

# **ASEPTIC CENTRALIZED VERSUS HOME EXTEMPORANEOUS PREPARATION** FOR CYSTIC FIBROSIS OUTPATIENTS' PARENTERAL ANTIBIOTIC THERAPY: **A SURVEY ON NURSES' SATISFACTION**

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# BACKGROUND

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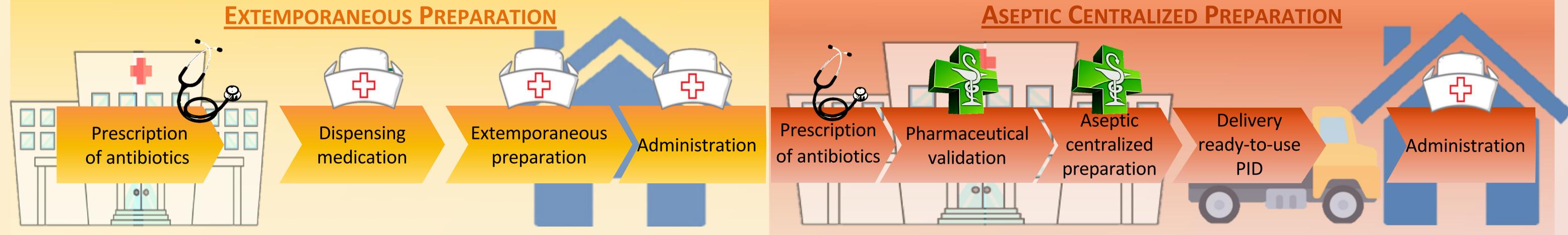
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Our pharmaceutical unit is part of a **french regional multidisciplinary network** dedicated to patients with cystic fibrosis (CF). For home intravenous antibiotic therapy, preparation of antibiotics in portable infusion devices (PID) is either done extemporaneously in the patient's home or **centralized in aseptic conditions** in our unit.

Depending on antibiotics stability, up to 7 days of treatment is delivered at once to the patient and stored at 2-8°C. Daily treatment is then administered by a nurse.

A previous study showed that centralized preparation reduces costs of treatment.

The goal of aseptic centralized preparation is to secure medication process by reducing infectious risk and ease home administration through provision of ready-to-use PID but evidence-based data are lacking.



## **OBJECTIVES**

This work aims at assessing nurses' satisfaction toward using ready-to-use PID vs. extemporaneously prepared PID.

# METHODS

In November 2017, an online anonymized survey was send to 647 nurses of the regional multidisciplinary network.

23 items :

- Nurses' level of confidence
- Practical aspects of treatment: <
- **Quality of care**
- Time dedicated to each step

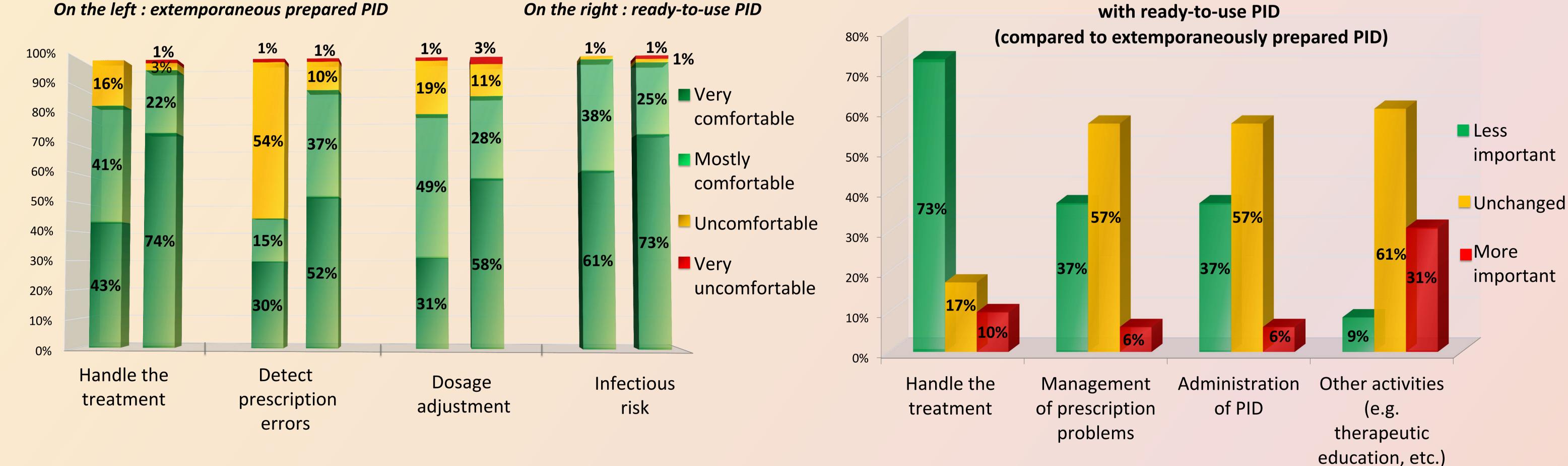
# RESULTS

81 (13%) nurses answered the survey. 67% took care of at least one patient with CF in the past year and the remaining 33% in the last 5 years.

