Specialist training in rheumatology in Europe

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Abstract

Rheumatology is a broad discipline managing a spectrum of different conditions and there are divergences in what is routinely treated by rheumatologists both within and between countries. The free movement of doctors throughout the European Community has lead to moves to harmonize specialist training to ensure common standards of care. The Union Européene des Médecins Spécialistes (UEMS) has developed recommendations for the specialist training of rheumatologists in Europe that recognizes the broad definition of the discipline and the diversity of clinical practice in Europe. The core curriculum aims to provide a common standard around which to develop locally applicable national curricula. The provision of high quality care requires some assessment of training and competency as well as continuing professional development and ways of ensuring the provision of this throughout the European Community to a mutually high standard are being developed. The future may see more overlap in the training of all the disciplines concerned with the management of those with musculoskeletal conditions to their benefit.

A wide spectrum of rheumatology is practised in Europe, with differences both within and between countries. Therefore, it is difficult to define rheumatology in simple terms and that leads to a misunderstanding of what competencies a rheumatologist has and what they have to offer to the person with a musculoskeletal problem. Rheumatology can be defined either by the problems that are treated, that is pain and loss of function related to the musculoskeletal system; by specific conditions that manifest principally in the musculoskeletal system, such as connective tissue diseases, inflammatory arthritis, osteoarthritis and osteoporosis; or by the pathological processes which includes immune, biomechanical and psychological mechanisms. Some rheumatologists concentrate on inflammatory joint disorders and connective tissue diseases whereas others focus on soft tissue rheumatism, spinal disorders and rehabilitation [1]. Any specialist training programme, however, needs clear learning objectives and in most European countries these follow a broad definition of rheumatology. There is also a need to harmonize training in Europe. This has resulted from the legal right of free movement of doctors in the European Community which was established by the Treaty of Rome (1957) with mutual recognition of qualifications including specialist training established by EC Directives 75/362/EEC (1975) and 75/363/EEC (1975). The move to harmonize training is to ensure common standards of care throughout the Community and equal opportunity for specialists to work in different member states, without losing the advantages of some heterogeneity in methods of teaching and clinical practice. The European Commission recognizes the subsidiarity of each member state to recognize the completion of specialist training and has only set a minimum duration of training. No standards have been established for content, quality or subsequent competency. In response to this the Union Européene des Médecins Spécialistes (UEMS), a professional non-statutory body of representatives from medical specialities from the member states, has developed a charter for specialist training in Europe to set standards. The Monospecialist Committee for Rheumatology of UEMS has further developed a recommended core curriculum and training record specific for rheumatology within Europe [2]. The aim is to work towards the same standards of care and outcome for a patient anywhere in Europe by seeking harmonization of the content and quality of training. Such standards will be similar to those being sought in most developed economies, and give some guidance to those still in the stages of development. In practical terms there is only a limited need for harmonization as most doctors practise close to where they train and the movement of nationals, the potential patients, throughout Europe is still small. The need is to establish standards that ensure a comparable quality of life and improvements in health for any person receiving specialist care for a rheumatic disorder.

Setting standards first requires establishing a common understanding of what rheumatology is and what

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rheumatologists do. The UEMS has defined rheumato-
logy as that branch of medicine concerned with medical
musculoskeletal disorders and that this term includes
systemic disorders, connective tissue, inflammatory arthri-
tis, osteoarthritis, back trouble, soft tissue rheumatism
and non-traumatic bone disorders. A rheumatologist is
defined as a specialist medical practitioner who has
completed postgraduate training in the diagnosis,
management and prevention of these rheumatologic
disorders. Although not all rheumatologists practise
such a broad definition of rheumatology, it has been
agreed within Europe that training should follow such a
broad curriculum.

Variations in clinical practice within Europe

The future trends and variations in health needs and in
clinical practice within Europe affects the training needs
for different populations that will lead to local varia-
tions in priority for components of any curriculum. The
health needs and priorities of the local population are
affected by the epidemiology of the rheumatic condi-
tions and also by the social settings and expectations of
the people. Certain musculoskeletal conditions such as
osteoarticular fractures show a variation through Europe,
being more common in Scandinavian countries [3].
Acceptance of chronic disease and expectation of care
shows socio-economic and cultural differences that can
greatly affect demand on healthcare and influence
management strategies.

