Training to treat cancer: future developments

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Both medical and clinical oncologists treat patients with cancer, but these specialties receive markedly different training. A questionnaire was sent to all UK oncology trainees regarding training. Rotation to other cancer-related specialties was successfully piloted. Such rotations might enhance interprofessional working.

The specialties of clinical oncology and medical oncology have until now been separate entities, with markedly different training programmes. However, their roles are rapidly evolving as a result of changes in cancer services provision following the Calman–Hine report (Calman and Hine, 1995). Another significant development has been the introduction of Calman training, which has shortened the time spent in the specialist registrar (SpR) grade from 7–8 years to only 5 years. Training must adapt to changes in service provision and become more efficient to maximize the training value of the shorter time available.

Treatment of cancer patients now requires cooperation between members of multidisciplinary teams (Royal College of Radiologists, 1996). In the UK, such teams comprise doctors from the following specialities: surgery, clinical oncology (able to administer both radiotherapy and chemotherapy), medical oncology (predominantly administering chemotherapy), palliative care, haematology, respiratory medicine, gynaecology, radiology and histopathology. A common core curriculum of training for oncologists, the formation of a single specialty of oncology (combining clinical and medical oncologists) and experience in the other specialties are possible ways of improving integration.

A common core curriculum of training for clinical and medical oncologists (before specialization) is being developed by the Joint Council for Clinical Oncology. Currently the MRCP is an entry requirement for medical oncology trainees (MOTs), but no specialist examination is undertaken. Clinical oncology trainees (COTs) commonly possess MRCP before entry into the specialty and from October 2000 this will be an entry requirement.

The Fellowship of the Royal College of Radiologists (FRCR) examination is a mandatory requirement for the certificate of completion of specialist training (CCST) for COTs. COTs may be resistant to relinquish the FRCR examination for alternative methods of assessment, but MOTs may not wish further formal assessment post-MRCP and therefore the FRCR examination might be the stumbling block in the merging of clinical and medical oncology training.

Experience in other specialties requires rotation during SpR training. As total SpR training is short, time in rotations must be spent efficiently.

As training is key to the creation of a single oncology specialty, it was important to establish its current position, seek opinions on how it could be improved, and start to implement such changes. Information was therefore collected and used to design an oncology training programme to equip trainees for their role in multidisciplinary teams in cancer units and centres.

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METHODS

Questionnaires

Two questionnaires were administered, the first in February 1997 to COT representatives in the 17 UK deaneries, seeking details and opinions on current training schemes, and the second was distributed in March 1997 to all 190 COTs registered with the Royal College of Radiologists and the 130 MOTs registered with the Association of Cancer Physicians in the UK.

The second questionnaire was designed and approved for distribution by the Association of Cancer Physicians (on behalf of medical oncologists), the Royal College of Radiologists (representing clinical oncologists) and the lead deans for oncology. One hundred and twenty six COTs (66%) and 87 MOTs (62%) replied. Results were analysed anonymously and unanswered questions were coded as not stated. The second questionnaire covered various aspects of training: present experience of rotation to other oncology specialties, and opinions on possible developments in training in other oncology specialties and in cancer centres and cancer units, common core curriculum, assessment and research.

Prototype rotation

A prototype rotation for SpRs in cancer-related specialties in the Yorkshire Deanery was then designed in the light of the questionnaire results, experience in other centres with established rotations and in consultation with the local doctors involved. This rotation was piloted by the first author (GG). Log books were devised containing a list of

training objectives for each rotation to focus the trainee and for discussion at assessments.

RESULTS

Questionnaires: present training situation

The first questionnaire was responded to by all 17 regional representatives. Masters degree courses in oncology were offered by Edinburgh, Glasgow, Birmingham, Manchester and Leeds, although not all courses included compulsory basic radiotherapy training.

In 7 of 17 (41%) deaneries, the COTs rotated to medical oncology departments for at least 6 months of service commitment. Only two regions had formal rotations to enable MOTs to gain experience of training in clinical oncology. Rotations to other departments such as palliative care were not organized. Fifteen of the 17 representatives commented that the trainees had excessive service commitment and poor supervision in some clinics and radiotherapy planning sessions.

