



## Editorial

Continuing Education in Spirometry: A Light Along the Way<sup>☆</sup>

## Formación continuada en espirometrías: una luz en el camino

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Despite the diverse nature of chronic respiratory diseases, their clinical expression is rather limited in symptoms, so their manifestation may be overlapping. For this reason, the differential diagnosis of chronic lung disease requires additional tests that help the clinician to differentiate some diseases from others. Among these complementary studies, chest radiology (as an anatomical study) and pulmonary function tests (as functional assessment) are particularly relevant. Of the latter, spirometry has acquired a leading role as the first functional assessment in patients with respiratory diseases, since despite its simplicity, it provides comprehensive information on the lung physiology. However, although spirometry is a simple, non-invasive, reliable and safe technique, numerous studies have shown that there are problems with underuse<sup>1</sup> and variability in the quality of spirometry performed.<sup>2</sup>

The causes of this inadequate use of spirometry are multiple, and have probably contributed notably to the underdiagnosis of chronic respiratory diseases in the general population.<sup>3</sup> In this issue of *Archivos de Bronconeumología*, Roger et al.<sup>4</sup> studied the use of spirometry in 65 public hospitals using a cross-sectional survey. The survey collected information on relevant aspects of spirometry, such as the number, type of spirometry, site where they were performed and information on the professionals who carried them out and their training, among others. In the results analysis, the authors observed irregular use of spirometry in these centres,<sup>4</sup> and identified the quality control of the test, inclusion of results in hospital data systems and the application of continuing education programmes as the main weak points in the centres studied. Along the same lines, a recently published national study<sup>5</sup> corroborates these findings, and also pointed out that the low number of spirometries performed, misuse of the bronchodilator test, inadequate calibration of the device and poor training are the main

problems in the implementation of spirometry in Spain. An analysis of both studies indicates that proper continuing training in spirometry is needed to promote the performance of more of these tests and to ensure their quality.

Also in this issue of *Archivos de Bronconeumología*, Represas-Represas et al.<sup>6</sup> evaluated the effectiveness of a spirometry training programme run for teams of doctors and nurses from 26 health centres. This training programme consisted of two theoretical-practical sessions two months apart with supervised monitoring of the spirometries. Through this programme, the authors evaluated 74 participants, of whom 45 completed the programme with a final evaluation after one year. The number of spirometries correctly performed and interpreted was 71% one month after starting the programme, 91% in the second month and 83% one year after having completed the initial course. Thus, the authors showed that it is possible to improve the number and quality of spirometries in Primary Care.<sup>6</sup> These results provide a key innovation in spirometry training, namely attending a continuing education programme for various sessions that allows the knowledge acquired after the first course to be put into practice and validated over time. The study<sup>6</sup> also assessed the participant's knowledge one year after the first educational intervention, which enabled the authors to confirm that it remained the same as at the end of the training. However, the reality in Spain is different, since most professionals who attend a spirometry training programme do so occasionally without any subsequent follow-up.<sup>5</sup>

In order for spirometries to be performed properly, at least three requirements must be met: to have quality spirometers, to establish guidelines or recommendations on spirometry and to implement training and qualification programmes for the professionals responsible for performing the test.<sup>7</sup> In this respect, the *European Respiratory Society* (ERS), aware of the impact of correct training in performing spirometries for better management of respiratory diseases as a whole, has recognised the importance of producing a quality certification for professionals who perform this test. The ERS working group *Harmonising Education in Respiratory Medicine for European Specialists* (HERMES) has proposed the ambitious task of preparing an accreditation process for this

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activity by creating a so-called *European Spirometry Driving Licence*.<sup>7</sup> This accreditation process will devise uniform activities and documents that will serve as measurable criteria for the institutions that train health professionals in spirometry. The project, known as Spirometry HERMES, includes a complete training programme, certification guidelines, educational material and assessment criteria. In this way, it is hoped to create a basic competency qualification programme to define quality spirometry. The first documents are already available,<sup>8–10</sup> and include information on the requirements necessary for training, the educational experience, organisation of the training programme and other organisational issues, specifications of the venues for performing the spirometry, as well as requirements for specific settings. Each of the sections into which the programme is divided has a list of criteria designed to achieve optimal quality standards that enable implementation of the programme and its surveillance.

This seems to be the right time for national scientific societies to make an appeal, in order to launch teaching and training programmes, promote the correct performance of spirometries and achieve better awareness of the need to carry out quality functional examinations in all care centres that treat respiratory patients. This will enable the necessary competencies to be acquired and maintained in the long term in order to perform this technique consistently following the required quality criteria, in the interests of accessibility and equity that should govern any healthcare system.

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