## The chronic obstructive pulmonary disease in Azienda Sanitaria Provinciale Siracusa: economic considerations related appropriateness of prescription.

N. Avola<sup>1</sup>, S. Guzzardi<sup>2</sup>, D. Sgarlata<sup>2</sup>, R. Sorbello<sup>2</sup>, G. Cacciaguerra<sup>2</sup>, A. Scandurra<sup>2</sup>.

<sup>1</sup>Università degli Studi di Catania, Scuola di Specializzazione Farmacia Ospedaliera, Catania, Italy.

<sup>2</sup>P.O. Umberto I, U.O.C. Farmacia, Siracusa, Italy.

#### Background

COPD is an irreversible inflammation that causes airway narrowing and has a slow and progressive course. Drug therapy allows to improve clinical outcomes as well as quality of life, but often prescriptions are not adherent to GOLD Guidelines (Global Obstructive Lung Disease) for COPD treatment.

#### Purpose

To evaluate the budget impact of adopted treatment vs the one adherent to GOLD GL.

#### **Materials and Methods**

The authors, by administrative databases and mathematical models, obtained:

The number of patients with COPD in 2010 in ASP Siracusa

The number of patients divided by stage of severity

Prescriptions of medications for COPD (ATC R03) in 2010 in ASP Siracusa

The cost of therapy

Number of patients

Current treatment cost



The cost of treatment adherent to GOLD GL according the number of patients in 2010 in ASP Siracusa

Appropriate treatment cost

#### **GOLD GL** recommends:

-to use in mild-stage SAMA/SABA

(short-acting antimuscarinic/B<sub>2</sub> agonists);

- to add **from moderate to very severe stage** LAMA/LABA (long-action antimuscarinic/B<sub>2</sub> agonists);
- to add in severe and very severe stage FDC (fixed combination drugs)/ICS(inhaled corticosteroids).

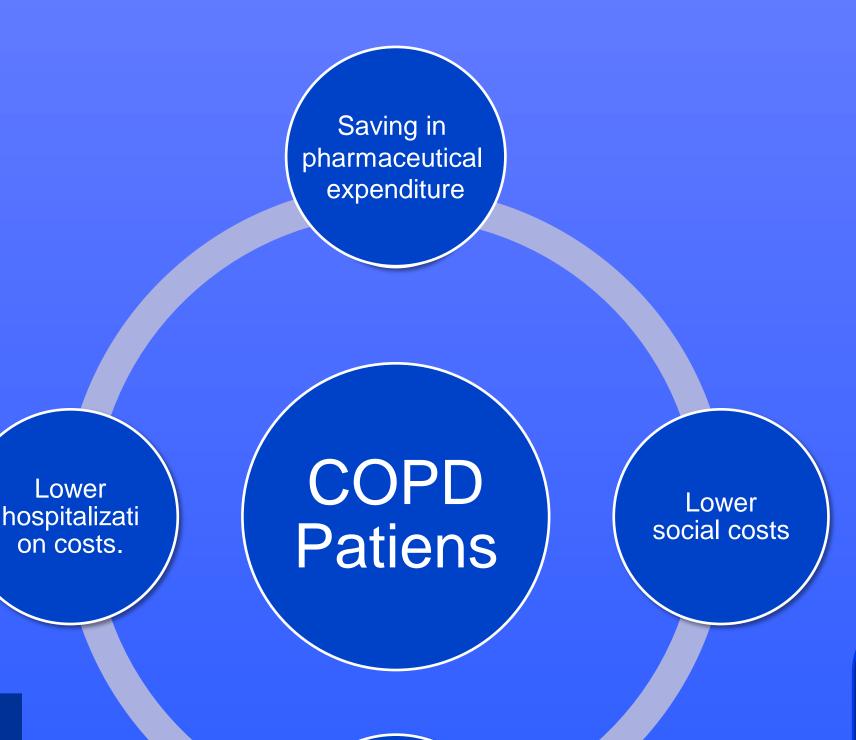
#### Results

5895 patients with COPD in 2010 in ASP Siracusa

1484 in mild-stage 2672 in moderate stage 1155 in severe stage 584 in very severe stage



