PRACTICE OBSERVED

The GP and the Medical Student

Students from Queen's University

JOHN WILSON

Our practice is in a rural health centre for four doctors. One doctor is a trainer and teacher, and I am a teacher. One partner has been in general practice for 25 years, one for 10 years, and two for six years each. For the past six years five or six students have come each year for a two-week attachment, either in the final year or in the prefinal year. The students either travel to the health centre each day or stay at a local hospital five miles away. The programme for the prefinal year student is planned, whereas the final year student has a more flexible programme, depending on the student's requirements which are assessed on the day of arrival. The final year student needs more "face to face" confrontation with the patient and more discussion with his teacher concerning clinical judgment and total assessment of the case.

The students come from a hospital, having gathered clinical facts in specialties. They have great difficulty in applying this specialised teaching to symptoms that have a general basis. In general practice we assess by listening, discussing the problem with the patient, and examining the system of the body that help us to come to a decision on the basis of a differential diagnosis, rather than take a complete history and perform a complete examination. Our main expertise is in using stored memory about the patient and the family history, and using notes which often appear to the student to be a jumble of illegible information. If at the end of the two weeks we have shown the student that the patient is a whole person and that every system of the patient and his part in a family unit must be considered before attempting to manage a disability, no matter how simple, then we have introduced the student to the main aim in general practice. In developing this main aim we are guided by overall aims from the department of general practice.

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Queen's University, Belfast: to show the student the earliest manifestation of illness, the wide spectrum of illness, and the importance of physical, psychological, family, and social factors in the causation and management of illness.

There is a good opportunity to display the doctor/patient relationship and the great loyalty of the patient. The teacher has to develop skills in the art of making a primary diagnosis, managing that condition, and gathering and recording information. The student has to be shown how the general practitioner is always concerned in preventive clinical medicine and health education, which requires a close working relationship with the primary care team.

Prefinal year student

FIRST WEEK

Day 1—The student is introduced by the senior secretary to all the secretarial staff, then to as many of the partners as possible, and finally to the doctor who is responsible for the student during the two-week attachment. During the first morning the student observes the doctor's method of practice. Very little explanation is given until the end of surgery when the teacher assesses how interested the student is and how well orientated the student is on matters of observation and deduction.

At the first coffee break the student is introduced to as many of the other members of the primary care team as possible—the treatment-room nursing staff, the district nurses, the health visitor and social worker, the other members of the team, physiotherapist, speech therapist, and chiropodist, who are attached part-time, are introduced later in the week. Then the student is taught about the importance of the home call and how calls are taken, who receives them, who decides that the home call is necessary, how the urgency of the call is graded, how calls are recorded, and the importance of a proper recall list. Lunch follows with the teacher at his home, where the student generally assesses the student, and may take the opportunity to explain

services of the occupational therapist, the problems of the elderly living alone, the difficulty in getting medicine, and the only one of getting patients to take the medicines prescribed. This is followed by an immunisation clinic and a discussion of immunisation procedures from the general practice point of view. The rest of the morning is spent observing the teacher writing repeat prescriptions and explaining drug regulations, prescription writing, and regulations pertaining to exemption from prescription charges. In the afternoon a full consultation programme with a different partner continues as a clinical session.

Day 5—A full morning's consultations followed at 11.30 am with a meeting with all the primary health care team, when the problems of several patients in the community are discussed. New ideas on management are formulated for some of the patients with major problems. The afternoon is spent in a normal surgery session until halfway through; the student then has an opportunity to attend the postnatal and cervical smear clinics.

Weekend—During the weekend the student is encouraged to stay in the practice, which gives the opportunity for tutorials on the doctor's bag—its contents, the multiplicity of certificates and forms, the specialised equipment carried, electrocardiograph resuscitation and defibrillator—and on the independent contractor status and remuneration and the relationship with the general service, especially the laboratory and radiological services.

