Rheumatology education for general practice

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The survey by Billings and Mole in 1977 showed that about 10% of general practice consultations were for musculoskeletal problems.¹ Within this large number of consultations about 30% of presenting problems were with the lumbar and cervical spine. Osteoarthritis and 'non-articular' rheumatism were the next most common category, whereas consultations for rheumatoid arthritis were few. The seronegative arthritides, connective tissue disorders, and juvenile chronic arthritis were shown to be only rarely encountered in general practice.

In addition to these familiar diagnostic categories a number of other musculoskeletal symptoms are presented to the general practitioner. Some of these will be found in depressed patients as one of the commonest presenting symptoms of depression in general practice is somatic pain, much of which is musculoskeletal. Postviral muscle fatigue syndromes and pain syndromes, such as fibrositis, have both achieved prominence recently. Apart from these, however, there remains a residue of symptoms, some of which may be the earliest signs of rheumatological disease and some of which may be manifestations of psychological disequilibrium.

The needs of general practice rheumatological education must be considered from within the context of their working environment. Most of the population is registered with a general practitioner. They are the first port of call for most patients with symptoms of illness. Inevitably, general practitioners encounter a wide spread of disorders, which is in considerable contrast with consultant practice. In addition, patients have free access to a general practitioner and may present with illnesses which cross the boundaries of hospital specialties or with symptoms of problems that are best located within families or the workplace. Consequently, there is a different set of priorities for investigation and management within general practice, which includes a different balance between the physical and psychosocial aspects of disease.

Many local factors affect the way a general practitioner practices—for example, the pattern of work and interests of the local department of rheumatology, the availability of resources, etc. Access to resources varies considerably; rheumatologists are not spread evenly throughout the country, which affects referral patterns. Open access to physiotherapy and occupational therapy is still unavailable in many districts despite evidence that open access works well and speeds up care for patients.² Inevitably, referral patterns from general practice—often used as a marker for quality of care—will be distorted by factors such as these.

Educational needs and research activity are closely related. At present most research in rheumatology emerges from specialist departments, which shifts the focus of interest away from common conditions seen in practice. Until the common rheumatological problems seen in general practice, and their natural history, are made clear the value of particular interventions will never be determined. Practice based research into common conditions has been started,^{3 4} and should in time form a basis for the profession's knowledge.

The pattern of educational provision at present closely parallels the patterns of research activity, as indicated by Badley and Lee in their study of the consultant rheumatologists' role in the medical education of general practitioners.⁵ Although specialists thought that teaching should be directed towards the problems met in general practice with an emphasis on management skills, these sentiments were in direct contrast with their actual teaching. The topics taught reflected hospital and personal interests. The focus in postgraduate lectures is on transferring available knowledge rather than working on problems in general practice that demand a new solution. Similarly, Griffin and Barry, in evaluating their carefully researched course on muscle and joint pain,⁶ attributed the failure of ordinary refresher courses to the use of an educational model which offers what the expert knows rather than teaching what the learner needs to know.

The educational needs of general practitioners may be conveniently divided into two phases: vocational training and continuing medical education.

Vocational training

As recently as 1979 only 40% of medical schools offered a formal undergraduate course in rheumatology, though almost all offered a lecture series. Hence young doctors embarking upon their three year mandatory vocational training course for general practice will have gained some rheumatological knowledge but probably little in the way of skills—either in diagnostic examination of the musculoskeletal system or therapeutic skills, such as soft tissue or intra-articular injection. Management skills for conditions commonly seen in general practice will rarely have been observed in practice. Thus it is hardly surprising that a common attitude among vocational training scheme entrants is that rheumatological problems are perhaps best left to rheumatologists. Vocational training for general practice became mandatory in 1981, comprising two years of approved hospital jobs

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and one year attached to a trainer within a training practice. A half day release for training should operate throughout the whole three year period, though time for learning in the hospital rotation is often restricted.⁷ Only a small minority of hospital rotations include rheumatology as one of the medical jobs. For example, within the North East Thames region one out of 16 schemes includes rheumatology in the rotation. Few course organisers see rheumatology as a priority in comparison with the claims of paediatrics, obstetrics, psychiatry, general medicine, and casualty.