Information from the second questionnaire, sent to all oncology trainees, supported the first questionnaire's findings. The results have been reported in detail elsewhere (Gerrard et al, 1998), but relevant results are summarized here. Only 53 (43%) COTs and 26 (30%) MOTs who responded trained in medical oncology and clinical oncology respectively and in some instances exposure to the full breadth of the specialty was restricted. For example, only 65% of COTs who rotated gained experience of high dose chemotherapy and only 54% of MOTs attended radiotherapy planning clinics.

Questionnaires: enthusiasm for new developments in training

The second questionnaire was mainly concerned with assessing trainees' opinions on changes in training. One hundred and ninety eight (93%) respondents thought that a course in which MOTs and COTs have lectures together on the principles and practice of chemotherapy and basic radiotherapy would be helpful. One hundred and thirteen (90%) COTs and 69 (79%) MOTs indicated that this 'common core' should be validated by an examination. The majority of trainees wanted assessment to be by short examinations, such as multiple choice questions. Most MOTs would be prepared to take examinations after MRCP, although only 25% of MOTs wanted to take a more extensive examination, such as the FRCR.

One hundred (79%) MOTs and 66 (76%) COTs felt it important to rotate to clinical oncology and medical oncology departments respectively. Ninety one (72%) MOTs and 54 (62%) COTs wanted a rotation to palliative care as part of their training. The majority considered the optimal time to be 6 months in either medical or clinical oncology departments respectively and 3 months in palliative care.

One hundred and ninety (89%) respondents wanted supervised service commitment while on rotations rather than observation with no clinical responsibility. Sixty three per cent of respondents thought that it was appropriate for oncology trainees in the SpR grade to commence training as 'pluripotential' oncology SpRs and spend time in both medical and clinical oncology departments for the first 2 years of training before specializing in medical or clinical oncology.

One hundred and ninety four (91%) of trainees felt that their training would be enhanced by spending 12 months in another cancer centre in the third or fourth year of training and the majority thought that experience in a cancer unit would be advantageous.

Prototype rotation field tested

As the questionnaire results indicated that the majority of trainees wanted rotation to other cancer-related specialties, a prototype rotation scheme was designed for Yorkshire trainees. A senior registrar in clinical oncology (GG) piloted the COT attachments to medical oncology, palliative care, pain management, general surgery, gynaecological oncology, haematology and radiology (*Table 1*). To fulfil oncology trainees' desires to train in a cancer unit and a second cancer centre, optional rotations between neighbouring units and centres were designed. An outline of a proposed training rotation is shown in *Table 2*.

DISCUSSION

The responses to the questionnaires indicated that current training programmes for oncologists are far from ideal. Comments revealed that at present there is excessive unstructured service commitment. A minority of oncology trainees receive a common core curriculum with exposure to both clinical and medical oncology at a basic science and clinical level.

The vast majority of oncology trainees want a common core curriculum with an applied cancer sciences course, to include lectures on both basic radiotherapy and chemotherapy. This could be followed by a more in-depth learning programme related to their chosen specialty. It is important for the standards of those regional oncology Masters degree courses with a common core curriculum to be nationally agreed. Of relevance, in response to the ques-

TABLE 1.
Prototype rotation

Rotation	Useful aspects of the prototype rotation*
Medical oncology	Service work in a medical oncology department
Palliative care	Observation/service work in a hospice, hospital-based palliative care team, and with community McMillan nurses
Pain management	Observation of transcutaneous electrical nerve stimulation (TENS), nerve blocks, acupuncture in pain clinic and day case unit
Surgery	Observation of axillary dissection, breast lumpectomy, Wertheim's hysterectomy, mediastinoscopy, and lobectomy
Radiology/pathology	Attendance at pathology–radiology–oncology meetings
Haematology	Attendance at joint haematology–oncology clinics

*Useful to observe more operations and gain more in-depth experience on the above rotation dependent on the trainee's site of special interest

tionnaire, some expressed the view that the FRCR examination is important because it is consistent nationally and in view of candidate anonymity was more likely to be objective.

