Pulmonology Teaching in Medical Schools and the Future of the Specialty

La enseñanza de la neumología en las facultades de medicina y el futuro de la especialidad

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The European Higher Education Area (EHEA) was created to harmonize educational programs in European universities, standardizing the knowledge, aptitudes and skills necessary for professional development. Seventeen years after the Declaration of Bologna1 launched the initiative, the time has come to ask if these objectives have been achieved. With regard to the training of physicians, the answer is a resounding no.

Not only have Spanish medical faculties failed to take advantage of the opportunity to standardize their curricula and teaching programs, they have allowed disparities to increase considerably.2 This had led to study plans which reflect more the power of the specialist areas or departments within each faculty,2 than a serious analysis of the necessary course content for training our medical students, which should be same in all faculties. The current situation and the opportunities lost were predicted almost to the letter by Lobato et al.1 in 2010.

So, what has happened in respiratory medicine education? Is teaching in our area of expertise any more standardized than in others? The theoretical and practical contents of the pulmonology syllabus in the curricula of most Spanish universities have not been given the weight they deserve, considering the importance of respiratory diseases, at least in terms of their prevalence and impact on the health of the population. In most universities, only 4 European Transfer Credit and Accumulation System (ETCS) credits are assigned to respiratory medicine, far fewer than other similar disciplines.

The theoretical and practical classes offered vary widely, very few universities have dedicated pulmonology areas, and even fewer are fully integrated within the medical and surgical syllabuses. Most respiratory medicine teaching takes place in shared areas with names such as medical pathology or medical-surgical pathology. When a discipline lacks its own space, there is a risk that other teaching departments specializing in other organs or systems acquire more weight, even if those diseases are less prevalent. Clinical training is the keystone of medical teaching4 and while there appears to be greater uniformity in practical training, this inevitably depends on the departments through which each student rotates.

Despite the difficulties involved, a robust analysis of respiratory medicine study plans in Spanish universities is needed. This will facilitate the introduction of collaborative mechanisms ranging from standardization of teaching programs in the different faculties (without the need to wait for unnecessary legal changes) to the creation of common teaching tools or inter-university exchange programs. This is an issue that has not been addressed by any of the scientific societies – these associations appear to be much more focused on practicing medicine than on teaching it (university level teaching seems to be something alien to these groups), although some publications have appeared on the teaching of general pathology5 or pediatrics6 for example. This is an appropriate moment for the Spanish Society of Pulmonology and Thoracic Surgery (SEPAR) to reflect critically on this problem, but to do this, we need first to understand that the future of the specialty is not only decided by the choices made by resident interns,7,8 but also by the way in which respiratory tract pathology is taught at university.

Villena and Álvarez-Sala, in an article that appeared in Archivos de Bronconeumología9 in 2007, reported on a SWOT analysis of respiratory medicine in Spain. In their opinion, the specialty was threatened by the limited availability of practicing pulmonologists qualified to teach the subject at the university level, a situation that could have a negative impact on the number of postgraduates choosing to specialize in pulmonology. This problem may now be accentuated by university teaching cuts.

The future of any specialty is determined by its importance in solving the health problems of the society in which it is practiced, and by the choices of graduates taking up internships. Equally important, however, is the organization of the curriculum in medical faculties, including how students study and learn, the attitude of the teaching staff, and their motivation for introducing innovations in the syllabus. Undergraduate teaching should be viewed by respiratory medicine specialists as an opportunity,9 and by SEPAR as a challenge. Our society must place greater importance on the role of pulmonology and thoracic surgery teaching in the university.

A good approach would be to reach out to students to improve their understanding of the work and responsibilities of pulmonologists, and to strengthen ties with professional student societies,
such as the State Council of Medical Student (CEEM); efforts made in recent years have been laudable, but could clearly go further.

SEPAR must develop new and rigorous working outlines for university teaching. First, we must closely analyze the current situation using reliable instruments such as the Delphi method to identify problems and areas for improvement associated with undergraduate education in respiratory medicine and thoracic surgery. SEPAR can subsequently formulate an appropriate response to the problems detected. This calls for an organized, balanced, enthusiastic response. The future of the specialty begins in the university.

References