

The Future of Postgraduate Medical Training*

Raj M Nambiar *FRCS, FRCSE*

SGH Postgraduate Medical Institute, SGH

INTRODUCTION

At the SGH 10th Annual Scientific Meeting I had the opportunity to sketch the “Changing Landscape of Postgraduate Training”. In this presentation, I shall attempt to review the current status of our postgraduate training in the context of these changes and then look at the challenges in the future of postgraduate training.

TRENDS IN TRAINING

It is well known that among the many drivers of change in clinical practice are medical technology and specialisation, which are also important influences that have impacted upon medical education and training. This is inevitable because the main aim of postgraduate training is to equip and maintain the physician to be competent in keeping with current best practices for the care of our patients.

Historically, the traditional British system influenced by the powerful Royal Colleges and locked in by their own traditions had resisted major changes in postgraduate training for a very long time. The system has been criticised as being mainly an apprentice type, with no defined syllabus and standard of training, no fixed endpoint and one in which trainees had to seek out their own training programme and be assessed by non-structured but competitive examinations.¹ On the other hand, following the Flexner report in North America almost 50 years ago, some reforms had been initiated in medical education and training which over time has progressed to a well structured format. The major strengths of the training programme from the beginning were a defined curriculum, clinical rotations, in-service assessments, graded responsibilities, exposure to research and evaluation of trainers, and

all the elements that are considered essential even today.

In the UK, major reforms were introduced during the last decade following the recommendations of the Calman’s report. A Specialist Training Authority was formed with legal responsibility to be in overall charge. Deaneries and Specialist Training Committees were created to implement a structured programme. The standards of training were set for the various specialities by the Royal Colleges. The number of Specialist trainees was defined and selection was centrally controlled. Clinical rotations to different hospitals and close supervision of trainees were made mandatory. Appraisal and feedback of annual review of in-training assessment and a defined end point of training with certification of completion of specialist training (CCST) were introduced.²

CURRENT STATUS IN SINGAPORE

In Singapore, a similar arrangement has been in place for the last 3 years. The Specialist Accreditation Board (SAB) is in overall charge, under which are the Joint Committee for Specialist Training (JCST) formed by the Academy of Medicine and Graduate School of Medicine and Advanced Specialist Training Committees (AST) for all specialities. The certificate on completion of training by the SAB allows one to be registered as a specialist by the Singapore Medical Council.

Structured Training

Although the term “structured training” is commonly used, it is not well understood and therefore, structured training is not properly implemented. Structured training implies training that has objectives, a defined programme and processes to achieve it. In the context of medical specialist training, it should include clinical work in the wards, outpatient department, operating

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rooms, intensive care and all other areas where on-the-job training can occur. It should also include lectures, workshops and other skills training sessions, research and non-clinical learning programmes that enhance broad skills for professional development.

A major problem in postgraduate medical training is the lack of a detailed curriculum. The definition of the levels of knowledge and skills to be achieved in all areas of training may not always be easy but the basic competency and core knowledge required could be detailed with the others left in general terms.

The recently completed accreditation site visits to hospitals indicated that there had been an increased effort by departments in implementing a structured programme and that trainees felt that much more was being done now than in the past. However, there are key areas for improvement in training and supervision, appraisal and reporting, assessment and certification, and evaluation of training programme.

Clinical Teaching and Supervision

Clinical training in the past has been and will continue in future to be an “apprentice type” in the wards, outpatient clinics or operating rooms. Proper apprentice type training involves developing a close working relationship between the clinical teacher or trainer and the trainee and giving the trainee opportunities to observe and learn directly from the teacher during the course of normal clinical work. The main drawback of apprentice type training is that it depends heavily on the interest of the teacher and the opportunities available and the result can be either most rewarding or ineffective.

The traditional apprentice type of training has been labelled as apprentice by osmosis and criticised as being vague, variable and merely as an “incident in the life of a consultant”. On the other hand, proper apprentice type training is learning with supervision and guidance and graded responsibility. It can be most useful if the teacher is committed to imparting not only the skills and knowledge, but also attitude and values during clinical work. Apprentice by coaching is an orderly progression, in which the trainee is moved up the steps from simple to more complex management, with supervision and graded responsibility.³ It is said that experience without training increases confidence but not competence while supervised training increases both confidence and competence. The supervisor should have a clear idea of the goals and specific objectives that the trainee should achieve so that the clinical opportunities are well utilised.

Appraisal and Reporting

Regular appraisal and feedback by the designated supervisor is an essential part of effective training. Unfortunately, this is not uniformly practised in clinical departments. It is important that the supervisor has sufficient contact with the trainee in his work for proper appraisal to be carried out. Although informal exchanges during the course of work will no doubt occur more frequently, it is essential to have more formal appraisals in a training scheme. For example, during a 6-month training period there should be at least 3 formal meetings between the teacher and the trainee. The first and most important meeting should be held in the first week to define each other's roles, set objectives and plan the training. A second meeting midway through the training period should be held to review achievements, identify problems that require to be solved and plan further training to meet the goals set at the beginning. A third meeting at the end of training should be held to see how much the overall objectives have been achieved and recognise any deficiencies that need to be remedied in the next posting. The appraisal should include appropriate documentation as a record of experiences and achievements.⁴

Appraisal, although distinct, has often been confused with assessment. While appraisal is a description of activities, achievements or characteristics, assessment is a measure of performance against defined criteria. Assessment is therefore objective and precise and may include examinations or tests.

