Introducing a new HERMES project on respiratory infections

In 2014, the European Respiratory Society (ERS) took the lead in harmonising training programmes in a field of emerging interest across Europe, respiratory infections. In order to establish defined standards of knowledge and skills in this new field, the ERS has launched the educational task force “Respiratory Infections” under the HERMES (Harmonised Education in Respiratory Medicine for European Specialists) initiative (hermes.ersnet.org). Most countries do not have their own system for training physicians in respiratory infections. To fulfil this unmet need, the educational task force aims to support the harmonisation of training through different tools: in the first instance, by developing a training syllabus and curriculum for respiratory infections, and in the future, by designing educational resources that could lead to voluntary assessments and certification. In this editorial, we will focus on explaining the rationale behind the HERMES Respiratory Infections project and present the first steps in the development of a training syllabus.

The need for harmonisation of training across Europe

Respiratory infections pose a major threat to public health worldwide as they represent one of the leading causes of morbidity and mortality in most countries [1]. Pneumonia, for example, is a prominent cause of death for children under 5 and adults over 65 years of age, particularly in developed countries [2]. Meanwhile, tuberculosis remains a common infection and a serious clinical issue, especially for middle- and low-income countries. In 2013, a significant number of tuberculosis cases (64844) was reported in 30 European Union/European Economic Area countries [3]. In addition, in certain economic or geographical contexts, a new problem arises, the emergence and spread of multidrug-resistant tuberculosis. As a consequence, there is a risk that poor clinical and public health management of individuals with latent or active disease favours the emergence and spread of the infection. Given the differing epidemiology and resources available at local levels, the management of the diseases included in this field is still a challenge. At the same time, recent developments in diagnostic techniques have made respiratory infections a field of emerging interest. Nowadays, respiratory infections are one of the central topics in the training of respiratory physicians. However, the education of physicians with an interest in respiratory infections is still heterogeneous across European countries. Respiratory infections as a subspecialty of respiratory medicine covers knowledge and skills in partial overlap with other major disciplines in medicine, such as medical microbiology and infectious diseases. Clear definitions of the knowledge and skills central to respiratory medicine as well as these overlapping areas are needed in order to better coordinate and improve patient care as well as to identify areas of collaborative future research. In summary,

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there is a pressing need to standardise knowledge and expertise in the field of respiratory infections among different European countries in order to equally prevent and better manage respiratory infections.

**Current situation of training and management of respiratory infections**

A recent situational analysis run by the ERS among the newly established Respiratory Infections educational task force asked the opinion of its 13 members and two advisors with respect to two main areas: current training in respiratory infections and management of the disease. The task force members/advisors, mostly respiratory infections and tuberculosis experts from the Respiratory Infections Assembly of the ERS, represented several European countries, including the UK, Germany, the Netherlands, Italy, Spain and Malta, as well as the USA.

Concerning current training in respiratory infections, we have learned about the following aspects:

- In most countries, respiratory infections training is included in the general respiratory training (nine out of 11 responses) and respiratory infections are not recognised as a specialty or subspecialty in most countries (11 out of 13 cases).
- Furthermore, in most countries, there is neither a specific syllabus available for training programmes (10 out of 12 responses) nor are there any specialised training centres for respiratory infections in the countries investigated (10 out of 11 responses).
- There is no specialty examination available in any of the respondents’ countries of work (12 out of 12 cases) and, although some countries make use of written tests, case-based and oral examinations (four out of 12 responses), in general, there are no specific assessments in place (eight out of 12) that are specifically targeted for respiratory infections.

With respect to the current management of respiratory infections, we reported on the following aspects:

- The first diagnosis in adult patients is usually performed by the general practitioner (12 out of 12 responses).
- Once a diagnosis has been given, the treatment and management of the patients is decided either by the general practitioner (four out of 12 cases) or a respiratory medicine specialist (four out of 12 cases).
- Patients with respiratory infections are mostly followed up by the respiratory medicine specialist (eight out of 12 cases) and then by the general practitioner (five out of 12 cases) or an internal medicine specialist (five out of 12 cases).

**Objectives, target audience and next steps**

Following the successful development of other HERMES projects (discussed previously by De Backer and Simonds [4] and Pitta et al. [5]), the Respiratory Infections educational task force aims to develop a curriculum for training in respiratory infections. The intended target audience is respiratory physicians with a special interest in respiratory infections. As a first step in this process, the educational task force has started to work on a consensus-based syllabus, listing the knowledge and the core skills that are considered central to the field of respiratory infections. A web-based Delphi technique is currently used as the main method to consult a large group of experts in the field of respiratory infections, consisting of members of the ERS Respiratory Infections Assembly, national experts and representatives of ERS membership countries. The syllabus will be structured into clearly defined modules, such as mandatory and optional, according to the paradigm of the previous HERMES syllabi. Once established, the syllabus will be used as the main input for the development of a consensus-based core curriculum. This will include the learning outcomes, competencies, assessment methods, educational resources and the learning opportunities necessary to teach the educational content described in the syllabus. The syllabus and curriculum will have no legal weight per se but will serve as a blueprint to guide and facilitate the implementation of a training programme in respiratory infections, based on identified needs at a national level. During this process, ERS will also seek the collaboration of members of the other organisation involved in respiratory infections, such as the World Health Organization, the European Society for Clinical Microbiology and Infectious Diseases, and the European Scientific Working Group on Influenza.

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Conflict of interest

A. Niculescu and J-L. Noel are employees of the European Respiratory Society. Disclosures can be found alongside the online version of this article at breathe.ersjournals.com

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