THE TRAINING OF STUDENTS IN GENERAL PRACTICE

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The demands of general practice are too wide to enable medical students to be trained during their undergraduate curriculum in all the experiences they are likely to meet as general practitioners.

Medical education must include in its objectives more than the mere teaching of facts and techniques. It must prepare the student adequately and intelligently to meet situations he has never met before, whether concerning individuals, families or communities. He must learn to shoulder responsibility and be self-reliant, to observe and make inferences from his observations and to learn and practice the principles of methodology. His training from his first to his final year should foster a desire to understand the rationale of human reactions and behaviour; he must learn how to know people, their illnesses, and their neighbours' illnesses. He must know what is normal in individuals and communities, both physically and psychologically, and he must know how

to maintain that state of normality. Most of these qualities do not belong to any particular field of work or to any particular subject in the curriculum; they can and must be developed as a philosophical theme in all subjects.

Nevertheless, there are basic facts and experiences that must be taught and learned in every subject, in the 'subject' of general practice no less than any other. How can students be taught the experiences or some of the experiences of general practice, and at the same time learn to appreciate and apply the above-mentioned general philosophical principles? Attempts are being made to provide the practical answer to this question in many medical schools of the Western world.

Common to all these attempts is the providing of clinical experience for the students outside the wards and outpatient departments of the teaching general hospital. It is claimed that this kind of practice provides certain types of experience that cannot be obtained in a general hospital. These types of experience include the management of minor illness that is not serious enough to be admitted to hospital, the observation of normal people, the management of emergencies in an environment devoid of the facilities that are available in a hospital, of old people, and of chronic and incurable illness in the home environment; the kindly but rapid disposal of trivial complaints and the differentiation of these from *apparantly* trivial complaints which are indicative of serious physical or mental disease; the observation of the natural course of disease; the appreciation of medico-legal facets to cases and the applications of the law in practice, for example, in public health matters and in the certification of mental disorders; the use and value of social-service agencies such as those concerned with child welfare, or the care and rehabilitation of alcoholics; and the impact of illness, both physical and mental, on persons other than the patient. In the general-practice training schemes to be described, this experience is obtained in an extra-hospital environment under the guidance and supervision of practitioners experienced in general practice.

Clearly, some of these experiences occur in the wards and out-patient departments of general hospitals and in the ordinary social contacts of everyday life, but these self-same experiences carry a different educational value when experienced outside the hospital environment.

The schemes adopted in numbers of medical schools to provide 'general-practice experience', some of which schemes I visited personally in 1953, have been classified by the British Medical Students' Association in their published survey of schemes in operation in British medical schools which they presented to delegates of the first World Conference on Medical Education in London in August 1953. This survey classifies the schemes as follows:

1. *Health-Centre schemes.* The Edinburgh scheme, which I visited, will be described, and also the proposed scheme at Manchester.

2. '*Residential*' *schemes*, where students spend a period of 2—4 weeks living with a general practitioner, attending his 'surgery' hours and accompanying him on his rounds. I discussed this type of scheme at Aberdeen, where it is voluntary, and at Charing Cross, London, where it is compulsory.

3. '*Attachment*' *schemes*, where the student is attached to a general practitioner for the mornings only, for a period usually of about 2 weeks.

4. '*Day visit*' *schemes*, where the student spends an occasional day with a general practitioner.

In the United States, schemes corresponding to the residential and the attachment schemes are under trial, as well as schemes not very dissimilar from the British health-centre schemes or that at the University of the Witwatersrand.

In Norway, training in the experiences of general practice will shortly be made obligatory after graduation; 6 months of the year's compulsory internship will be spent as assistant to the equivalent of the part-time District Surgeon in South Africa.

The scheme at the Alexandra Health Centre and University Clinic (Witwatersrand University) approaches most nearly the British health-centre scheme of all overseas schemes studied, yet with quite considerable differences both in the type of experience offered and in the general philosophical principles learned by the students.

I shall briefly describe and comment on certain representative schemes at Aberdeen, Edinburgh, Charing Cross and Manchester, where I visited and the scheme at Richmond, Virginia, described at the Conference on Medical Education; and also the Witwatersrand scheme.

