Rheumatology outpatient training: Time for a re-think?

Rheumatology, as a specialty, presents the education and training process with particular challenges. The rheumatology trainee is likely to spend more time alone seeing patients in an outpatient clinic than on ward rounds with bedside teaching. Whereas the teaching ward round is still a familiar phenomenon in hospital medicine, true ‘teaching clinics’ are still in their infancy. With heightened patient expectations, financial constraints, and increasing workloads, there is a growing concern of how an appropriate balance between training and service will be maintained for rheumatology trainees in the outpatient ‘classroom’.

In contrast with inpatient teaching, time is more limited in outpatient clinics for in depth discussion, opportunity to probe the trainee’s knowledge of cases, and to observe the patient-trainee interaction. Furthermore, there is limited time to demonstrate clinical skills, to reflect upon the experience, and for assessment and feedback. A recent North American review of research literature on education in the outpatient setting for both medical undergraduates and graduates during the period 1980–1994, reported it to be characterised by variability, unpredictability, immediacy, and lack of continuity with comparatively few cases discussed with the attending physician and even fewer examined by them.1

Rheumatology education has been discussed in this journal from various viewpoints.2–4 The aim of this editorial is specifically to consider the issues implicit in teaching in outpatient departments, which is where most future clinical specialist rheumatology training will take place. Hopefully discussion will thus be stimulated and imagination ‘fired’ in this most important area of postgraduate education. For the remainder of the text ‘trainee’ will refer to the specialist registrar grade and ‘trainer’ to the consultant grade.

Experiential learning
‘You learn as you go along’

In recent years, rheumatology postgraduate training has often followed, right or wrong, the ‘learn as you go along’ approach. Learning from isolated clinical experience is a natural process, albeit an inefficient one. Experiential or experience-based learning can be defined as ‘a process of meaningful and autonomous learning which leads to comprehension and understanding—the learner can make sense of what he or she has learned and relate it to other things’.5,7 With the ongoing process of harmonisation of specialist training in Europe,8 more formalised and shorter training programmes are currently being implemented.9 It is therefore important to consider the effectiveness of current training methods in rheumatology outpatient clinics.

To facilitate experiential learning, outpatient clinics involving trainees need to be re-assessed with specific reference to the following:

(1) Does the case-mix offer an appropriate spectrum of disease?

This question should obviously be considered in the wider context of the complete training programme because training in both general and specialist rheumatology outpatient clinics will be necessary. Core curricula, currently being introduced by, for example, the Specialist Advisory Committee for Rheumatology in the UK as well as the Union of European Monospecialists, will assist in the necessary qualitative scrutiny of the case-mix in the outpatient clinics of each trainee.

(2) Is there adequate time for teaching and appraisal?

(see below):

This represents an important area of discussion (and concern) for all involved—that is, the patient, trainee, trainer, and health care purchasers—in view of the significant impact of teaching time on the clinical workload, which has been estimated to represent a required 25% reduction of the consultant-trainer clinical outpatient workload.10 Similarly, if a specialist trainee is available in an outpatient clinic, the workload should ideally be increased by only 25% in view of training requirements.11

(3) Will the trainee have reasonable continuity of care in order to appreciate the natural progression of diseases, the response to treatment, etc?

Experience in isolation however, can be a slow teacher if the encounters are not examined carefully, as well as being an inaccurate teacher if the same mistake is uncritically repeated. Many learning opportunities are missed in the midst of a day’s work and questions fade rapidly with time. Much of the detail of the experience may be lost if not processed promptly. Clinical experience is only the start of a learning cycle.12 Kolb emphasised the importance of reflection being integral in making sense of the experience.13 Reflection can be defined as ‘standing back and thinking about an aspect of experience in an attempt to break free from assumptions already made’14 and has been shown to be an effective method in raising the awareness of other professionals to the wealth of learning in their daily work.15 17 In the clinic setting, experience can be thus processed and developed either during or after the clinic using a variety of methods:
QUESTIONING
The structure of the clinic must incorporate the time needed for trainees’ questions and the trainee must never feel inhibited to ask a question in the middle of clinic, no matter how busy. However, when problems are discussed during a clinic, the interaction between trainer and trainee is often short in duration, focusing on management and treatment options, and involving suboptimal teaching and minimal feedback. Several time and motion studies in family practice settings in North America have been reported. Zweig et al reported that the trainers spent 53% of their teaching time performing clinical supervision and only about half of that time discussing specific patient problems or seeing patient with trainees. Williamson et al reported that each teaching encounter averaged 6–8 minutes and that trainees only sought supervision for only 25–50% of their patients. Finally, Xakellis and Gjerde reported that the degree of trainee dissatisfaction of trainees with respect to access to teaching in the outpatient setting correlated with the accessibility of the trainer and any interruption in the actual teaching.