SECOND WEEK

During the second week the student spends more time with the nursing and paramedical services, and, by arrangement, attends a well-baby clinic, has discussions with social workers, and attends one or two assessments; accompanies a district nurse on a round of morning visits; and also visits with the health visitor and attends one of her special development assessment clinics. Students are also sent on their own to visit a few patients in their homes with chronic conditions, which have a combination of medical, nursing, and social problems. These cases are then discussed when the student returns, providing a good assessment of the student's ability to take a history, examine a patient, and evaluate the help that the patient has had from adaptations to the home and aids. We have also the bonus of a new person bringing fresh ideas to the management of such patients.

Final year student

In the final year attachment the students are more mature. They are introduced to antenatal clinics, postnatal visits, and, if possible, at least two hospital confinements in the general practitioner unit. The students benefit more by being exposed to selected patients and are left in an examination room with the patient to develop rapport, skills in taking a history, and skills in examining the patient. The student is expected to make a provisional diagnosis and offer advice on treatment and management. Any of the sessions with the paramedicals and nursing staff that were missed in the first attachment can be fitted into the second attachment. By arrangement with the patient the student makes a visit to the patient's home to assess a new complaint in a chronic illness; then the teacher makes visits and assesses the total management and prescribes if necessary.

While on the first attachment the student has seen the case given to patients with terminal illness, both degenerative and malignant. I prefer the final year student to take on as one of the major cases a patient with a malignant condition and concentrate not only on managing the patient but on managing the entire family. We can also give students experience of the medical management of a child's home and a home for elderly citizens with degenerative disease and holiday relief beds.

Conclusion

After these two attachments to general practice the student should have a greater insight into a general practitioner's work and the part he plays in the National Health Service. At last I can see teachers in general practice breaking the myth that we sit all day at a desk writing certificates and prescriptions. All the partners in the practice enjoy students. I believe that our patients also enjoy the experience and feel that they are helping. A few now feel that they are experts. We enjoy the students' suggestions for improving our management, and occasionally a student has helped to throw new light on a patient's problem.

Each time I have a student with a patient I question myself:

The GP and the Specialist

Radiotherapy and oncology

THURSTAN B BREWIN

"Radiotherapy and oncology" may seem to be an awkward name for a specialty, but it is one letter shorter than "obstetrics and gynaecology," and at least gives a better idea of the job we do than just "radiotherapy." We give chemotherapy and hormone therapy too, and though most of our patients have some kind of tumour or cancer there is much variety, both in presentation and prognosis. What other specialist uses vaginal speculum, laryngeal mirror, and ophthalmoscope? On our ward rounds and in our outpatient clinics we see patients of both sexes and all ages—and with our social workers and nursing staff we try to maintain (so far as time allows) an interest in morale and in the wider problems of cancer patients and their families.

How much do we achieve? Like the statistician¹ who was asked "How's your wife?" (he replied "Compared to whom?"), we can only respond that we are still a long way from the magical bullet that will cure all cancer, but that if our therapy is compared with that available to, let us say, the neurologist or the cardiologist we are not doing at all badly. We cure more patients than either of them and provide at least as much effective symptom control. Moreover, the idea that if our patients are not curable their condition will steadily deteriorate is only true (even broadly) for certain cancers. With many other kinds of cancer long remissions—not very different from those seen by the cardiologist (and often with a similar or even better chance of good quality of life)—are commonplace. So, despite many tragic cases and frequent disappointments, we have no lack of grateful patients.

