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EDITORIAL

Sleep HERMES: a European training project for respiratory sleep medicine

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The clinical characterisation and description of the obstructive sleep apnoea/hypopnoea syndrome (OSAHS) and related syndromes have been revealed by several epidemiological studies conducted in the late 20th and 21st centuries. These highly prevalent syndromes affect about 9% of middle-aged males and 4% of females. These syndromes have serious medical and social consequences, such as cardiovascular or metabolic diseases and even premature death. Consequently, respiratory sleep medicine has evolved and progressed rapidly within the sleep medicine field over the last decades. New diagnostic and therapeutic techniques appeared in response to an increasing number of patients and clinical interventions. The research progressed to focus not only on the clinical and pathophysiological, but also on the genetic and molecular aspects of these syndromes [1–4]. Nevertheless, the literature in the field does not provide any clear consensus on diagnostic classification and assessment. No harmonised standards of training exist across Europe for respiratory sleep medicine. The European Respiratory Society (ERS) conducted a survey in 2010 to enquire about the structure and organisation of training in different countries within Europe. National experts in the field of respiratory sleep medicine from 21 different countries were consulted. They were first asked about the duration of training in respiratory disorders during sleep. A huge diversity in training organisations and durations was revealed. Across 18 collected responses, it was observed that nine countries do not have any specific training for the specialty. Those countries are Luxembourg, Belgium, Denmark, Greece, Sweden, Poland, Cyprus, Ireland and the UK. On the contrary, training is organised in the Czech Republic, Germany, Romania, Spain, Lithuania, Finland, Austria, the Slovak Republic and Lithuania but could last from 1 week to 12 yrs. Moreover, except for the UK and the Slovak Republic, these countries do not have a specific syllabus in respiratory disorders during sleep. Only three countries (the Czech Republic, Germany and Romania) have an examination for this subspecialty and eight have accredited training centres (the Czech Republic, Germany, Luxembourg, Italy, Romania, Spain, the Slovak Republic and Austria). The ERS provided external and postgraduate courses but the requirements and expectations in the field were not fulfilled. There was a need for a project supporting both the teaching and certification.

THE SLEEP HERMES PROJECT

In 2005 the *ERS* school established the HERMES (Harmonised education in respiratory medicine for European specialists) initiative in order to improve the harmonisation of training in adult respiratory medicine across Europe [5]. Within this initiative, syllabi and curricula were developed for adult respiratory medicine [6] and paediatric respiratory medicine [7, 8]. At present, other HERMES projects are ongoing including intensive care medicine and respiratory sleep medicine. For respiratory sleep medicine, a sleep HERMES task force was officially launched during the ERS Annual Congress in Vienna in September 2009. The task force consists of a chair, two co-chairs, and 12 experts in the field and who altogether represent seven different European countries. This group consists not only of representatives from the ERS but also the European Sleep Respiratory Society (ESRS) and European Board for Accreditation in Pneumology (EBAP).

The project was coordinated and funded by ERS. In April 2010, the task force drafted a list of topics mainly collected from educational material from courses organised by the ERS and other courses held in Antwerp (Belgium) and Edinburgh (UK). The items on this list were reorganised to create a first draft of the ''HERMES European Core Syllabus in Respiratory Disorders during Sleep'' in June 2010. This syllabus contained nine modules and 185 items focusing on the respiratory area of sleep disorders and aimed at targeting respiratory medicine specialists who would like to be specialised in sleep medicine. In line with the methodology previously used to produce the adult and paediatric HERMES syllabi, the sleep task force decided to use a consensus-based technique to develop the syllabus [9, 10]. This technique

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consists of an interactive process designed to lead to consensus within a panel of experts. Several rounds of analysis using online surveys were performed to define a list of core skills and competencies any European practising specialist in respiratory medicine should possess. The process involved three different groups. The task force, participating as the first group itself, identified the national respondents for the project through National Centres of Competence in Research across Europe. 21 National Respondents participated in the syllabus development and contributed to the project, each representing one country. The third group consists of members from the ERS Clinical Physiology and Integrative Biology Assembly (Assembly 4), Sleep and Control of Breathing Group. Altogether, 285 respondents originating from 35 different countries were contacted during the syllabus development process. The majority of the respondents who actually participated to the surveys were either respiratory medicine specialists in clinical practice or sleep medicine specialists in clinical practice. The syllabus development went through three rounds of surveys. The first survey aimed at determining which sections and items should be included in the syllabus and whether they should be mandatory or optional. The results from the first survey were analysed during a face-to-face meeting in September 2010 at the ERS Annual Congress in Barcelona to prepare a second draft of the syllabus. The revised syllabus was subjected to a second survey intended to state which levels of competence for the syllabus items that trainees should have acquired by the time they qualify as tertiary care specialists in respiratory sleep medicine. After some considerations the levels of competence were defined as follows: Level 1 or Basic: the item must be known by everybody from the respiratory sleep medicine field in the daily practice; Level 2 or Intermediate: knowledge sufficient to manage with consultation, under supervision or referral; Level 3 or Advanced: the topic should not be known by everyone in the respiratory sleep medicine field and has the highest level of complexity and is highly specialised.

A proposed syllabus, including these levels of competence, was carried out in a third online survey where respondents had the possibility to agree with the task force proposal or to suggest further levels of competence for the syllabus items. The last round of the survey led to a finalised syllabus with eight modules and 172 items that has now been published [11]. The modules are: physiology and anatomy of sleep and breathing; respiratory conditions; nonrespiratory conditions; clinical assessment; diagnostic techniques; treatment and follow-up; medico-legal aspects of sleep disorders; and paediatrics. The latter module is proposed to be mandatory for paediatricians and optional for adult pulmonary medicine specialists.

THE CHALLENGE FOR ACCEPTANCE AND IMPLEMENTATION OF THE PROJECT

This syllabus will be used differently among Europe depending on the status of the respiratory sleep medicine educational programmes. However it will help indeed to harmonise the teaching and bring more homogeneous insights into the field among different countries and sleep centres. It will therefore improve the quality of respiratory sleep medicine in Europe. Moreover it may also clarify the position of respiratory sleep medicine within the broader field of sleep medicine. It strengthens the specific role of all the different healthcare providers within the extensive field of sleep medicine. The hope is that the syllabus will be used as a guide when drafting regional sleep courses and of course also for the postgraduate courses of the ERS itself, those organised during the Annual Congress and those organised outside. In these courses, the HERMES syllabus topics will be highlighted so that the participants can be informed which part of the course will be used for the HERMES respiratory sleep medicine examinations.

FUTURE DIRECTIONS

The syllabus will be a guide for the courses but a more formal curriculum will be even more helpful in organising these courses. This curriculum, to be developed in the coming year, will indicate in more detail the knowledge, skills and attitudes related to each topic and also possible evaluation methods (portfolio, mini-clinical evaluation exercise, intermediate evaluation, final examination). Some of these can be applied during the courses as a preparation for the HERMES examination. The latter will be prepared and organised and will be the final goal of the project. It must also be emphasised that this syllabus is based on actual knowledge in the field but many innovations and new developments will also be considered [12] and it will be a challenge to continuously update and adapt the syllabus, the curriculum and the examination in line with the progress of knowledge in the field of respiratory sleep medicine.

STATEMENT OF INTEREST

Statements of interest for A. Simonds, S. Andreas and W. Randerath can be found at www.erj.ersjournals.com/site/misc/statements.xhtml

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