The frequency of questioning is clearly related to the level of training of the trainee. Xakellis and Gjerde reported that although third year trainees took longer for each training event near the end of the year, they sought consultation for a lower percentage of patients and therefore consumed less total teaching time than earlier in the year. Other factors related to consultation rate by the trainee include the nature of the specialty, the perceived learning value of the case in question, and the workload of the trainee.

POST-CLINIC DISCUSSION
This ‘teaching method’ is often used but with varying effectiveness and in various guises including the less than ideal ‘corridor-style’ discussion. Ideally it should be a purposeful and structured review of some or all of the patients seen and be aimed at: (i) reviewing the consultation as well as (ii) providing an opportunity for the trainee to discuss the experience and any problems met.

Such exercises are likely to require a minimum of 30 minutes and will depend on the quantity and quality of discussion taking place during the clinic. Where it may not be feasible to supervise most of a trainee’s consultations, such ‘debriefing’ exercises are a valuable opportunity for appraisal of their competence. Closing the session by synthesising the important learning points or devising learning plans for the future, or both, may contribute a sense of achievement and help morale.

Four variations of the post-clinic discussion sessions are:
(i) Random case analysis as chosen by the trainer.
(ii) Problem case analysis, for example, the trainee brings a case or specific clinical question that she or he perceives as a problem.
While the trainee is presenting the case, the trainer should be listening and listing all the subjects that can be used as teaching points and discussion areas and then choose the one or two most appropriate topics, recording the others for another time. Areas of factual ignorance may best be rectified by using them as ‘homework’ for the trainee and further discussion at a later date.
(iii) A departmental staff clinic where any staff member can present a case of interest or for clarification as described by Wright and Helliwell.
(iv) Interesting models such as that described by Paccione et al, which propose that each trainee fills in a simple standard form detailing each patient encounter, which are then collected by a senior member of staff and used at department led ‘outpatient rounds’ the following morning. In this way all patients are reviewed and quality is assured and interesting teaching points can be selected, prepared, and discussed efficiently in limited time. Fresh coffee and croissants, I’m sure, would make this even more attractive!

OTHER MODES OF LEARNING IN THE OUTPATIENT SETTING

LISTING
In each episode of clinical teaching there are three individuals: the patient, the clinical teacher, and the trainee and the communication between any of these individuals (that is, in six possible directions!) can be educational to the others. The value of such interactions should never be underestimated in the acquisition of particular skills such as counselling, for example, advising a patient of the side effects of a drug, explaining the diagnosis and prognosis of a disease, managing a patient with chronic pain, discharging a patient without a definitive diagnosis, etc. Such skills are difficult to learn from books and being the ‘fly on the wall’ for a few pertinent consultations can act as important training exercises in this area.

Case notes that guide and teach
The three volume pile of case notes bound by a reliable rubber band is an all too familiar feature of rheumatology review clinics but often overwhelming to the new rheumatology trainee. Problems run the risk of being missed, neglected or treated out of context. A ‘dynamic’ list of active and inactive diagnoses or problems, or both, followed by a list of current medication is a useful aid for the trainee and permits more time for exploration and interpretation of the patient’s current problems that the patient is presenting with. The construction of a clear treatment plan with possible variations, can help direct and educate a trainee, never mind the referring doctor or general practitioner. Dictating such informative letters however requires time and a clear head, not easy to achieve in an over booked, running late clinic. The revolution of information technology makes this an interesting area for the future. It is a sobering thought that as long ago as 1968 ‘medical records that guide and teach’ were being highlighted in the medical press!

Observation of the consultation by the trainer
This method is not frequently used in postgraduate hospital practice yet is an important teaching method and perhaps could be considered for occasional use in rheumatology outpatient clinics. Establishing the trainee as the doctor figure in the consultation is however essential to success.

Flexibility in teaching methods is important. Individual trainees will be at different stages of their training and have different areas of strength and weakness. Each doctor learns in a different way depending on many variables including their own personality and the context in which learning is taking place. Recognition of such issues should be incorporated into the initial induction and subsequent appraisal procedures.