Reports and Annual Review

In the UK training system, an annual review of training and reporting is an integral part of training and is made compulsory. The regular in-training assessment report (RITA), the Annual review report and updated personal curriculum vitae are important documents in the training portfolio of all trainees. In Singapore, trainees are assessed by 6-monthly progress reports and logbooks, which contain the in-training experiences. At present, the annual training review is not uniformly practised, as it has not been made a compulsory requirement.

WHAT IS THE FUTURE OF POSTGRADUATE TRAINING?

We have witnessed major changes in the practice of medicine in the past and this trend is likely to continue in the future. It is probable that some of the old established major specialties like internal medicine and even general surgery may disappear in due course as

newer specialties and subspecialties are created. The organ and region-based sub-specialties, like hand and spine in orthopaedics, and breast, gastric and colorectal in general surgery, are now claiming to be separate entities. The endoscopic, minimally invasive and interventional radiological procedures are becoming common turf for many disciplines. In recent years, doctors and specialists are also increasingly taking up additional roles in hospital administration, and managerial positions. Therefore, besides being a specialist clinician, teacher and health educationist, what other skills and training should a future medical specialist need?

New Skills for the Future

There is no doubt that a future doctor must be highly competent in clinical practice, and able to perform consistently well, practise ethically and follow evidence-based medical practice. He or she should be committed to teaching and research, be a lifelong learner and maintain competence and broad skills relevant to practice.

In a recent working paper, the Royal College of Physicians and Surgeons of Canada listed the skills required of a doctor for the new millennium.⁵ Besides being a medical expert and clinical decision maker, a doctor should also be an effective communicator to patients and relatives and a role model to students. The doctor should also be a collaborator with colleagues in a multidisciplinary setting, a team builder, a manager and a scholar who will be aware of the social and environmental causes of disease and health. The person should also be a lifelong learner and a professional who will have compassion and integrity to practise ethically. Another area of competence for the specialist that is becoming increasingly important is in clinical governance. The term, although commonly used, is not about governing doctors and specialists but is concerned with improving the quality of care by integrating a number of existing systems such as clinical audit, handling of complaints, clinical risk management and evidence-based practice.

New Training Methods

Although most consultants enjoy teaching, it must be recognised that not all are effective teachers and trainers. There is no requirement for those aspiring to be consultants in teaching hospitals to undergo any form of training in teaching techniques. It is obvious that those who have a responsibility to teach must be trained in modern methods of teaching clinical skills, communication skills, motor skills as well as trainee assessment and feedback, and providing educational

supervision. The various changes that have been introduced, together with the reduced time available for training, dictates the need for a more formalised and professional approach to training.⁶

Computer-based teaching and computer-based learning have been popular in many areas of education but not very much in the medical field until recently. It is now known that factual knowledge and psychomotor skills can be taught and measured in a properly equipped laboratory, although real professional competence must be learnt and tested in real life situations. Even core clinical skills in the wards and outpatient clinics can be taught by videotaped simulated consultations of common clinical scenarios. It can also be effectively used to improve trainees' communication skills and provide a systematic approach to long case examination technique, case presentations and problem discussions. The use of video trainer in teaching operative skills is now popular for endoscopic and laparoscopic procedures. The new generations of manikins with computer simulations are slowly replacing cadavers in skills training. It is now well recognised that skills can rapidly improve with competency-based instructions. Therefore, it would seem essential to have a well-designed and fully equipped skills training laboratory for the future training of specialists.

New Training Links and Partnerships

We have had a postgraduate system that is well established and recognised. However, it is important for us to continue to maintain and further develop both regional and international links with educational and professional colleges. Where the standard of training and assessment meets our own high expectations, we should move to establish reciprocal recognition of training and qualifications with well-known regional professional colleges. In addition, our traditional links with UK and Australasian Colleges must be further advanced, especially in joint training programmes and assessment examinations.

As we follow the growing trend of consultant-based care which requires more and more specialist procedures done by consultants, there will be fewer opportunities for trainees to do things independently to get adequate practical experience. The shortened length of training period and reduced number of work hours in future would only aggravate this problem. It will be of great benefit if advanced trainees could, in their third year of training, spend 6 months to a year in a district hospital setting in the neighbouring countries where clinical material is in abundance and qualified staff is in short supply. This will not only broaden the clinical experience of our trainees but

would also enrich the culture, values, communication, relationship and understanding between future specialists in the region.

REFERENCES

1. Evaluation of the reforms to higher specialist training, 1996-1999. The Open University Centre For Education in Medicine, 2001.
2. A guide to specialist registrar training. National Health Service Executive, 1998.
3. Wilson JA. Unsupervised surgical training: questionnaire study. *BMJ* 1997; 314:1803-4.
4. Miller GE. The assessment of clinical skills/competence/performance. *Acad Med* 1990; 65:563-7.
5. Skills required for the new millennium: report of the societal needs working group. The Royal College of Physicians and Surgeons of Canada's Canadian Medical Education Directions for Specialists 2000 Project, 1996.
6. Biggs J. New arrangements for specialist training in Britain. *BMJ* 1995; 311:1242-3.