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Original article

Postgraduate education in internal medicine in Europe

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ABSTRACT

Background: Limited information exists on the framework and content of postgraduate education in internal medicine in Europe. This report describes the results of a survey of postgraduate training in internal medicine in the European countries.
Methods: Two online questionnaire-based surveys were carried out by the European Board of Internal Medicine, one on the practice of internists and the other on postgraduate training in internal medicine. The national internal medicine societies of all 30 member countries of the European Federation of Internal Medicine were invited to participate. The responses were reviewed by internal medicine residents from the respective countries and summaries of the data were sent to the national societies for approval. Descriptive analysis of the data on postgraduate training in internal medicine was performed.
Results: Twenty-seven countries (90%) completed the questionnaire and approved their datasets. The length of training ranged from four to six years and was commonly five years. The majority of countries offered training in internal medicine and a subspecialty. A common trunk of internal medicine was frequently a component of subspecialty training programmes. Hospital inpatient service was the predominant setting used for training. A final certifying examination was in place in 14 countries.
Conclusion: Although some similarities exists, there appear to be significant differences in the organisation, content and governance of postgraduate training in internal medicine between the European countries. Our findings will prove invaluable for harmonisation of training and qualification in internal medicine in Europe.

1. Introduction

Internal medicine has been referred to as the cornerstone of the health care system in Western societies [1]. Internists play a major role in the diagnosis and management of acute and chronic medical disorders of adults. A wide spectrum of knowledge and skills equips the internist with the necessary tools to provide comprehensive care to patients with multiple chronic conditions, which are so frequently observed in the elderly population. However, in many countries in Europe the fundamental role of internists has been supplanted by physicians practicing a subspecialty of internal medicine. The medical care provided by subspecialists has been criticised for being fragmented [2,3]. In recent years, the migration of physicians has become more common with the growing influence of the European Union [4]. European regulations and directives have been created to facilitate this development with mutual recognition of diplomas and specialist examinations between member nations (Directive 2005/36/EC of the European Parliament and of the Council, 7 September 2005, on the recognition of professional qualifications). The requirements for qualification and certification differs among countries and information on these differences is not readily available. This could potentially cause problems when certified internists move to a new country within the European Union and are expected to be competent in a number of

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tasks for which they have not received proper training. Hence, the coordination of postgraduate medical education and qualification in Europe has become more important than ever before.

In the past, qualification in internal medicine and other medical specialties has largely been determined by the time spent on training. Recently, it has become increasingly recognised that trainees must demonstrate adequate clinical competence. Reform of training programmes to meet these requirements have already been made in several European countries, including the United Kingdom [5] and the Netherlands [6]. New competency-based curricula have been developed and methods of assessment have been revised [7–10]. The European Board of Internal Medicine is devoted to promoting postgraduate training and qualification in internal medicine in Europe. The core competencies of the internist have already been defined [11] and current work focuses on characterising additional competencies. A European Board guidance for training centres in internal medicine was recently issued [12]. Finally, a European Board examination in internal medicine was introduced but failed due to poor attendance [13].

Published information on postgraduate training in internal medicine in Europe is very limited [14]. This is somewhat surprising in view of the extensive literature covering this area in the United States [8,10,15]. A report from Turkey published in this Journal [16], brought attention to challenges which are likely to be shared by other European countries such as the conflict between service and education and the lack of an effective national accreditation body. This report describes the results of a survey of the organisation and governance of postgraduate education in internal medicine in the European countries, carried out by the European Board of Internal Medicine.

2. Materials and methods

In 2008 and 2009, the European Board of Internal Medicine, which is formed jointly by the European Federation of Internal Medicine (EFIM) and the European Union of Medical Specialists (UEMS) Section of Internal Medicine, launched two online questionnaire-based surveys of internal medicine in Europe. The first survey focused on the practice of internists and their role within the health care system, and the other on postgraduate training in internal medicine. A detailed description of the design and organisation of the surveys and data collection and verification is provided in the report of the survey of the practice of internists in Europe [17]. In this paper, the results from the survey of postgraduate training in internal medicine are reported.

