

estimated in less than 50% is a major issue in medicine.^[1] This is also true concerning drugs used in patients with chronic obstructive pulmonary disease (COPD).^[2] Patient education is the most appropriate intervention to improve adherence and its implementation in current management of COPD is a need to meet.^[3]

We have evaluated the changes in the adherence to drug treatment in patients with COPD receiving a complete educational program. From patients referring for the first time to the outpatient setting of our pulmonary rehabilitation unit we included in the study the first 100 patients who were prescribed by their primary care physician a drug treatment according to the updated version of the guidelines on obstructive lung disease (GOLD).^[4] In particular, 28% of patients were treated by inhaled long acting beta2 agonists (LABA), 31% by tiotropium, 26% by LABA plus inhaled corticosteroids (ICS), 8% by tiotropium plus ICS, and 7% by LABA, tiotropium, and ICS.

At admission, 34% of patients had stopped one or more of the prescribed drugs without physician's authorization, and 53% did not use the correct dosage. This defines a compliance of 66% and an adherence of 47%. In addition, only 24% of patients showed a correct inhalation technique.

All patients underwent a pulmonary rehabilitation (PR) program based on 10 sessions with physical exercise, respiratory exercise, and education on COPD. The latter included a detailed explanation on aims and outcomes of drugs for COPD and training to learn to apply the correct inhalation technique.

After 6 months, 95 patients attended the subsequent PR course. The 5 patients who did not attend were contacted by phone: all were continuing the drug treatment, but only 2 used the correct doses. Of the 95 patients continuing PR, 3 (3.2%) had stopped one or more drugs, and 12 (12.6%) did not follow the correct dosage. This defines a compliance of 96.8% and an adherence of 87.4%. Therefore, patient education is able to greatly improve compliance and adherence to the prescribed drugs in patients with COPD. Such outcome should stimulate to expand the application of patient education in management of COPD patients.

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Effect of patient education on adherence to drug treatment for chronic obstructive pulmonary disease

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