

Introduction

- ◆ Cystic fibrosis is an autosomal recessive genetic disorder that affects the lungs, the pancreas, the liver and the intestine.
- ◆ The pharmacotherapy contributes to a better quality of life, reduced hospitalizations and prolonged survival.

Objectives

- ◆ The aim of this study was to review the literature on the impact and the role of pharmacists in cystic fibrosis.

Methods

- ◆ A Web portal about the evidences of the impact and the role of pharmacists in specific diseases, programs of care or pharmaceutical activities was developed.

<http://impactpharmacie.org>

- ◆ A **literature search** on Pubmed® was conducted: pharmacist OR clinical pharmacy OR pharmaceutical care AND cystic fibrosis.
- ◆ French and English articles about the role and the impact of pharmacists in cystic fibrosis from 1990-2013 were included.
- ◆ For each article we included:
 - all key indicators that document the the **role of pharmacists with only quantitative or qualitative metrics**.
 - all key indicators that document the **impact of pharmacist with statistical analysis**
 - all relevant **pharmaceutical activities** in that context

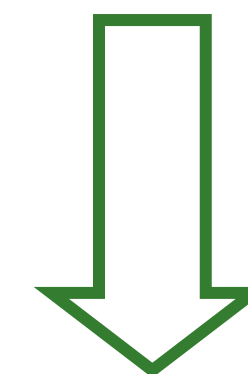
Discussion/Conclusion

- ◆ There are limited data published about the role of pharmacists in cystic fibrosis.
- ◆ While it seems relevant to support such clinical implication, pharmacists involved in that program of care should better document and evaluate their impact.

Results

Literature search

Four relevant articles included in our analysis



24 key indicators that document the role of pharmacists with only quantitative or qualitative metrics
Nine key indicators that document the impact of pharmacist with statistical analysis
Six pharmaceutical activities

Key indicators (quantitative or qualitative)

Settings	Number of articles
Hospital	1
Hospital for children	2
University hospital	1
Patient care wards	
Cystic fibrosis center	3

Categories of key indicators (Number of keys indicators)	Number of articles
Costs (4)	2
Adverse effects	No data
Errors (1)	1
Morbidity	No data
Mortality	No data
Adherence	No data
Satisfaction (2)	1
Others (7)	2

An article can have several indicators.
 An indicator may be present in one or more articles.

Key indicators that document the impact of pharmacists with statistical analysis

Categories of key indicators (Number of keys indicators)	😊 Number of articles	😐 Number of articles	😞 Number of articles
Costs (4)	1	-	-
Adverse effect (no data)	-	-	-
Errors (no data)	-	-	-
Morbidity (2)	1	1	-
Mortality (no data)	-	-	-
Adherence (no data)	-	-	-
Satisfaction (no data)	-	-	-
Others (3)	1		

Legend 😊 Positive impact 😐 Neutral impact 😞 Negative impact

Positive key indicators

😊 **« Costs » indicator 4/4**

- ◆ Drug level costs
- ◆ Dosing adjustment costs
- ◆ Length of stay cost
- ◆ Total costs

😊 **« Morbidity » indicator 1/4**

- ◆ Schedule for the evaluation of individual quality of life-direct weighting

😊 **« Others » indicator 3/3**

- ◆ Mean levels per patient to achieve pharmacokinetic and pharmacodynamics goal
- ◆ Mean number of days to achieve pharmacokinetic and pharmacodynamics goal
- ◆ Number of courses that achieved pharmacokinetic and pharmacodynamics goal

Pharmaceutical activities (n articles)

