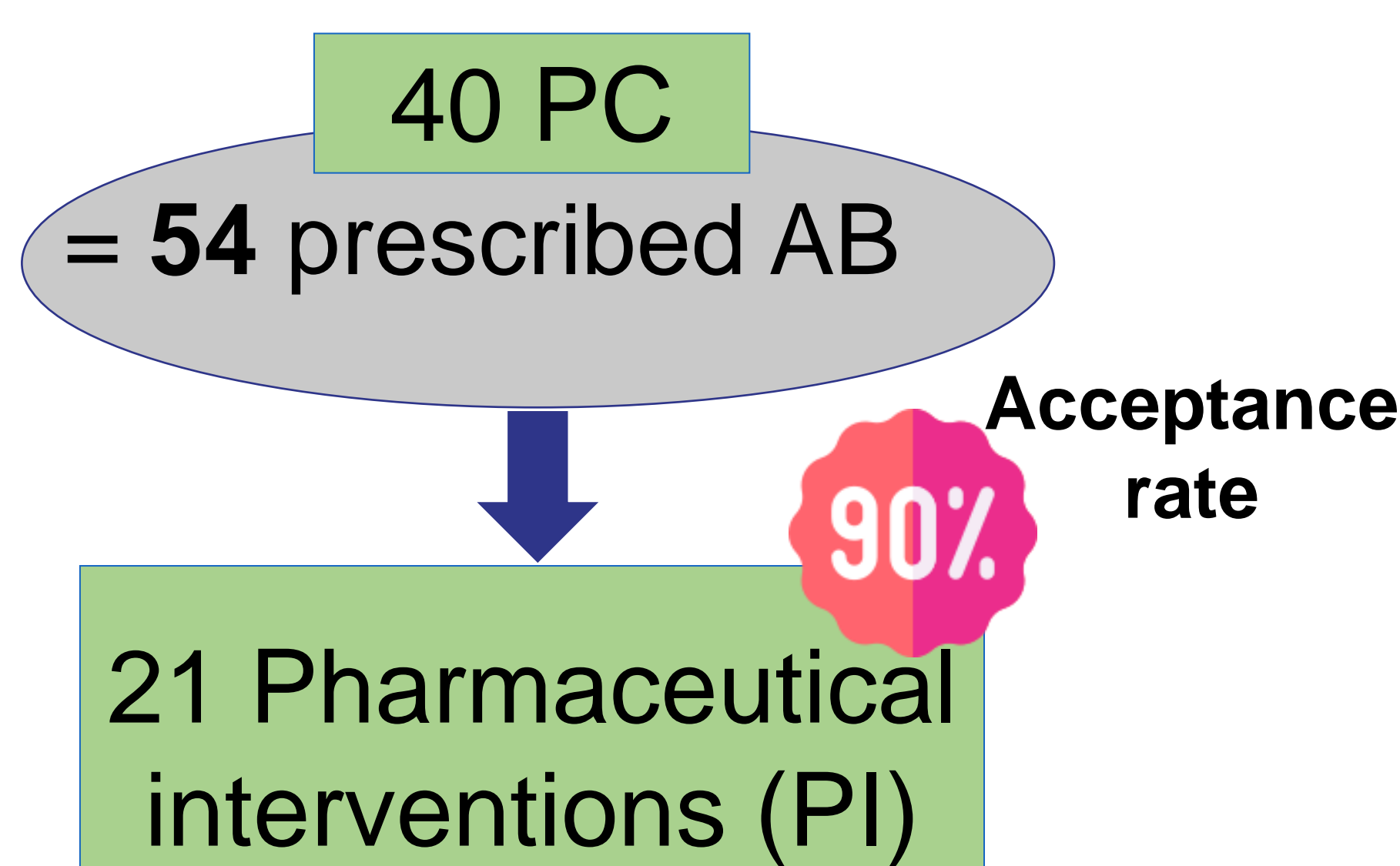
- Sex : 70% male
- Median age : 76y [Q1=59; Q3=79]

Most consultations occurred :

- Surgical wards (45%) and emergency units (18%)

Most frequently used AB :

- Sulfamethoxazole/trimethoprim (24%), levofloxacin (20%), and amoxicillin (19%)



The main infection sites were :

- Osteomyelitis (30%), endocarditis (18%), surgical site infections (15%), and abscesses (15%)

The median treatment duration :

- 39 days [Q1=21; Q3=42] with 65% monotherapies and 35% dual therapies

Prevention or correction of drug interactions

- Apixaban/Rifampicin : ↓ apixaban concentration
- Levonorgestrel/Levofloxacin : Ineffectiveness of the contraceptive pill
- Iron-Lansoprazole/Levofloxacin : ↓ levofloxacin absorption

Management of adverse effects

- Levofloxacin/Rifampicin : Nausea, vomiting
- Acute renal failure and abnormal liver function tests
- Levofloxacin : associated glycemic disturbances
- ECG monitoring

Optimization of administration schedules

- Treatment duration abnormally shortened
- Fasting administration with rifampicin

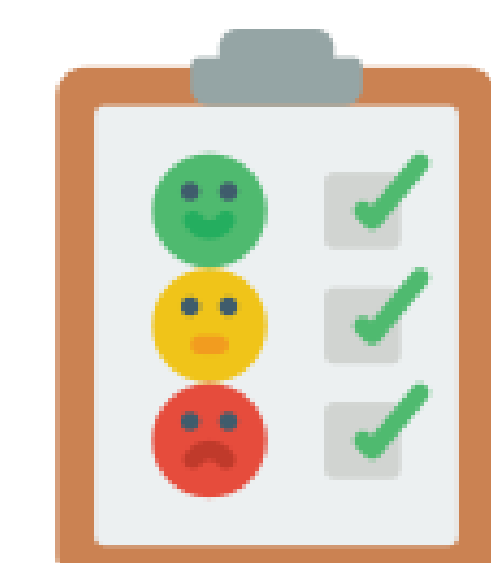
Adjustments to treatment duration or dosage

- Dosage adjustment : Apixaban, Heparin
- No clinical indication : Proton pump inhibitor



Three patients contacted the hospital pharmacist after the PC :

- Two for clarification on dosing or duration
- One to report a severe skin reaction to sulfamethoxazole/trimethoprim → Leading to urgent rehospitalisation and treatment modification



High level of satisfaction

Discussion/Conclusion

Pharmaceutical consultations enhance the safety and effectiveness of long-term antibiotic therapies by improving patient understanding, supporting adherence, and enabling timely intervention when complications arise. They underscore the essential role of hospital pharmacists in multidisciplinary infectious disease management.