Variation in clinical practice both within and between
countries relates to case-mix, severity of diseases and
their management. This variation is influenced by
several factors. The system of healthcare has effects on
both clinical practice and on outcomes. At present there
are countries of similar levels of income, education,
industrial attainment and health expenditure with a wide
variety of health outcomes some of which is due to
differences in performance of the health systems [4]. A
health system includes all the activities whose primary
purpose is to promote, restore or maintain health.
Health systems provide cost-effective healthcare by
managing care in different ways. Three important
factors that influence the provision of care are first,
demand, secondly, methods of clinical management and
finally, different ways of delivering care. There are
examples of differences in these in different European
countries that result in variations in clinical practice.
First, demand varies in systems which control it, for
example, by either making payments based on capita-
tion not clinical activity, introducing gatekeepers to
expensive secondary care, making some direct costs to
the user and educating the public so that they are better
able to care for themselves. In an increasing number of
countries primary care acts as a gatekeeper for access to
expensive specialist care but for this to work efficiently
there should be competency within primary care to
manage common musculoskeletal conditions and recog-
nize the more serious that need expert management.

Unfortunately, the deficiency in undergraduate educa-
tion and primary care training in musculoskeletal
conditions means that the competency at this level is
often inadequate. However, this system will mean that
many of the ‘aches and pains’ will not be referred to the
specialist who is then more likely to focus on more com-
plex cases. In other countries direct access to specialists
is available and they will see a far broader range of
rheumatic conditions. Waiting lists for specialist care are
another way to control demand and costs although
increasingly unacceptable to the public. The perceived
role of specialists also affects demand and practice—
whether perceived by patients, colleagues or themselves.
Many physicians and people with musculoskeletal
conditions do not understand what rheumatologists
can offer.

Secondly, clinical management varies both within and
between countries but control over this is increasingly
achieved by the use of evidence-based guidelines. This is
a principal of healthcare reforms in the UK and is a
trend being followed in many other European countries
where there are health technology agencies appraising
the evidence for cost-effectiveness. Guidelines have been
produced by various professional organizations both
nationally and at a European level, such as EULAR
guidelines for osteoarthritis of the knee [5] or the IOF
guidelines for osteoporosis [6]. There is at present an
ambitious project by the Bone and Joint Decade in
collaboration with EULAR, EFORT and IOF with the
support of the European Commission to develop a
common public policy from existing knowledge that can
be implemented across the European Community for
people at risk of or with musculoskeletal conditions
focusing on osteoporosis, joint diseases, back pain and
musculoskeletal trauma. Such guidelines will form part
of the knowledge base of any specialist and their clinical
activities will in part relate to the implementation of
such guidelines in ways relevant to local needs whilst
maintaining clinical freedom to provide the most
appropriate care for the individual.

Finally, there are differences in the way care is
delivered for rheumatic disorders in Europe and also
important changes in the delivery of care with a move
away from hospital based secondary care towards
community care and the promotion of self care with
greater use of non-doctors. The historical context of
the development of rheumatology from both internal
medicine and physical medicine, the tradition of rehabili-
tation and balneotherapy in some countries and the
inherited physical resources to provide these has resulted
in differences in the delivery of care both within and
between countries but the economic pressures towards
out-patient care with loss of inpatient facilities are
common throughout Europe. Human resources also
affect delivery of care and the numbers of rheumatolo-
gists varies greatly between some countries that will
affect what they see and need to be competent at. The
role of primary care, other medical specialities such as
orthopaedics and care of the elderly, and of health
professionals also has a significant effect on referral

patterns. For example, if primary care is well developed they will manage many soft tissue problems, or physiotherapists and osteopaths in the community may manage most episodes of back pain, whilst in other countries there may be large numbers of rheumatologists in private practice who manage such problems.

These factors in part explain the wide differences in case mix seen by rheumatologists throughout Europe [1] but another important factor is personal preference—the rheumatologist developing a practice based on what they are interested in and not necessarily on the needs of the community in which they are working.

Although there are many differences in rheumatological practices at present both within and between European countries, the trends towards cost containment and cost-effectiveness will mean that this is likely to become increasingly similar throughout Europe.

Core curriculum for specialist training

In Europe a recommended Specialist Training Charter and a Core Curriculum have been agreed by the UEMS and European Board of Rheumatology [2] that aims to establish standards to the benefit of future patients and of the trainee as well as taking into account the variations in need.

The Specialist Training Charter recommends criteria for training centres; entry into training; the duration, supervision and content of training; manpower regulation; trainers and evaluation of training. A training centre should provide adequate experience of the full spectrum of musculoskeletal conditions with all the necessary support facilities. It may be necessary for the trainee to attend other centres to gain the required comprehensive experience. The trainee should have completed a basic medical training before commencing a common trunk in internal medicine which should be for a minimum of 2 yr. At the end of this they should be competent in the care of acute medical conditions before they commence specialist training in rheumatology. The specialist training should be for a minimum of 4 yr which includes 3 yr clinical care training and the content of training is detailed in the Core Curriculum. At present training in several countries does not include a common trunk in internal medicine, and the duration of rheumatology training varies from 2 to 4 yr. It is recommended that there should be adequate support of the trainee with a named supervisor. It is emphasized that the number of specialist trainees should relate to both the need for future specialists and the facilities of training available. Unfortunately, there is still over-training of specialists in some countries such as Spain with highly qualified specialists unable to find appropriate employment. Training should be undertaken in properly remunerated posts and this may need to be at different centres if that is necessary to gain the full spectrum of expertise and experience. Finally, for quality assurance, responsibilities are put on the trainer to ensure their suitability and a programme of visitation of training centres is recommended to ensure that they meet the requirements. Such visitations occur in some countries such as the UK and The Netherlands and a scheme of visitation between European countries is being developed.