2.702.627€ was the cost of prescriptions in 2010 in ASP Siracusa; 1.787.967€ (66,16%) for FDC/ICS



3.000.000
2.500.000
2.500.000
1.500.000
1.000.000

ATC R03

2010 prescriptions cost

adhering to the GOLD GL cost

1.393.323€

1.393.323€

1.353.938€

1.309.304 the cost of treatment 100% adhering to GOLD GL; 434.029€ (33,15%) for FDC/ICS

A saving of 1.393.323€

#### Conclusions

If the prescriptions of FDC/ICS were adherent to Gold GL, spending would have been 50% less. The adherence to GOLD GL ensures the patient an appropriate therapy and allows financial resource saving.

With the unconditional support of

Improved life quality



nicoavola@libero.it

## APPLICATION'S EFFECTS OF TREATMENT PLAN FOR DISPENSATION OF BIOLOGIC DRUGS IN RHEUMATIC DISEASES IN ASP 8 OF SIRACUSA, ITALY CPC-136

<u>F. Ferlito</u><sup>1</sup>, D. Spadaro<sup>1</sup>, D. Sgarlata<sup>1</sup>, R. Sorbello<sup>1</sup>, S. Guzzardi<sup>1</sup>, E. Migliorisi<sup>1</sup>, N. Avola<sup>1</sup>, S. Regolo<sup>1</sup>, G. Cacciaguerra<sup>1</sup>.

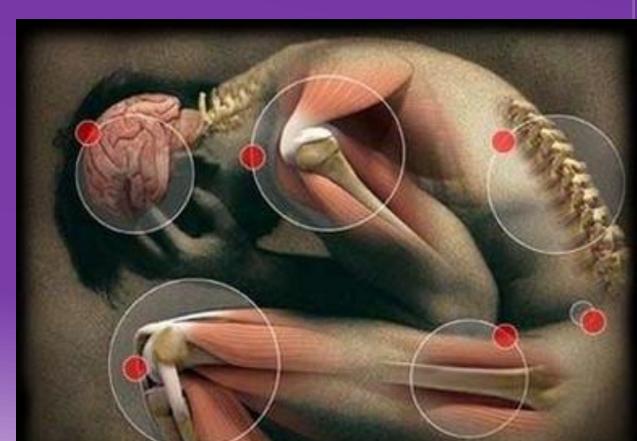
<sup>1</sup>ASP SIRACUSA P.O.Umberto I, Farmacia Clinica, Siracusa, Italy.

#### Background

Rheumatic diseases are a chronic diseases with a high cost. New drugs are the anti-TNF inhibitors adalimumab (A) and etanercept (E). The Infectious-Diseases-Unit of Umberto I Hospital, Siracusa, Italy, was identified as a Regional Center for the prescription of biologics. Furthermore, the D.A. 0264/16.02.2011 had authorized a regional Treatment Plan (PT) to dispense these drugs, monitoring health care costs and appropriateness of prescription.

#### Purpose

To evaluate the consequences of the PT and the effects of A and E on PCR values and number of joints involved (NJI).



#### **Materials and Methods**

The PT is annual and consists of two sections containing:

Demographic features,
diagnosis,
prior therapy with any failures,
clinical and laboratory data (NJI, PCR),
date of first prescription and dose of biologic.

