# **Evaluation of adherence to inhaled medications in Chronic Obstructive Pulmonary Disease**



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### INTRODUCTION

Chronic Obstructive Pulmonary Disease (COPD) treatment consists mainly in inhaled medications. The evolution of this illness is linked with good compliance.

## OBJECTIVE

The aim of the study is to assess patients' compliance and their ability to use the inhaled medical devices.

#### MATERIAL AND METHODS

A prospective observational study was conducted in an University Hospital during 2 months

→ Inclusion criteria: patients treated by inhaled devices for a COPD

Girerd's compliance questionnaire<sup>1</sup>

- Fully observant  $\rightarrow$  score = 6/6
- Poorly observant  $\rightarrow$  score = 4 ou 5/6
- Non-observant → score ≤ 3/6



Ability to use the inhaler  $\rightarrow$  3 common steps

- 1. Expiration
- 2. Drug inspiration
- 3. Holding breath for ten seconds

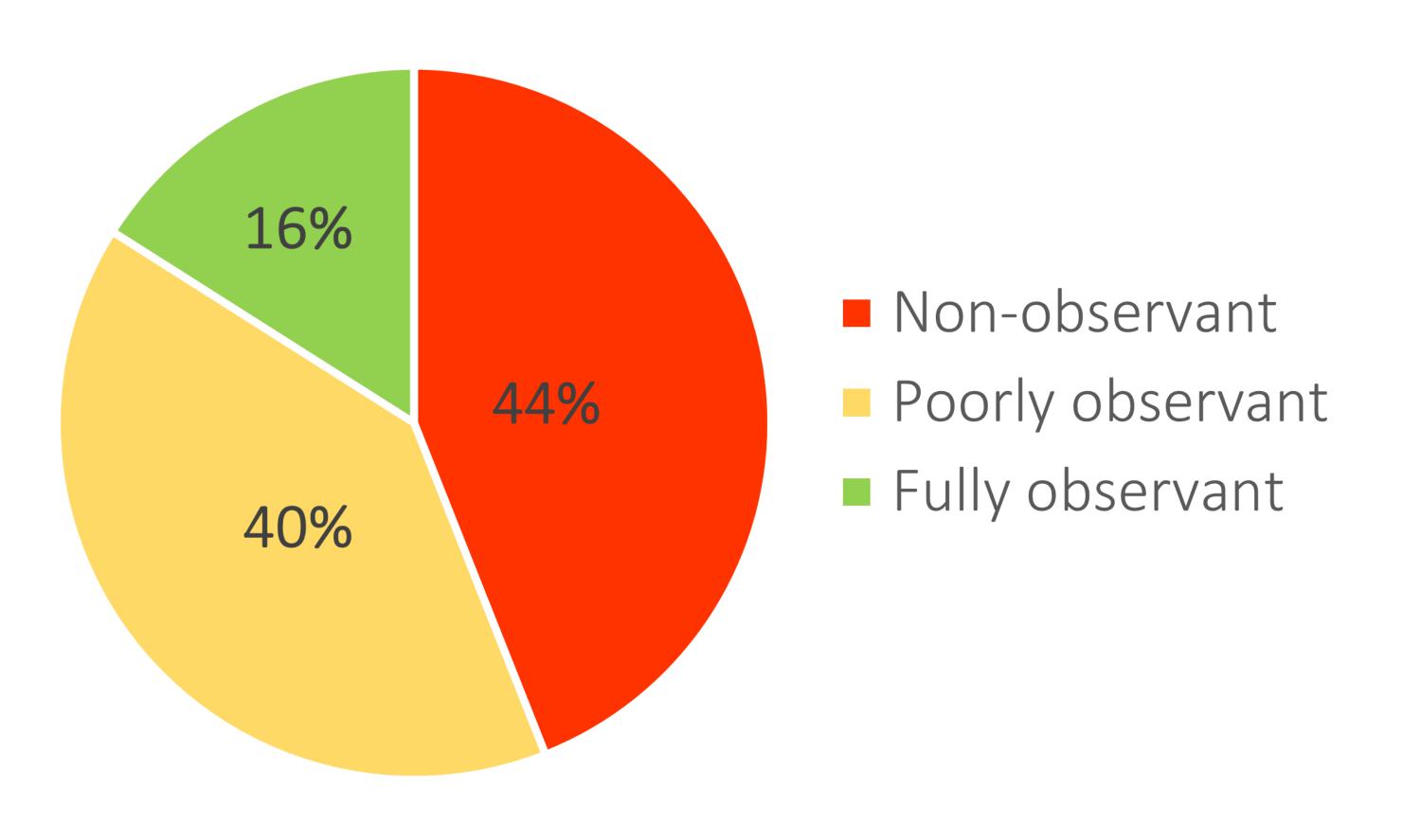
RESULTS

45 patients

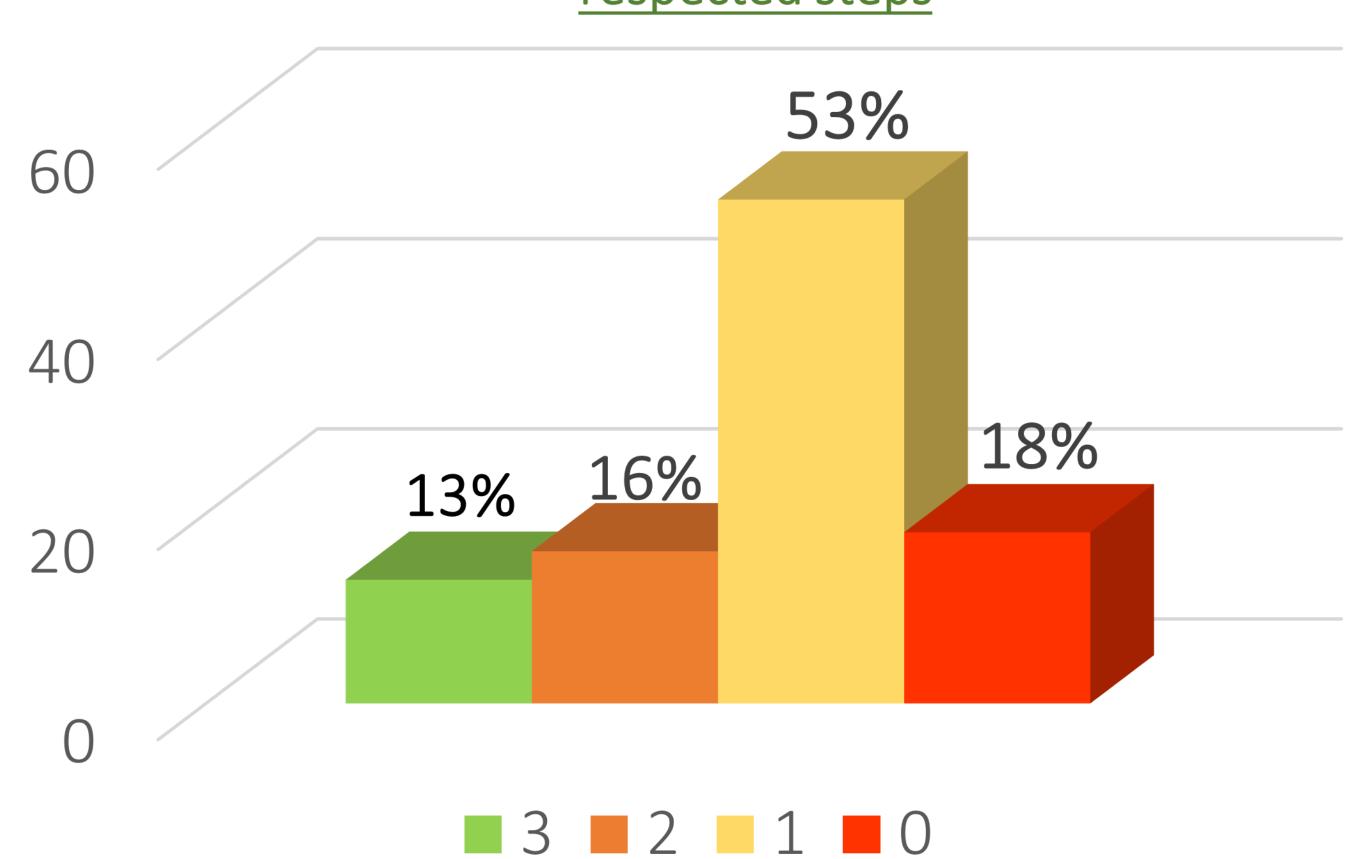
Mean compliance score: 3.5/6

Mean number of respected steps: 1.2/3

Patients' distribution according to their compliance score



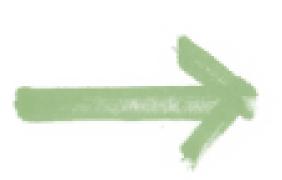
Patients' distribution according to the number of respected steps



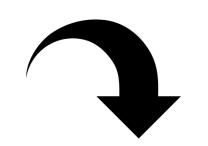
#### CONCLUSION

This study stresses a limitation in compliance in COPD patients with inhaled tretments:

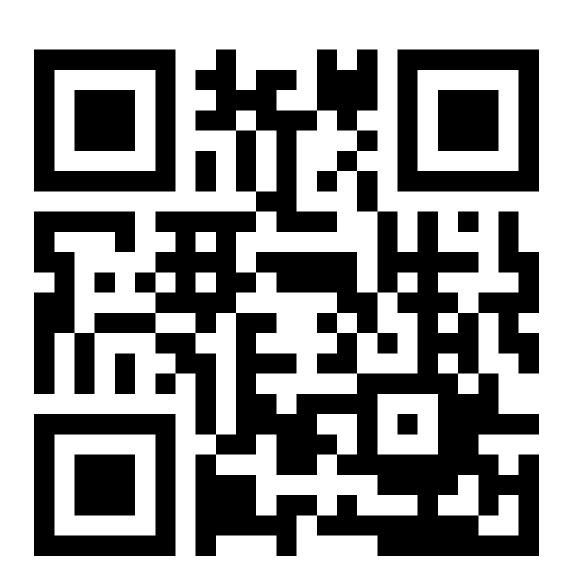
- High level of non-observant patients
- Limited mean number of accomplished steps during inhalation.



Clinical Pharmacist's intervention



Compliance improvement > impact on the disease evolution?



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