The Core Curriculum aims to provide a common standard around which to develop locally applicable curricula, which has been done in many European countries. It is difficult to define and agree all the competencies that are necessary in all countries but agreement has been reached based on what is currently done in clinical practice by rheumatologists and by the perceived clinical needs of those with rheumatic disorders. The curriculum considers the general knowledge, skills and attitudes required by a rheumatologist. It also considers several specialist skills, such as joint aspiration, which are common to rheumatologists in all European countries. This has been confirmed by a survey of rheumatologists in clinical or academic practice throughout Europe. A curriculum can be seen as defining what a rheumatologist is competent in and this has implications in some countries. In the UK, for example, a specialist can, within reason, perform what he is personally competent in. However, in systems where there is reimbursement for items of service, then the accepted competencies of a specialty are more critical as there may be no agreement for reimbursement if the procedure is not a recognized competency. In addition, difficulties arise if a procedure is considered the realm of another specialty. There are certain skills that are used routinely by rheumatologists in some countries but not in others such as musculoskeletal ultrasonography. At present it is accepted as inappropriate for these to be viewed as compulsory for all rheumatologists being trained in Europe and they are considered optional skills of the specialty. With time, however, they may become standard techniques for rheumatologists throughout Europe and an essential skill to gain competency in during training.

The general knowledge, skills and attitudes that are recommended as part of the Core Curriculum include basic knowledge of rheumatic disorders, clinical assessment, investigations, recognition and management of emergencies, drug therapies, role of allied professionals, patient education, research and teaching. Skills that are considered necessary for all rheumatologists are arthrocentesis, synovial needle biopsy, counselling and communication skills, management skills and audit methodology and outcome measures. Examples of optional skills for a rheumatologist are the performance of musculoskeletal ultrasonography, electromyography and diagnostic arthroscopy. The trainee needs to show they are competent in these skills and that should then enable them to perform the procedure without hindrance. However, there must be a means of ensuring they maintain their expertise in this skill as it may not be part of the usual continuing education programme. European courses are being developed to offer training in these skills and, for example, the ultrasound courses are of increasing popularity and the use of this technique...
as the extended finger of the rheumatologist is becoming more widespread.

Assessment

The provision of high quality care requires some form of assessment of the outcomes of care, the processes of care and of those who deliver care. Appraisal of specialists should happen at all stages but an essential stage is to ensure that the trainee has the appropriate competency before they can practise independently as a specialist. Evaluation of trainees and of their training is also important if one wants to standardize competencies and clinical outcomes. This can be done in several ways. Training programmes have to be approved by a national body in many countries, with some also inspecting the training centre. A formative assessment of trainees is also performed in some countries. The UEMS Specialist Training Charter recommends systems of approving training centres and their programmes with formative assessment of the trainee with visitation. The visiting group should ideally come from the host country and other European countries. It is also recommended that the trainee has a written record of their training, in which it is entered when they are considered competent by their supervisor at specific curricular activities. A log book has been produced by the UEMS to complement the Core Curriculum. There has been much discussion about introducing a European examination but no agreement for many practical reasons. A written examination would ideally be in the local language to avoid it becoming an assessment of language as well as rheumatological knowledge. Other forms of assessment which are trying to look at skills as well as knowledge, such as objective structured clinical examinations, require the presence together of examiners and candidates and the costs of such an examination at a European level rapidly escalate. Despite these difficulties a multiple choice examination was piloted at a recent EULAR Congress and it was found that candidates were not disadvantaged by it being in English [7]. It also provided an interesting insight into differences in clinical practice within Europe. Some form of optional examination will probably develop over the next few years as there are many rheumatologists who wish to work in a different country and wish to demonstrate the quality of their training. European examinations have been developed and run successfully by other specialities.

Continuing medical education (CME)

Learning is lifelong and specialist training extends throughout the professional career to ensure the specialist continues to provide the highest standards of care. Advances are rapid in medicine and all knowledge cannot be learnt as a trainee. CME is defined as the maintenance of professional competence by a continuous process of updating knowledge, skills and attitudes. It should be the personal obligation of any specialist to regularly update themselves and monitor their performance to ensure the continuing delivery of appropriate care. It is compulsory in many countries with a minimum requirement usually defined in terms of time spent pursuing educational activities such as meetings or courses, and using some system of credits. Registers of physicians’ CME activity are being developed to monitor this. There is natural public and political concern that the highest standards of care are consistently delivered and occasional high profile cases of medical incompetence result in pressures to formalize procedures to ensure this. Audit is a way of monitoring processes and outcomes to identify and subsequently investigate differences, and clinical governance is a system recently introduced in the UK to ensure that the highest standards are achieved at all stages of healthcare. Ensuring a fully trained, updated and motivated workforce is central to this. There is, therefore, a move away from just monitoring quantity of fact-based meetings attended, many around topics which the individual is fully conversant with, to continuing professional development (CPD) with a focus on a physician’s personal and professional development and their individual needs.

