Seventh International Congress of Human Genetics Berlin

Workshop: Training in medical genetics

This workshop was organised by Professor W Fuhrman and was designed to examine the training of medically qualified geneticists and the associated rules and regulations in different countries. Speakers had been invited as individuals, and had not been nominated by national organisations or societies. There was general agreement on the need for recognition of clinical genetics as a specialty so as to promote the quality and status of the discipline, and it was interesting to hear how various countries had tackled this.

Because, according to the organiser, Britain had influenced many countries, R Harris (Manchester) opened with an account of the training of clinical geneticists in Britain. Clinical genetics is a specialty recognised by the Department of Health, with National Health Service funded training (Senior Registrar) and Consultant posts. He described the need in general professional training for experience in paediatrics and general internal medicine, and for success in the membership examination of a Royal College. Basic genetics may be by degree or be arranged during higher specialist training, which is obtained only in senior registrar posts visited and approved by the Joint Committee on Higher Medical Training (JCHMT). The only postgraduate examination requirement is membership of a Royal College. There is no specialist 'exit' examination in medical genetics while accreditation is obtained at the end of higher specialist training but is not mandatory for appointment to consultant posts. The emphasis is on flexibility, the need for wide clinical experience, research, and some first hand experience of laboratory techniques.

The Canadian view was presented by Dr Martin and the rules and regulations in the USA by Dr V M Riccardi. The North American approach was similar in many ways to Britain, but rather different at present in that non-medical PhDs and genetic counsellors may be certified as well as medical graduates, and there is greater emphasis on specialist board examinations in medical genetics. Like Britain, training centres are 'accredited' and reviewed periodically.

There followed short outlines of the procedures in the Soviet Union (N P Bochkov), Australia (D M

Danks), Czechoslovakia (M Kucerova), the three Scandinavian countries (U Friedrich), Finland (R Norio), German Democratic Republic (W Gohler), Federal Republic of Germany (H Cleve), the Netherlands (M F Niermeijer), and Yugoslavia (I Zergollern). As might be imagined, there was much variation and in some countries (surprisingly Denmark was one of them) there is no state recognition of medical genetics as a separate discipline. However, it was clear that in all countries represented at the workshop strenuous efforts were being made to train doctors and other professionals who could provide at least a nucleus of service and information to cope with the growing demand.

In most countries (including Britain) genetics is not always adequately taught in medical schools. Doctors are still graduating with little understanding or knowledge of the subject at a time of rapid developments. This is a good argument for cooperation between those responsible for providing clinical services and medical schools!

There was much discussion of the role of non-medically qualified geneticists in clinical work, although this was not the main object of the workshop. The unanimous view was that well trained geneticists could contribute greatly to the effectiveness of the genetic team working with clinical geneticists fully licensed as physicians. A majority of the participants, at least among those who took part in the discussion, expressed reservations about the title 'Medical Geneticist' for a non-MD person which might be misunderstood as medical qualification.

It was sad that 'third world' countries were rather poorly represented, and their specialised needs were not adequately debated. Most third world countries want to have at least one centre of excellence where western trained clinical geneticists can practise their skills, with emphasis on 'high tech' research and the genetic or dysmorphic problems of individual families. However, much greater inroads can be made in many countries by identifying common problems and developing population based programmes such as those that have been used in some countries so successfully to reduce the incidence of thalassaemia.

The meeting concluded with the thought that the WHO might provide a forum for further discussions leading to improved training in genetics at all levels.

RODNEY HARRIS
*Department of Medical Genetics,
 St Mary's Hospital,
 Hathersage Road,
 Manchester M13 0JH.*

Training course for senior registrars in clinical genetics, Brindle Lodge, NWRHA, 1 to 5 September 1986

One of the advantages of a small specialty is that it is possible to know all the trainees personally and when we ask for their help in identifying deficiencies in training we get it promptly! Recently there was a unanimous request from trainees for information on 'Organising Genetic Services' (in preparation for their apotheosis to consultant status) and for 'Basic Genetics' (from trainees lacking a degree in genetics). There was also felt to be a need for trainees in clinical genetics to meet their counterparts in cytogenetics. A training course was planned with the help of the North Western Regional Health Authority (NWRHA), who generously made available a Regency mansion set in the Lancastrian countryside where a unique, but potentially immiscible, collection of talents was assembled. These included a National Health Service (NHS) regional general manager, a treasurer, several experts on clinical trials and health service economics, academics, clinical geneticists and cytogeneticists, and genetic and cytogenetic trainees. The outcome was indeed catalytic with considerable improvement in mutual understanding of the problems of the Health Service.

The clinical and cytogenetic trainees found each other to be agreeable companions and contact with general managers to be 'a revelation' and 'a sobering insight'. One trainee even awarded 'five stars for NHS management' (a reference to the training session on NHS management). Equally interesting was the feedback from the tutors about the trainees. The Health Service managers expressed pleasure at the interest shown and one said that he thought that geneticists were the nicest bunch of clinicians he had met!

All talks were informal with frequent interjections and extended discussion. Every speaker was allocated a trainee as 'rapporteur' who took notes, led the discussion if necessary, and clarified points with the speaker afterwards. To the surprise of one organiser, the term 'rapporteur' was unfamiliar and threatening to trainees (one even described it as "wretched") but, allowing for some initial semantic confusion, it produced a fascinating permanent record of the meeting (available from RH while stocks last) and avoided passive participation. This was reinforced by four 'set piece' presentations of high quality: genetic services, screening for Down's syndrome by low maternal serum AFP, Huntington's disease and the G8 probe, and finally prenatal diagnosis and future screening for cystic fibrosis. Several lectures and discussions were devoted to the clinical applications of gene probes and of microcomputers. There were four microcomputers available throughout the course allowing instruction and 'hands on' experience of a dysmorphology data base, risk, linkage, and data management programmes.

The day devoted to the aims and philosophy of NHS general management was particularly lively, matched only by the previous day's sometimes heated discussion of the complementary roles of clinical geneticists and cytogeneticists. There was much scepticism from trainees about experimental economic tools apparently already being used to make decisions on the relative merits of different clinical procedures and hence the allocation of resources. These methods included 'Quality Adjusted Life Years' (QALYs) and 'Decision Trees', neither of which appeared in their present forms to be able to accommodate genetic procedures and non-directive genetic counselling. Indeed, the existence of the latter was a surprise to the economists and it was good to have registered a palpable hit with the treasurers who, impressed by the obvious value of rapidly evolving services based on the 'New Genetics', were appalled to learn how tenuous and 'soft' its funding was. However, faced with a treasurer's dilemma of reconciling 8 million pounds worth of bids for regional developments with only 3 million in the kitty, it was clear that clinicians and scientists who can demonstrate objectively the effectiveness (and efficiency, even when discounted!) of their work will do their patients a considerable service. Most of us went away determined to think very hard about ways of proving the worth of genetics using our new armamentarium of economic jargon, although we were told that colourful brochures couched in lay terms may have the greatest impact on manager's struggling to understand the claims of competing professionals.

The present state of clinical genetics and