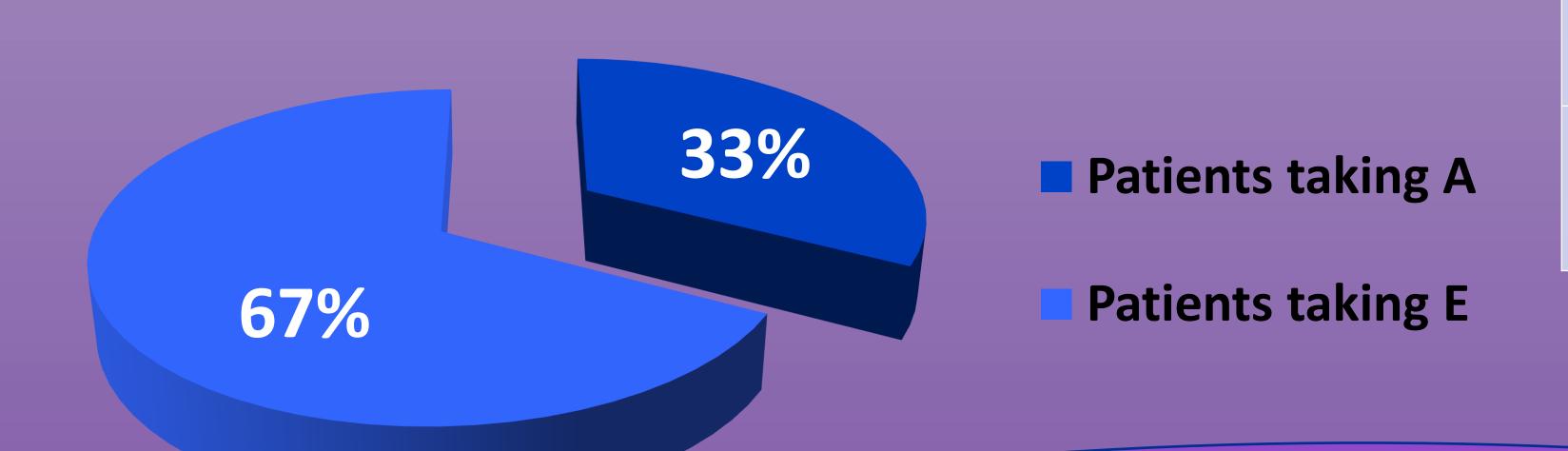
Follow-up at 6 months, with the assessment of therapeutic efficacy (excellent, good, adequate, inadequate), side effects and updated clinical data.

# Regional PT | Note the property of the proper

#### Results

56 PT were examined:

32.7% of patients (mean±SD age: 50.7±12.1) taking A and 67.3% (mean±SD age: 54.1±13.7) taking E.



Patients taking		PCR values	NJI values
A	Baseline	0.5 ± 1.0 g/dl	11.9 ± 7.2
	6 months	$0.1 \pm 0.2  g/dl$	10.1 ± 9.2
E	Baseline	2.5 ± 6.2 g/dl	15.4 ± 10.8
	6 months	1.2 ± 3.9 g/dl	8.2 ± 8.2

#### Conclusions

The use of A and E has been shown to improve the clinical condition of the patients. Furthermore, the application of PT has allowed all patients with rheumatic diseases of the province of Siracusa to access a dedicated health facility, reducing their physical/economic inconvenience. A significant economic benefit was recorded for the ASP 8, not having to refund the costs of flow-compensation activation (File F).

ferlito.fabio@virgilio.it

### EFFICACY OF HEALTH LITERACY IN THE SELF-EDUCATION OF DIABETIC PATIENTS

S. Regolo<sup>1</sup>, F. Ferlito<sup>1</sup>, D. Spadaro<sup>1</sup>, D. Sgarlata<sup>1</sup>, S. Guzzardi<sup>1</sup>, N. Avola<sup>1</sup>, G. Cacciaguerra<sup>1</sup>, S. Italia<sup>2</sup>.

<sup>1</sup>ASP SIRACUSA P.O.Umberto I, Farmacia Clinica, Siracusa, Italy.

OHP-030

<sup>2</sup>ASP SIRACUSA P.O.Omberto I, Farmacia Cillica, Siracusa, Italy.

#### Background

The increased prevalence of chronic diseases, including diabetes, requires a critical review of models of care and the introduction of new strategies of intervention. The Health Literacy (HL) is a tool for education of patients in order to increase the understanding of medical information and thus achieving a therapeutic education. The diabetic patient is educated to manage the disease in accordance with the perceived needs for a better compliance to drug treatment and its outcomes.