In The Netherlands all specialists have to be re-registered every 5 yr to retain their place on the medical register. Initially the criteria for this were quantitative based on the time spent in clinical practice, but qualitative criteria have been introduced and doctors will be required to complete 40 h a year of accredited CME or be assessed in the workplace every 5 yr, although in practice both criteria are usually required by the specialist societies who have been given this monitoring role [8]. In the USA re-certification is necessary and it is being considered in other countries, but the process usually involves a test of knowledge and problem solving skills using multiple choice examinations and does not evaluate the more relevant clinical reasoning and communication skills. Different approaches have been taken in Australia and Canada where maintenance of certification is based on participation in educational and quality improvement activities, with learner centred activities that facilitate team learning and performance enhancement in multidisciplinary practice settings [9]. Criteria have been incorporated by the Royal Australasian College of Physicians that relate more closely to doctors’ performance than attendance at traditional CME activities [9].

The UEMS is developing a charter for continuing medical education as it is clearly of major and increasing importance in the provision of high quality healthcare. The charter gives general recommendations concerning regulation, co-ordination, structure, assessment and accreditation, quality assurance and funding. The various medical specialities are developing more precise guidance about content and credits, and ensuring the quality of educational activities within Europe. The Monospecialist Committee for Rheumatology of UEMS considers that the competencies defined by the
curriculum for specialist training should form the basis for the competencies that should be maintained throughout a specialist’s career by CME. A 5 yr cycle of continuing medical education activities is recommended to cover the relevant topics and this can be by a wide range of methods from private study through local meetings to national meetings and international congresses. Case discussions amongst colleagues are recognized as a simple and effective means of maintaining competency.

There are many issues concerning the accessibility and suitability of CME activities. Appropriate time with reimbursement is required if one expects physicians to attend sufficient activities to maintain their standards of care. This is available in most countries for salaried physicians but is not so consistent for those in private practice where there may only be a tax allowance. There is a wide range of methods of CME but it is difficult to evaluate the quality of education delivered, the benefit gained and educational need being met. The content of educational meetings is being reviewed in many countries and by the European Accreditation Council for Continuing Medical Education (EACCME) before being given any credits as a CME activity. This is necessary to ensure meetings and other educational activities meet the educational needs as well as the scientific needs of the rheumatological community. The quality of educational activities is also being improved by responding to participant feedback. Educational needs can be identified by clinical audit or appraisal and other methods such as visitation by colleagues or the use of standardized patients [10] are being investigated. It is important to be able to demonstrate that the members of the profession are taking responsibility for their own professional development if the imposition of re-registration or re-certification is to be avoided.

Future issues

Several trends have been identified that will influence the practice of rheumatology in Europe and the requirements of training to meet these changes. Demographic changes will increase the burden of musculoskeletal conditions but their management will be increasingly in the community with greater priority on primary prevention as health and social care budgets are unable to cover the inexorable increase in costs. Secondary care must demonstrate the additional benefits it can offer in outcomes for the individual with a musculoskeletal condition and for society as a whole to justify its added costs. Even if specialists are not directly treating the growing numbers who have musculoskeletal conditions, they will play a pivotal role in developing strategies and advancing treatments through research. In addition, they will have a role educating those health care providers who will be dealing first hand with those with a musculoskeletal condition. The development of more sophisticated and expensive treatments will, however, mean a need for expertise in their use. There is much overlap in the competencies of diagnosis, assessment and principles of treatment required for managing the wide spectrum of musculoskeletal conditions by rheumatologists, orthopaedic surgeons, rehabilitationists and internists and there could be a useful trend towards more commonality in training although the very distinct differences related to skills such as surgical procedures or use of disease-modifying drugs will maintain clear differences between the specialities. An integrated core curriculum for undergraduate training is being developed by the Bone and Joint Decade Education Task force and in some countries there is already very close integration with internal medicine of which rheumatology is a subspecialty. Such closer training and working with the related disciplines may also influence the present trend of the management of musculoskeletal conditions into the community and help maintain centres of specialist activities with access to beds for inpatient care when needed.

The future of rheumatology depends on demonstrating the better outcomes that can be gained by specialist care which are accessible to all in Europe. High quality specialist training and CME are the means of achieving this.

References