Aberdeen. During medical-school vacations, each of 15—20 general practitioners in Aberdeen and the countryside around is allocated one senior student for a month. The student does not as a rule reside with the practitioner, but accompanies him in all his work, both office and domiciliary. The scheme is voluntary, both for the students and the practitioners, and about two-thirds of the students volunteer for this experience. When, some years ago, the Medical Faculty at Aberdeen approached the local branch of the British Medical Association for their views on instituting a general-practice training scheme, the branch did not accept the scheme because they feared that the patients would object. A year or two later, the branch reconsidered their refusal, and asked the University to give the scheme a trial on a voluntary basis. This is now being done, and the present scheme is regarded as a success. The students like it, the practitioners acknowledge that the students keep them up to the mark and on their mettle, and the patients are intrigued by this new interest which is being taken in their health. The students gain experience in general practice, but do not undertake much responsibility. They do not learn to know people as intimately as they would if they were given more responsibility.

Edinburgh. The General-Practice Training Unit at Edinburgh has been established for the specific purpose of training students. The Unit functions as a general-practitioner unit under the National Health Service, and is in two sections, one at the Royal Dispensary in West Richmond Street, and one at the Livingstone Dispensary in the Grass Market. Each of these sections

has a 'panel' of 2,000 patients and potential patients, which is regarded as an average-sized practice for one general practitioner in the National Health Service. As it is a teaching unit, two practitioners (instead of one) are attached to each section of the unit. At the Royal Dispensary, there is also a social worker, a nurse and a secretary. Regular 'surgery' hours are held twice a day, and domiciliary visits are paid. The patients attending offer a cross section of general practice in a poor district of Edinburgh.

Students' attendance is not full-time; a group of 6 attend part-time over a period of 10 weeks. Each student sits with one of the doctors at a surgery session twice a week. From the contacts made at these 'surgery' sessions arises the rest of the student's work during his period in the unit. The student attends to the case notes, examines the patient, and is made to feel that he is one of the team. His follow-up of the cases includes domiciliary visits, alone, or with a doctor if the likely management of the case is beyond his experience, and he accompanies the patient to the Royal Infirmary for consultations, or for special investigations such as X-rays. He 'sees the patient through' the various departments of the Royal Infirmary on such occasions. He becomes closely acquainted with the patient and with the patient's relatives in this way, and learns to appreciate the personal implications of the procedure of 'investigating' a case. He meets the social worker and the pharmacist over individual cases at the Dispensary, and the whole attending group of students attends a conference once a week with the medical, nursing and social-worker staff. Only one-quarter of the total number of Edinburgh medical students at present passes through this Unit during the medical curriculum, owing to the large number of students still being admitted to the medical school.

The cost of the Unit is about £19,000 per annum, which is being found by the University, the National Health Service and the Rockefeller Foundation.

An alternate scheme of reducing the period of 10 weeks in this Unit to 6 weeks has been discussed, the students for the remaining 4 weeks to be 'apprenticed' to general practitioners. This would enable more students to pass through the General-Practice Training Unit in their medical course.

In this 'Health Centre' form of training for general practice, students learn responsibility in that they are made partially responsible at least for patient welfare and therapy. They act under the guidance of experienced practitioners, but perhaps see too comfortable a form of general practice. To a limited extent they learn to decide issues of patient management themselves. They see the impact of illness in the home environment, and upon earning capacity. The seeds of social conscience are permitted to develop.

Manchester. 'Derbyshire House', the General-Practice Training Unit of Manchester, was not yet functioning as such at the time of my visit. It is intended that the Unit shall function in much the same way as the Unit at Edinburgh, but with a different method of staffing. At Edinburgh all the medical staff are full-time and are paid by the University. At Manchester it is proposed that there shall be a full-time Director, and in addition 4 local general practitioners employed part-time. At Derbyshire House, which is situated not far from the Manchester Royal Infirmary, the University will provide 4 suites of consulting rooms, each suite being a complete 'surgery' for the use of one general practitioner. The students will attend the practice in the surgery and also accompany the general practitioner on domiciliary visits. The general practitioners will be selected from the local practitioners of Manchester, and will continue in their own general practices. The time to be spent in the Unit by the students is still to be decided.

