Postgraduate Training Around the World

Postgraduate training in Canada

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In contrast to the United Kingdom, postgraduate medical training in Canada is entirely confined to university settings although it was not always so. Excellent reviews of the historical background have been published by Shephard¹ and Ruedy.² Specialty intern and residency (the term used in North America for housestaff and registrar positions) training in Canada first became popular in the 1920s and 1930s when medical graduates began to seek a year of hospital training before entering practice. The term 'intern' was first introduced at Johns Hopkins University when the first graduates sought hospital positions in 1897 where Osler refined this internship role based on his previous experience at McGill University in Montreal, Canada.

Prior to 1972 residents were primarily involved in the care of those patients without private insurance but the introduction of Medicare (the equivalent of the National Health Service in the United Kingdom) resulted in a much larger pool of patients available in the teaching hospitals for training. This also meant that it became possible for all postgraduate training to be university based; this was decided upon by the Royal College because (a) teaching hospitals affiliated with medical schools were found to be better equipped and staffed to provide comprehensive training within a specialty; (b) it is easier to ensure that someone (the university) takes responsibility for the residents overall training instead of the resident having to seek a series of appointments often at different hospitals. Whereas in 1959 47 hospitals out of 140 offered residencies without any connection to universities, in 1975 it became obligatory that all programmes be university based.

Initially, specialization was opposed by many in the profession since specialists were self-designated, but it became quickly accepted once guidelines for training and evaluation were put in place. In Canada, the Royal College of Physicians was founded so that any physician wanting to perform 'special work' would have the opportunity to obtain a 'distinguishing

designation'.¹ Since 1946 certification as a specialist has required the passing of standardized assessments and examinations; in 1971 it was decided that certification should evaluate competence by setting clear-cut examination objectives that matched the training objectives and that evaluation should occur over the duration of the whole training instead of totally depending upon a short, one-shot exam; this was implemented by introducing a mid-training examination of the candidates' knowledge of the general principles with a later examination of the candidates' knowledge of a particular specialty and the inclusion of information from the assessment of a candidates' in-training evaluation reports.

Most residency programmes are based on residents gaining experience in the care of in-patients on Clinical Teaching Units (CTUs) which are organised to focus on the training of residents and senior medical students. There is now increasing emphasis on the extension of the CTU to day care units and ambulatory clinics where an increasing proportion of specialty medicine often involving the application of high technology, such as endoscopy and body imaging, is being carried out without admission to hospital.

Unfortunately postgraduate training programmes are becoming a political battleground in Canada due to the provincial governments (healthcare is primarily a provincial rather than a federal responsibility) using a programme of systematic reduction of residency positions by as much as 50% in some cases to reduce the number of specialist physicians who are deemed to be in oversupply. This is causing increasing problems because the residents have traditionally provided the service coverage for teaching hospitals and the supervision of medical students – the quality of the training clearly markedly diminishes as the number of specialty residents drops to one or two who are responsible for increasing clinical loads and supervision of students. It is bad for the educational focus when these trainees become the political pawns and the residency programme becomes the villain when decisions have to be made to withdraw residents from some clinical services. Expansion of the number of specialty residency training programmes has accentuated this

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problem with the residents then being divided up yet further.

The need for greater numbers of general internists is attracting increasing attention.^{3,4} There are few on university faculties compared to the other specialties – which means that they have little impact upon undergraduate and postgraduate trainees. In Canada internists only see patients referred to them, as in the United Kingdom – this is in marked contrast to the United States where many internists provide primary care. Despite studies that indicate adequate or excess numbers of internists there are shortages of general internists in several parts of Canada. Internists with specialist training often limit themselves to their subspecialty when they build up their practice in a community; this not only fails to relieve the demand on the existing general internists but may increase the load when these newly arrived subspecialists refer their patients with additional problems outside of the relevant subspecialty to the existing general internists – thus the quality of subspecialty care may rise whilst care in general internal medicine becomes less available.³ This has been identified as an important problem and a number of universities have now developed special clinical and research training programmes for general internists.

The certification and accreditation process has seen a number of refinements over the past few years; this has been made a priority by the Canadian Royal College as evidenced by the fact that in 1968 the McLaughlin Examination and Research Centre was established. This centre has been responsible for testing out a number of innovations and introducing major changes into the written and oral examinations.¹

In the past there were few explicit educational objectives provided to guide the acquisition of knowledge, attitudes and skills in the residency training programmes. As a result the Royal College examinations and examiners have implicitly determined the objectives of the whole training programme. This process is now being reversed⁵ and there is increasing appreciation of the need for defining and updating the educational objectives in each specialty so that they reflect changing trends (e.g. new ambulatory clinic skills) and can be assessed. This is done by stating the priority problems and conditions that a resident should be able to manage and then defining the necessary knowledge and skills. Evalua-

tion is then based upon these educational objectives.

Assessment of clinical competence is increasingly recognized to require different assessment methods for measuring the different components of the skills, attitudes and knowledge expected of any clinician and the level of this competence expected in a specialist. The clinical oral examination in internal medicine has been abandoned in the United States but in Canada it is felt that a written examination cannot be relied on to predict bedside clinical competence. The need to improve the standardization of the clinical oral examination was documented in one of the first studies of the McLaughlin Examination Centre.⁷ In order to assess the problem of different expectations of examiners in the Royal College oral examinations, a videotape of a complete examination was shown to 10 pairs of examiners (10 in internal medicine and 7 from the specialties). Seven of the ten pairs of examiners in internal medicine 'passed' the candidate and 3 'failed' him, while only 2 out of 7 pairs of specialty examiners 'passed' him. This study has led to emphasis being put into training of examiners and provision of guidelines for satisfactory performance in the clinical oral. A recent example of Canada taking the lead in this area from the UK is a paper published in 1985 that suggests that the OSCE (Objective Structured Clinical Examination) developed in Scotland may be better than the conventional oral for assessing some aspects of clinical competence in the Canadian setting, particularly those relating to basic clinical skills.⁸ The clinical oral has to be accepted as being limited by the small number of clinical problems that can be assessed and it is unclear to what extent one can generalize from the way in which a resident handles one problem to the way in which he/she handles other problems;⁹ hence the importance of a series of ongoing assessments throughout the period of training.

Britain has had a great influence upon the evolution of Canadian postgraduate medical training over the years largely due to many key clinician-educators being British graduates. With the advent of more restrictive Canadian immigration policies and increasing interaction between Britain and European Common Market countries the degree of British-Canadian interactions is lessening. We should not allow this to prevent Canada and Britain from benefitting from each others' ongoing experience in postgraduate education.

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