General Pharmaceutical Council of Spain

Aspira

Aspectos prácticos en el Servicio de Dispensación de inicio en el paciente asmático

Study of the Effect of Community Pharmacists on the Knowledge of the Inhalation Technique in Asthmatic Patients Using a New Inhaler (ASPIRA)

Aguilar J, Amaro L, Lopez-Torres R, Recio C, Martín L, Megía C, Varas V.

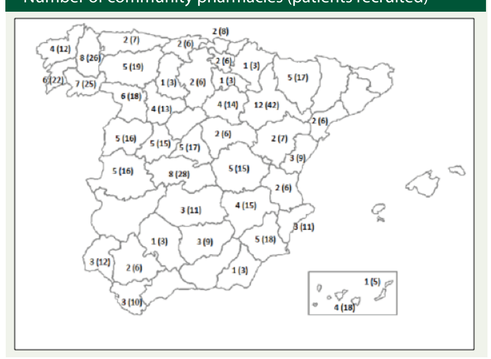
BACKGROUND INFORMATION

ASPIRA is the first action undertaken as part of HazFarma, a project promoted by the General Pharmaceutical Council of Spain (GPhCS) in collaboration with Cinfa Laboratories, to provide the keys for the implementation of Professional Pharmaceutical Services in Community Pharmacy. ASPIRA included a research study in adult patients with asthma.

METHODS

Prospective observational study at 149 community pharmacies in Spain. A total of 489 patients were recruited and monitored for three months (Fig 1). Each patient made three visits to the pharmacy. The first visit was scheduled at the beginning of the study (V1); the second one (V2), one and a half months later; and the third visit (V3) at the end of the study, three months after the first visit. At each visit, specific surveys were conducted with the aim to gather specific data for the variables assessed. The surveys conformed the Case Report Form hosted in the e-learning platform of the GPhCS.

FIGURE 1:
Number of community pharmacies (patients recruited)

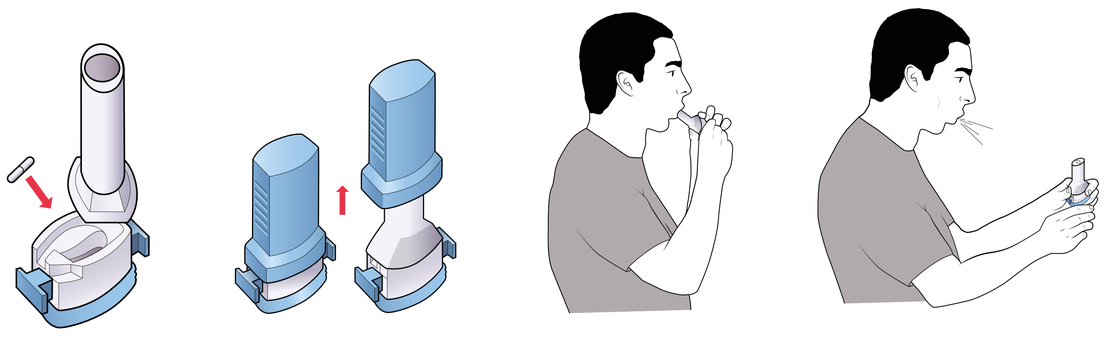


PURPOSE

Evaluation of the adherence to treatment in asthmatic patients using a new inhaler for the first time, through an assessment of their knowledge of and compliance with said treatment after being counselled by the community pharmacist.

CONCLUSION

In conclusion, community pharmacists were able to improve patients' knowledge of the inhaler and the inhalation technique, thereby improving adherence in asthma initial treatment.

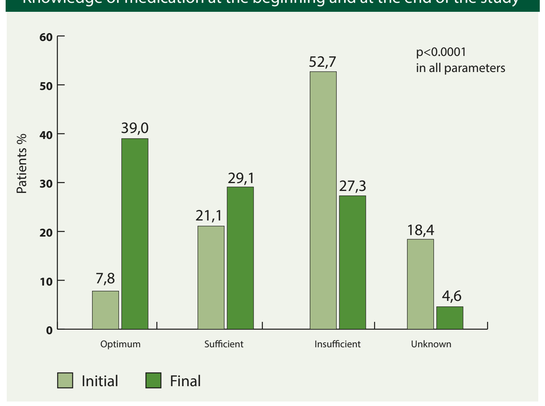


RESULTS

The average age in the recruited subjects was 53.5 years. 47.5% were women and 52.5% men. 25.6% had more than three concomitant diseases and 26.9% used more than 5 medicines. The average visit time was approximately 30 minutes.