When appointed to an SpR post, 63% of respondents thought that it was appropriated for future trainees to commence training as pluripotential oncology registrars. Further clinical specialist training would then focus on the treatment modalities and cancer sites relevant to the respective specialties (for example head and neck cancer for clinical oncologists, renal cancer for medical oncologists). The majority of trainees want the common core curriculum to include work experience in medical oncology, clinical oncology and palliative care departments. Some centres have established rotations between medical and clinical oncology trainees and in Yorkshire such rotations and attachments to palliative care, pain management, surgery, haematology and radiology have been successfully piloted. Such attachments will enable trainees to gain insight into the philosophy of other related specialties which is likely to improve future relationships between multidisciplinary team members. It is important that training objectives of attachments are clearly established to maximize the benefit to the trainee.

Ninety one per cent of trainees wanted to train in two cancer centres, which was the recommendation of optimal training by the Royal Colleges of Radiologists and Physicians before the implementation of the SpR grades (Royal College of Radiologists, 1995). The aim of 6–12 months work experience in another centre is to gain more general experience in a department with different treatments and organization, or to gain site specialist experience unavailable at the base centre. A concern for trainees is that this appears much less likely to happen with the 'regionalization' of SpR training with 5-year contracts to train in one region (NHS Executive, 1996). Funding issues and transient loss of the SpR's contribution to service work in the base department may be hurdles to overcome to enable rotations to occur. Some training programmes have the advantage of organized rotations to an adjacent cancer centre. For COTs in centres without established rotations the Royal College of Radiologists' Junior Forum has recently created a 'job swap' register on the RCR web site (www.rcr.ac.uk/enquiries) designed to help trainees to exchange posts.

It is also important to consider other oncology trainees and those in oncology-related specialties. In West Yorkshire there are established rotations for palliative care and gynaecological oncology trainees to be seconded for training in clinical and medical oncology departments. Similar rotations are being planned for MOTs. A small number of Yorkshire trainees in general surgery, haematology and paediatric oncology were interviewed and they were keen to visit a clinical oncology department a few times to observe the planning and side-effects of radiotherapy relevant to their specialty.

TABLE 2.
Proposed rotation

Rotation	Time	Comments
Medical oncology	6 months, in Year 2	Service commitment to include high dose chemotherapy
Palliative care	2 weeks–3 months, in Year 1 or 2	Depending on experience gained during clinical oncology training
Pain management		As part of palliative care attachment
Other centre or cancer unit	6 months, in 3rd or 4th year	
Radiology/ pathology	Years 1 to 5	Regular pathology–radiology–oncology meetings throughout training
Surgery	in 4th or 5th year	Operations appropriate to site specialty training and for consultant specialty in last 3 months of training
Haematology	in 4th or 5th year	Joint haematology–oncology clinics
Other departments		As relevant to site specialty interest

KEY POINTS

- Current training programmes in oncology are far from ideal.
- A questionnaire sent to all oncology trainees in the UK revealed enthusiasm for development of a common core curriculum and interdisciplinary experience.
- As a result, a rotation to cancer-related specialties was successfully piloted in Yorkshire.
- Such rotations could be transferred to other deaneries.
- Changes should result in a better oncology service in the future.

CONCLUSIONS

The responses to the questionnaires indicated that current training programmes for oncologists are far from ideal. Few trainees spend time in other oncologically-related specialties and may not gain a complete understanding of the full breadth of oncology treatments.

At present there is a mood for change. The majority of oncology trainees desire a common core curriculum and interdisciplinary experience. Rotations to other cancer-related specialties were successfully piloted in Yorkshire and could be performed throughout the UK. Exposure of cancer-related specialities to medical and clinical oncology would also be worthwhile. The end result of such changes should be a better oncology service in the future. HM

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