Fig 1: Nurses' feeling on different aspects of home antibiotic therapy

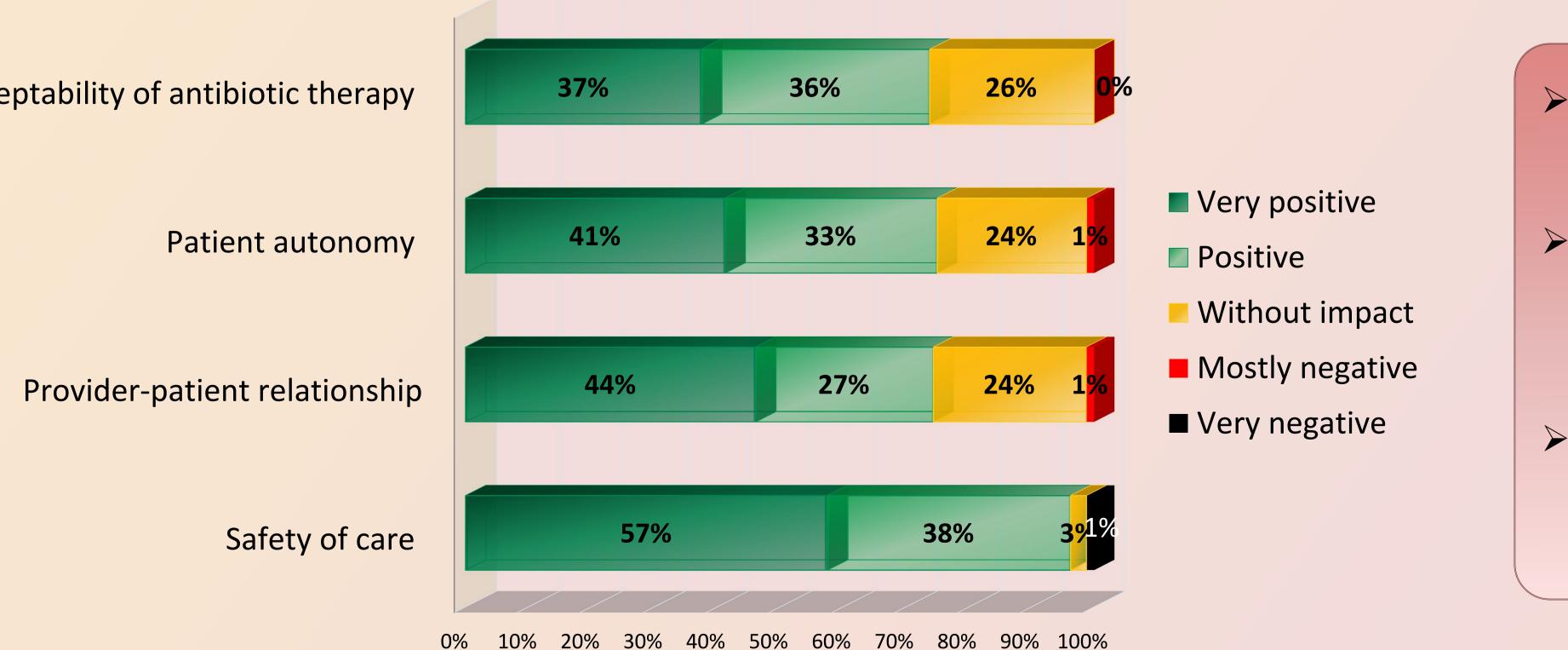
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Fig. 2: Time dedicated to each step of home antibiotic therapy



#### Fig. 3: Impact of ready-to-use PID on quality of care

Patient acceptability of antibiotic therapy



For all items evaluated, using ready-to-use PID improves nurses' level of confidence (Fig. 1)

## Unexpectedly, ready-to-use PID doesn't impact the time dedicated to care except for handling the treatment (**Fig. 2**)

> For a large majority of nurses, aseptic centralized prepared PID has a positive or a very positive impact on all items evaluated (Fig. 3)

#### CONCLUSION

The results of this study show that nurses feel that provision of aseptic centralized prepared PID tends to increase the security of medication process.

It would be interesting to lead a similar survey among patients of our network and to compare clinical outcome between aseptic centralized preparation and extemporaneous preparation at home.