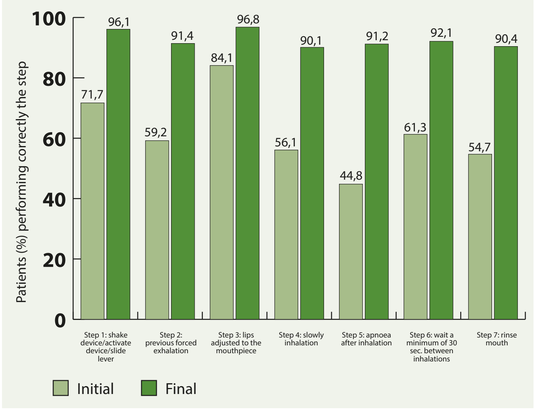
With regards to knowledge of the medication, there was an increase in patients with correct and complete responses to all the items in the specific survey (68% had an optimum or sufficient knowledge about their medications in V3 versus 29% in V1). **(Fig 2)**

FIGURE 2:
Knowledge of medication at the beginning and at the end of the study



A significant increase was also observed in all the items of the survey with regards to the inhalation technique. The inhaler was successfully used in about 90% of cases after the pharmacist intervention. **(Fig 3)**

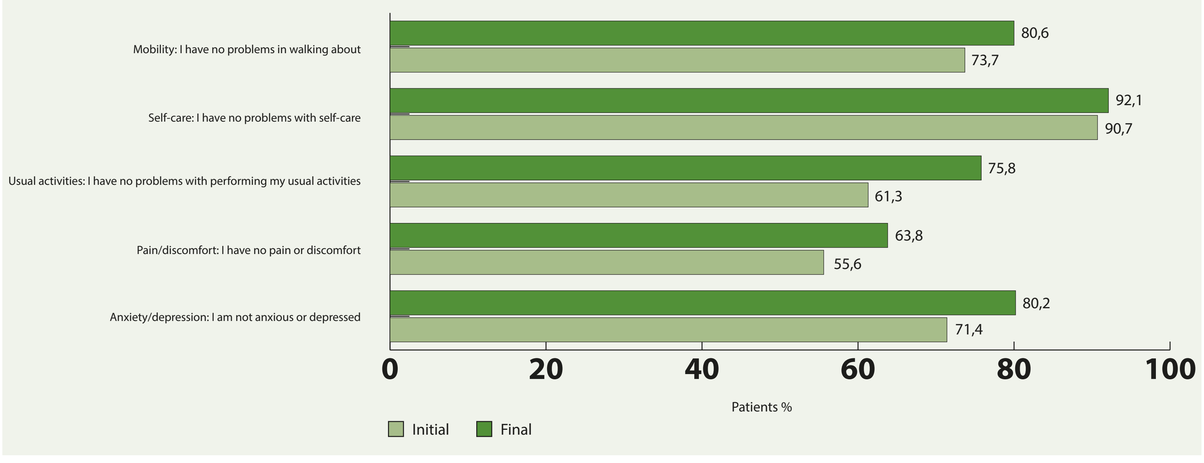
FIGURE 3:
Knowledge of the inhalation technique at the beginning and at the end of the study



Regarding adherence there was a relative increase of 30%.

In relation with Quality of Life, there was an increase of ratings in every item of the EuroQol 5D-3L **(Fig 4)**, and an increase of 8.8 points in the VAS scale from V1 to V3.

FIGURE 4:
Results on the five dimensions of the EurolQoL 5D-3L



Furthermore, 89.3% of patients thought that counselling offered by the pharmacist helped a lot or sufficiently to improve their inhalation technique **(Fig 5)**, and 86.5% considered that the global intervention of the pharmacist helped a lot or sufficiently to control their illness **(Fig 6)**.

FIGURE 5:
Do you consider that pharmacist counselling has helped to improve your inhalation technique?

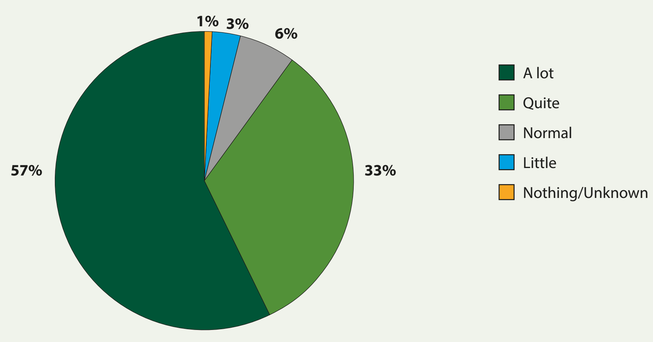
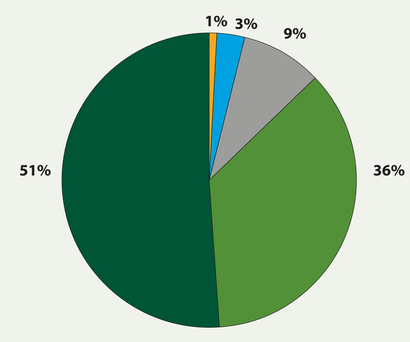



FIGURE 6:
Do you consider that the global intervention of the pharmacists has helped to control your asthma?