Occasional schemes offer a part time attachment—for example, a weekly attachment to outpatients for a period during the trainee year. It is possible to enter a trainee year in general practice, however, almost totally unversed in the diagnostic and management skills relevant to 10% of the presenting problems.

Development of vocational training for general practice has been strongly influenced by educational theory. Throughout the years of mandatory training there has been a determined attempt to state educational objectives, devise a curriculum, provide learning experiences, and devise methods of assessment.⁸

There has also been a critical approach to the teaching method, and within the general practice teaching community there is a considerable interest in enlarging the repertoire of teaching strategies. Examples of this include (a) teaching of communication skills, and use of the video to examine the consultation process; (b) small groups as a tool for learning, which are particularly useful for exploring norms and attitudes both by case discussion and by pooling knowledge and problem solving strategies; (c) project work in the trainee year, which helps to foster a critical approach to research and to bridge the gap between training and continuing medical education.

In summary, there exists for vocational trainees a well established framework within which rheumatological training can take place.

Inevitably there are difficulties in the 'delivery' of such a system even when there is good will and cooperation between the course organiser and the rheumatology department. I would identify two related difficulties. Firstly, the teaching skills of medical teachers. It is unusual for a medical teacher to have had any formal training in educational technique.⁹ Secondly, the problem of who should teach what to whom. Whereas hospital specialists may have a tendency to concentrate on their special interests or major inflammatory disease,⁵ and may have a narrower range of educational methods,⁹ general practitioner teachers may not have the range of knowledge and skills to impart. Although there is some evidence from rheumatology courses that more is learnt from general practitioner tutors than from consultant tutors,⁶ much more use should be made of shared teaching after the tutors have together identified the educational problems to be solved.

Clearly, within the period of vocational training there is considerable scope for participation in teaching. Some specific examples follow:

1 Consultants and course organisers might work together to determine some of the educational objectives for a rheumatological curriculum. For examples, the objectives might be that by the end of the year in practice the trainee should be able to (a) manage mechanical low back pain with and without sciatica, including the appropriate use of investigations and resources; (b) show the skills necessary to diagnose and manage common enthesopathies, such as tennis and golfer's elbow, including the use of local steroid injections.

2 The rheumatology department is a valuable resource for the vocational training scheme. Some of the special skills it may be able to offer include: (a) speakers for the vocational training scheme; (b) group leaders for small group workshops on particular problems identified in practice; (c) short clinical attachments, both in rheumatology clinics and physiotherapy; (d) assistance in gaining skills in soft tissue injections; (e) short courses on common conditions identified by trainees—for example, a day on low back pain, the management of osteoarthritis, aches and pains; (f) participation in project work.

The vocational training period is an 'educational window', and skills and attitudes gained at this time will set the scene for early years in practice. It is far more difficult to influence the habits of established doctors.

In many areas some 50% of vocational trainees eventually settle within the district, and thus investment in training at this stage should be viewed as a valuable asset for the future.

Continuing medical education

Continuing medical education is the process by which doctors keep up to date with advances in medicine, adapt to changes in the organisation of care, and implement and monitor changes in the way they provide health care for their patients. At present most formal continuing medical education is concentrated in brief lectures in postgraduate centres and as longer courses for which section 63 reimbursement may be available. General practice is currently going through a period of considerable change. It is as yet uncertain how the new conditions for claiming the postgraduate training allowance outlined in the white paper will affect the provision of courses.

Informal continuing medical education takes many forms; the commonest is private reading.¹⁰ Many practices run in-house meetings which may cover clinical case discussions, audit of clinical casework, or practice organisation and teamwork. Hospital colleagues with an interest in the work of general practice have been welcomed at meetings of this sort, which can be stimulating for both consultants and general practitioners. Throughout a district there may also be a network of informal medical activities—for example, young principals' groups, medical societies, audit and research groups, support groups, as well as commercially sponsored events.

How effective are these different forms of

education at modifying practitioners' behaviour? This is difficult to assess,¹¹ but there is a growing consensus that active, participatory forms of education, such as seminars, workshops, discussion groups, and projects, have the greatest effect on changing behaviour,^{8, 12} though some attention should be paid to the preferred learning style of the participant.

