



DESCRIPTION OF A CLINICAL PHARMACIST INTERVENTION FOCUSED ON MANAGEMENT OF A CHRONIC DISEASE AT HOSPITAL: THE EXAMPLE OF CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD)

M. Rigoni¹, A. Maire², S. Droneau¹, G. Leguelinel¹, F. Dubois¹

1. CHU Nîmes - Nîmes (France), 2. Institut Sainte Catherine - Avignon (France)



Background and importance

 COPD is currently the **fifth leading cause of death** with about 17 000 deaths by year in France, Despite having national recommendations, **many care non-conformities** are observed in COPD patients management.

Aim and Objectives

 Describe the intervention of a **Clinical Pharmacist** focused on COPD management recommendations emitted by the French Health Authority (HAS).



Materials and methods

Observational study conducted between January and July 2022.

Clinical Pharmacist included hospitalized COPD patients and performed a **pharmaceutical interview** focused on COPD management:



- medical follow-up by a pneumologist
- smoking
- vaccination against pneumococcus
- COPD medication
- medication adherence
- proper use of inhalation devices



- Collect the type and number of non-conformities to recommendations
- Collect the type and number of propositions emitted by Clinical Pharmacist

Results

N= 85 patients Mean age : 70.5 years

173 non-conformities detected on 79 patients

→ 2,1 non-conformities/patient

→ At least one non-conformity was observed in 93% of patients

Non-conformities detected :

- misuse of inhalation devices (77.2%)
- absence of vaccination against pneumococcus (67.1%)
- no follow up by a pneumologist (64.7%)
- active smokers (32,9%)
- prescriptions considered to be non-compliant (31.2%)

109 propositions :

- 57 pneumococcus vaccines
- 22 medical help to stop smoking
- 12 switch of device
- 12 patients were referred to their general practitioner
- 8 inhalation chamber

| Type and proportion of non-conformities observed | |
|--|------------|
| Inhaler misuse | 37% |
| No mistake | 18 (22.8%) |
| ≥ 1 mistake | 61 (77.2%) |
| 1 mistake | 27 (34.2%) |
| 2 mistakes | 23 (29.1%) |
| 3 mistakes | 11 (13.9%) |
| Type of mistake | |
| Don't exhaled before the puff | 56 (70.8%) |
| Insufficient inspiration | 18 (22.7%) |
| Don't block breathing | 13 (16.5%) |
| Patient-inadapted device | 13 (15.3%) |
| Vaccination anti pneumococcal | 32% |
| Vaccination complete | 28 (32.9%) |
| No vaccination or incomplete vaccination | 57 (67.1%) |
| Smoking | 16% |
| Smoker | 28 (32.9%) |
| Non-smoker | 57 (67.1%) |
| Prescription error | 15% |
| Total = 27 (31.2 %) | |
| Molecular redundancy | 5 (5.9%) |
| Prescribing error | 11 (12.9%) |
| Patient's error compared to the prescription | 8 (8.4%) |
| Long-term prescription of corticosteroids | 3 (2.8%) |

Conclusion

Clinical Pharmacist can detect non-conformities and make propositions to optimize COPD management during patient hospitalization.

This kind of focused intervention could also be used for patients suffering from other chronic disease such as heart failure, asthma or diabetes.

Keywords : COPD, non-conformities, clinical pharmacy