Charing Cross. Charing Cross Medical School, one of the smaller and rising London schools, is one of the few that has instituted a compulsory period of attachment of students to general practitioners. Students at some time after passing their pathology examination, which is written 6 months before the final M.B. examination, are each allocated full-time to a local general practitioner for a period of 3 weeks. They attend with the general practitioner to all aspects of the work of that particular general practice. The Medical Faculty invites general practitioners to join their panel of teachers, and from these volunteers selects teachers on personal and geographic grounds.

Richmond, Virginia. The scheme in force at Richmond is organized on a rather more elaborate scale than corresponding schemes in Great Britian. Four medical officers trained in general practice have been added to the teaching staff of the medical school, with a secretary and a telephone exchange operator. Six or 7 students at a time are attached for training to the Unit. They make domiciliary visits in motor cars equipped with two-way radio telephones and, if in difficulties, they are able to communicate directly with their seniors at headquarters. It would appear that one at least of the objectives in the training of medical students in general-practice experience, namely, the undertaking of responsibility, is apt to be missing in such an elaborate scheme as this.

Alexandra Health Centre and University Clinic. The training scheme of the Witwatersrand University at the Alexandra Health Centre and University Clinic is a 'Health Centre' type of general-practice training unit. The students in groups of 5 or 6 in their final year live in at the Clinic for 2½ weeks. A vast out-patient clinic and a limited domiciliary service is provided for the African population of Alexandra Township. The large attendance of patients at the Clinic necessitates the provision of a rapid service, the students taking an active part in providing this service, which includes attending to sick and injured adults and children, pregnant mothers, and patients suffering from chronic contagious diseases such as tuberculosis. The students undertake responsibility, but when so doing have the 4 medical officers of the staff to call upon for guidance, and a number of part-time visiting staff. They pay a certain number of domiciliary visits in the Township, either in the Clinic cars or on push bicycles, the riding of which is a feat on the unmade roads of the Township.

The cost of the Clinic is £25,000 a year. It provides primarily a service to the local population and, in passing, a very fine teaching service for medical students. The students see the living conditions of the lower socio-economic groups at their worst, and any seeds of social service are nurtured by the 2½ weeks' experience.

DISCUSSION

Common to all these schemes is the experience of seeing patients outside the general hospital in the more natural environment of the home and the community. Short as the period of such experience may be, it is sufficient to enable the student to picture his hospital patients in the environment to which they return on leaving hospital.

In schemes like those at Edinburgh and at the Alexandra Township students learn self-reliance and responsibility, in that they have to decide whether to ask for guidance in the management of patient situations or cope with such situations themselves.

They experience for the first time the traditional confidence which is placed by patients in the doctor. Some preen themselves in this reflected glory of an age-old profession, some pride themselves and some are humble and rather frightened by the trust and confidence that is placed in them. It is revealing to see that on occasions the patients place more confidence in their medical-student 'doctor' than in the consultant who happens to be called in to see their case.

The social conscience, even if present in the most embryonic form, is stimulated by experience of this type, particularly where the environment is as dramatically sub-economic as that of Alexandra Township.

The system of apprenticeship to general practitioners enables the student to see patients in their home environment, and to see a cross section of the work of the general practitioner. It lacks the facilities that permit the student to undertake responsibility, and to get to know people. From the general practitioner's point of view, the effect is the same as that which the student has upon the hospital teacher, putting him on his mettle and stimulating constant attention to his patients.

There are difficulties in the administration of the apprenticeship system. Personal incompatibilities between student and practitioner, which are bound to occur, have a greater impact on both student and teacher than in a hospital teaching scheme where the multiplicity of teachers smooths over the effects of individual incompatibilities. The geographic and multi-racial aspects of practice in South Africa add difficulties probably peculiar to South Africa.

By and large, the apprenticeship system would appear to be less effective and constructive than the health centre system.

'Attachment schemes' and 'day visit schemes' have very little to commend them as part of the medical curriculum. Voluntary attachments of this type during vacations may have an interest-stimulating effect.

In deciding whether to introduce a compulsory training scheme of one of the types described, a medical faculty should give due weight to the opinion held by many authorities that an adequately accommodated and staffed hospital out-patient department, with a social workers' service included, and with facilities for domiciliary visiting by students, provides experience equivalent or superior to any of the general-practice training schemes described.

The best way to provide experience equivalent to general practice or in general practice itself will depend on the local conditions that apply at each medical school.