With this in mind it is interesting to note¹³ that even when vocational training was in its infancy younger doctors preferred participatory learning but older doctors preferred lectures. Participatory learning seems to retain its attractiveness to these younger doctors as they grow older, however. Many vocational trainees once their training has ended feel the need to start groups to compensate for perceived defects in the systems of education on offer.¹⁴ Entrenched educational habits die hard, however. The classical postgraduate lecture will continue to be given and received as it is a psychologically familiar form and at face value seems cost effective, with an apparent transfer of a large amount of knowledge to many listeners.

A more critical approach to the form and function of postgraduate education is needed. Inevitably this will require some form of assessment of outcome, including outcome for patient care. Ross and Lawton attempted to evaluate a course for general practitioners on muscles and joints.¹⁵ Their course aimed at increasing knowledge and practical skills, and they tried to determine whether this altered management of patients, particularly hospital referral and investigations. Their main finding was that those who scored high on knowledge tests investigated and referred less patients and gave more local injections. A course in which participants gain relevant factual knowledge alone may not alter established behaviour.¹¹ Test scores continued to increase after the course, but examination of log diaries showed no change in referral or investigation rates. Huston offered to provide individual tuition on soft tissue injection to general practitioners who referred patients to his clinic.¹⁶ The response was disappointing in that those who referred patients most often had not responded to two or more educational offers. Results such as these can cause disillusionment with education as a force for change.⁹

Continuing medical education is only one link in the 'quality assurance chain', however. Experience in other areas of change and development in general practice has shown that there is a necessary balance between a professional drive for improvement and external forces for change—such as contractual or administrative pressures.¹⁷ It has also been shown that those general practitioners who are most able to benefit from changes are those who are already best organised, or who work in areas of least demand. This would fit with the general statement that those who are confident and organised in one area of medical practice will be able to respond with confidence given adequate knowledge and skills in another area.

The importance of this general statement is that new rheumatological knowledge and skills may have little impact on a doctor unless

considerable note is taken of the environment in which he practises medicine. Thus it may well be that training in specific medical skills may need to go hand in hand with practice management training and appraisal of attitudes to the doctors' role before real change can be expected.

For the future I think there are a number of ways that rheumatologists, general practitioners, and those in other disciplines, such as physiotherapy and psychology, might work together to promote a better service for patients through better education for health professionals.

Some specific examples of this include:

- 1 General practitioners and consultants together might produce a consensus on what rheumatological services can reasonably be provided within the setting of primary care.

- 2 General practitioners and consultants together might begin to define some investigation and management protocols suitable for conditions prevalent in their health district.

- 3 General practitioners and hospital staff should, through the process of peer audit, examine their performance and identify the subjects for which further education is required.

- 4 Teaching at postgraduate centres needs to move towards a more participatory style, with far more active educational input from general practitioner tutors. The topics chosen should be those shown to require further educational input.

- 5 Informal attachments of general practitioners to departments, and of consultants to general practice need to be fostered. These can operate with or without a system of peripheral clinics in general practitioner premises. There has been a sad loss of clinical assistant posts which are a valuable source of cross fertilisation between primary and secondary care.

- 6 Research into the prevalence and management of conditions in primary care needs encouragement.

- 7 The skills needed to manage many of the patients who have chronic or relapsing disorders need to be shared across disciplines. For example, the assessment and management of patients with chronic musculoskeletal pain may best be explored in conjunction with psychologists and physiotherapists. As doctors, in general, we provide our patients with a fairly restricted range of management strategies. Further studies of consultation, techniques and outcomes are necessary here. This is a particularly important area for general practitioners. An overemphasis on the somatic manifestations of illness and the use of technological solutions (usually prescribed drugs) or inappropriate referral may postpone improvement.¹⁸

- 8 With the coming revolution in information technology it should soon be possible to feed back to general practitioners information about referral rates and clinical outcomes. This information may well provide a source of impetus for change both in hospital clinics and general practice.

- 9 Groups for education and research, such as the newly formed Primary Care Rheumatology Society, need continuing support and resourcing by specialist departments.

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