2.1. Outline of the survey of postgraduate training in internal medicine

Part 1. General issues
Part 2. Curriculum
Part 3. Assessment and certification

The following specialties were considered subspecialties of internal medicine: allergy and immunology, angiology (vascular medicine), cardiology, endocrinology and metabolism, gastroenterology and hepatology, geriatrics, haematology, infectious diseases, nephrology, medical oncology, respiratory medicine and rheumatology. These subspecialties were selected as they are recognised in most European countries. However, it should be noted that other subspecialties exist in some countries, for example clinical pharmacology, sleep medicine and palliative medicine.

All 3 parts of the survey were launched on 5 May 2009. The survey can be viewed as supplemental materials online at www.ejim.org.

2.2. Data analysis

The European Board of Internal Medicine Competencies Working Group examined and analysed the data. The data were exported into a Microsoft Excel® spreadsheet and descriptive analysis performed. The data are reported as percent, mean, or median and range. The percentages are rounded off to the nearest whole number. In the presentation of the data, the number of actual responses to each question is used as the denominator for calculation of percentages.

3. Results

Twenty-eight national internal medicine societies completed the questionnaire on postgraduate training, providing a response rate of 93%, and 27 countries (90%) approved their dataset and were included in the analysis. The response rate for individual questions averaged 85% (range, 30 to 100%).

3.1. Entry and application to postgraduate training programmes

Entry of medical graduates into internal medicine training programmes was on attainment of a medical degree in 12 countries (12/27, 44%) and following basic postgraduate training in 11 (41%), usually a 1 or 2 year internship which was obligatory in most cases. Application for internal medicine training programmes was at the national level in 16 of the 24 countries (67%) that responded to this question and locally in 8 countries (8/24, 33%). Selection of trainees was through an examination in 12 countries (12/27, 44%) and/or an interview in 17 countries (17/27, 63%). A sufficient number of posts for all internal medicine applicants were available in 48% (13/27) of the countries in Europe, but there was a serious shortage (>50%) of training posts in Greece, Italy, Romania and Slovenia. After acceptance into a training programme, the entire training required for specialty qualification could be completed at the same institution in 17 countries (17/27, 63%).

3.2. Duration of training

All but one of the 27 countries offered training in the specialty of internal medicine, the exception being Denmark where internal medicine has not been considered an official specialty since 2004, when a reform of postgraduate training in the medical specialties occurred. The length of training ranged from 4 to 6 years and was 5 years in more than half of the countries (16/27, 59%). Twenty-two countries (22/25, 88%) offered combined training in internal medicine and a subspecialty, while this was not an option in Lithuania, Portugal and Spain. In such training programmes, a median of 4 years (range, 2–6 years) were spent on internal medicine (Fig. 1a) and 3 years (range, 1–5 years) on the subspecialty (Fig. 1b). In most countries that responded to this question (18/21, 86%), the training programmes in internal medicine and a subspecialty were completed consecutively. The exceptions were Ireland, Israel, and the United Kingdom, where the training programmes were run concurrently. In France, Portugal and Spain, qualification as a specialist in internal medicine required 5 years of training and was usually not followed by subspecialty. In the Netherlands, only internal medicine was officially recognised as a medical specialty, whereas subspecialty training was considered added qualification that was only acknowledged by professional societies. In Germany, the training structure had recently been changed to the requirement of a 3-year common trunk in internal medicine for those who wish to become subspecialists, with 3 additional years of subspecialty training. Iceland was the only country that did not offer postgraduate education in the subspecialties of internal medicine which, therefore, had to take place abroad. Eighteen countries (18/26, 69%) incorporated a common trunk of internal medicine as a component of postgraduate education in the subspecialities. Austria, Estonia, Finland, France, Poland, Spain and Turkey did not offer a common trunk and subspecialty training was not available in Iceland. In the countries lacking a common trunk, some internal medicine was usually a feature of the subspecialty training programmes. The duration of the common trunk ranged from 1 to 4 years with an average of 2.1 years.