ROLE OF THE TRAINEE IN RHEUMATOLOGY OUTPATIENT CLINICS
It must never be forgotten by the trainer or indeed the employing body that the trainees are not there simply to provide a service but that the outpatient clinic is the arena for most of their clinical training. This has obvious implications for quality of patient care—a well trained specialist registrar will provide good quality patient care. Allowances ought to be made particularly for the first few weeks they are in post—that is, to be truly super-numerary in a few selected clinics, reduced list sizes, provision of a departmental handbook, visits to the allied professions,
Table 1 Training checklist for rheumatology outpatient clinics

- Is the configuration of the clinic appropriate for training?
- Patient: doctor ratio
  New: follow up ratio
- Time allocation to include teaching time
- Is continuity of care facilitated?
  Patient-trainee
  Trainer-trainee
  Trainer-patient, for example, consultant to review all new patients and on every third visit thereafter with the trainee
- Is there an appropriate case-mix for the trainee?
- Provision of induction course for new trainees to unit
- Allowance for sitting in
  Consultant to observe a few consultations
- New trainee to observe for a few clinics
- Teaching and supervision of practical procedures
- Communication
  Of interesting patients
  Assessment of note keeping and letters
- Post-clinic discussion
- Appraisal and feedback mechanisms
- Provision/encouragement of collaborative and self directed learning

for example, occupational therapist, physiotherapist, orthotist, etc.

In a study of faculty perceptions of effective outpatient teaching in Canada, tutors felt confident about how much autonomy to allow a trainee when they knew both the trainee and the patient well.\(^\text{26}\) Autonomy of care for a list of patients enables the trainee to learn (and observe) the natural history of rheumatic diseases, many of which may become chronic. However if no one else sees the patient or indeed the relevant letter, mistakes can be missed. Furthermore, the consultant runs the risk of losing touch both with the patient who is after all being seen in his or her name, as well as losing touch with the trainee. One possible solution to this is that every third visit to clinic, a patient who may need to be acquired themselves by training. Outpatient teaching differs from inpatient teaching as there is little opportunity for advanced preparation and little time for in depth instruction. Hence very focused teaching is required and teachers may need assistance acquiring these skills.

It is important to acknowledge that training is only one of several roles of the consultant specialist. The full extent and interplay of these different roles including their demands in time, energy and skills must continually be conveyed to today’s health care purchasers to ensure quality of future patient care as well as the training of tomorrow’s rheumatologists. It is however important to emphasise that the teaching in the outpatient setting does not always have to be left to the consultant and may at times be more effectively provided by the allied professions.

Finally, it is salutary to note that Loftus \textit{et al} reported the personality of the teacher to be the major determinant of teaching effectiveness in both inpatient and outpatient settings.\(^\text{28}\)

**IMPORTANCE OF APPRAISAL IN THE OUTPATIENT SETTING**

As the majority of the future clinical career of most trainee rheumatologists will be spent in an outpatient clinic, specific appraisal of the trainee in this setting is important.

Appraisal has several roles: (i) It assures trainees they are important as are their training and educational needs. (ii) It allows two way feedback both of the process as well as of the participants. (iii) Identification of specific deficiencies and areas of concern. (iv) Problem solving. (v) Counselling and career guidance. (vi) Support.

A recent survey of pre-registration house officers in London suggested that time spent with their consultants in planned, well structured discussions about their problems and their performance may be an important factor in increasing the educational value of the pre-registration house officer year.\(^\text{27}\) Once again, senior staff may need training themselves in the methods and techniques of appraisal.

**THE FUTURE FOR EDUCATION IN THE OUTPATIENT SETTING**

These are exciting and challenging times. It is important for each of us to scrutinise our own teaching methods regularly and in some situations learn to let go of old habits and learn new and more effective ones (see table 1). Whereas more formalised (and familiar) training programmes of seminars, etc, are important, experiential learning with reflection in outpatient clinics is just as important. In view of the conflicting demands of service and teaching in outpatient clinics, there is potential for concern that deterioration of teaching could become a serious problem if good quality training and its relation with patient care is not recognised as an integral part of a rheumatology service by the healthcare purchasers.

The time is ripe for more research into the effectiveness of the teaching occurring in outpatient clinics. Slowly but surely postgraduate education is acquiring the prominent profile it justly deserves. Let us hope that our future trainees become specialists, full of enthusiasm rather than empty, having been drained by their service commitment.

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A 70 year old man with a 10 year history of seropositive rheumatoid arthritis presented with low back pain. Lumbar spine radiographs showed intervertebral disc space narrowing, vacuum phenomena, and irregularity of the subchondral margins of the vertebral bodies with erosions and sclerosis (fig 1). Aspiration, under x ray guidance, of the intervertebral disc space produced a dry aspirate. Bacterial (including acid fast bacilli), and fungal culture of aspirated contrast material was negative.

Rheumatoid discitis is uncommon in the lumbar spine and the cause remains unclear. Postulated mechanisms include, apophyseal joint synovitis with extension into the vertebral body-intervertebral disc junction; synovial infiltration into the fissures within the degenerating nucleus pulposus of the intervertebral disc; and neuropathic alterations secondary to analgesia or corticosteroid therapy.1

The changes may also relate to apophyseal joint instability with abnormal motion at the corresponding discovertebral junction, leading to herniation of portions of the disc producing cartilaginous node formation.2


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