#### Purpose

To adopt a diagnostic-therapeutic protocol shared between diabetologist and pharmacist, and to promote the active inclusion of people with diabetes in the course of treatment. Also activate an information system, monitoring and evaluation activities through clinical indicators.

#### **Materials and Methods**

Overall, 70 patients (32 women and 38 men) aged between 35 and 87 years underwent to self-education and were monitored in this study.

The patients were treated:

Ten with insulin
+
oral hypoglycaemic agents (OHA)

53 with OHA alone

7 with insulin alone

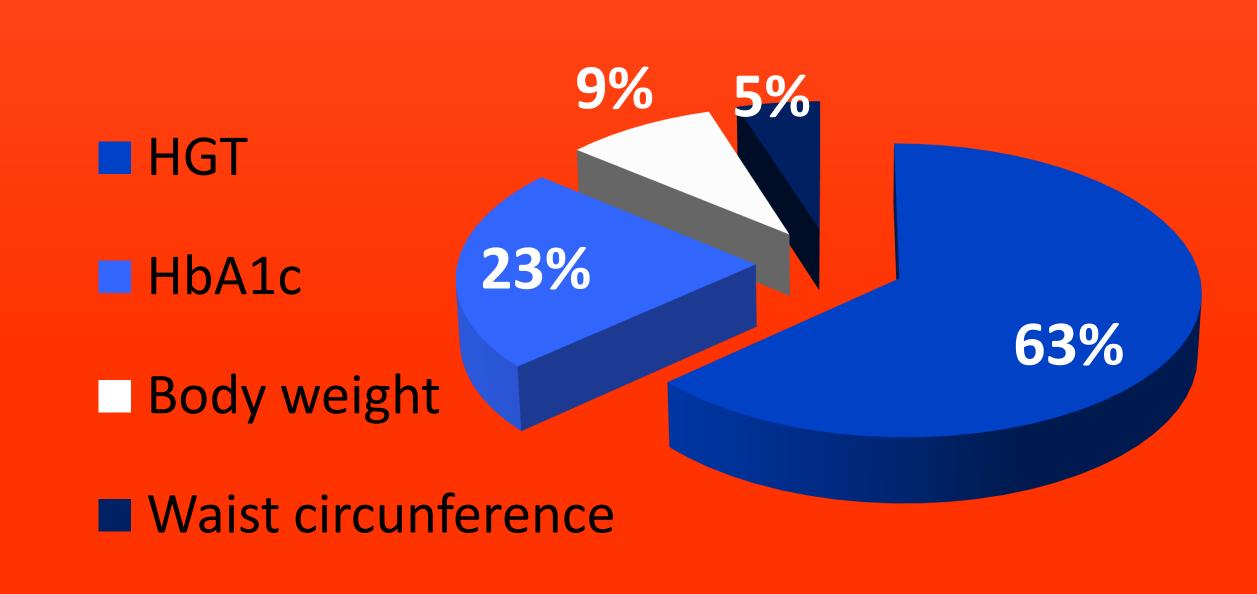
All patients received a sheet containing clear instructions for the proper management of the disease and therapy. The patient underwent monthly clinical monitoring, urging him to follow the right behaviors at home: constant monitoring of blood glucose, healthy and balanced diet, moderate activity and preventive screening for diabetes complications.





#### Results

Values of HGT, HbA1c, body weight and waist circumference were reduced by 42.2%, 15.2%, 6% and 3.3%, respectively. Compliance is improved in 30% of patients (screening tests carried out on time). Overall patient satisfaction was high.



#### Conclusions

Our experience confirms that the multidisciplinary HL is useful to improve the communication between doctor/pharmacist-patient relationship. It is important to consider that the learning of patients is focused on the simplicity of terms and on the knowledge of complications, in order to obtain a good management of <u>diabetes</u>.