Referral

Most (not all) curable patients come to us from other hospital units, but almost any type of recurrent or metastatic disease can

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What good am I doing for this patient? Are the medicines helping the patient? Is my management correct? Because the student has a critical eye, an exercise such as this is one of the best stimulants of personal audit in my medical practice. The practice is also being introduced to many prospective medical graduates who will eventually control admissions to hospital beds. Some will specialise, and knowing the practice that the patient comes from there will be a more personal approach to the patient. As a training practice we hope to attract trainees who have enjoyed their student experience. The time spent in helping the undergraduate is worth while and a most gratifying experience. Though not financially lucrative, there is the personal satisfaction that you may have sown a few seeds in a young active brain so that mankind in general will benefit.

be referred to us by a GP for an opinion, depending in part on whether the surgeon or physician who carried out the original treatment likes to cope at this stage or whether he is happy for us to do so. One of the advantages of referral to a radiotherapist is that he is in a good position to know the relative merits of radiotherapy and chemotherapy and can often himself carry out either method of treatment if indicated.

Brief background information in a referral letter assists us to identify likely fears (some of which may be quite needless) and to understand the patient better. "Probably has more pain than the admit—used to be a hospital orderly—husband died of lung cancer—mother was a patient of yours some years ago..." That sort of thing can be very helpful.

Some radiotherapists have a special interest in the overall management of certain kinds of cancer—lymphoma or gynaecological cancer, for example. Others have an interest in terminal care and may be happy to do home visits in such cases. The only snag here is that a reputation in this important and rewarding field may further nourish the myth that the work of the radiotherapist is all gloom and doom.

Radiotherapy and chemotherapy

To many doctors the basic principles of cancer chemotherapy are fairly clear, but radiotherapy remains a mystery. Radiation dosage often causes confusion. One reason is the effect of duration of a course and the frequency of attendance. For example, 4000 cGy in three weeks treating twice weekly is a higher dose (biologically) than 5000 cGy in six weeks, treating daily Monday to Friday. Another reason is that radiation dose represents not an amount administered but a concentration achieved. If we knew the concentration of drugs in different tissues this would be the best way of expressing drug dosage. Adding together doses of radiation given to different parts of the body is as meaningless as it would be if we were to add together the population densities (people per square mile) of different towns and arrive at an average figure, far higher than any population density existing in either of them.

her part in the management of the practice out of hours, such as taking calls, chaperoning, etc.

The afternoon surgery continues with the student observing the teacher introducing the doctor/patient relationship, his approach to the patient, the advantages of stored memory, and the patient's past history. Generally the student is introduced to the art of the examination and it is a great chance to use a stethoscope, torch, otoscope, and ophthalmoscope without the embarrassment of feeling that he or she is a novice.

This is a fairly typical first day, and by 5 pm the students are exhausted—not being used to long hours—and they are allowed to escape. The teacher gets a chance to take a few more patients and attend to his outgoing mail and the interpretation of the incoming laboratory investigations and hospital letters.

Day 2—The second day starts with the student observing the working of the office and the rapport between the secretary and the patients on the telephone as well as at the reception window. There is a chance to study the many forms and certificates, the methods of registration, control of waiting lists, storage of records, and use of registers including the age-sex register, and to see the number of people arriving at the health centre to attend the clinics held by all the other members of the primary care team. I generally give the student a remit to watch carefully the relationship between patient and secretary, which may be rewarding when it shows the secretary becoming a barrier between doctor and patient. It exposes the difficulties of an appointment system, and occasionally, informs me of a few points in the patients' attitudes and personalities that I may not have recognised before.

Next there is a chance to observe in the treatment room, help with the electrocardiographic recordings, and get a little practice in taking blood. The student can also assess the functions of the treatment-room nurses and see how important it is to have a well-organised treatment room in the day-to-day running of a practice. A further round of home calls before and after lunch gives the student the opportunity to discuss during car journeys the organisation of the practice, repeat visiting to patients who are chronically ill, the attached staff, the primary care team, contraceptive services, managing elderly citizens, and the medical services in the district—touching on district management and the statutory committees, including the professional organisations.

Lunch time each day is spent with a different partner, and in the afternoon the student joins that partner for the early surgery consultations, changing to a different doctor for a later surgery. This gives the student a chance to observe different approaches, alternative management, and, very often, a different rapport with the patients.

On the second evening the student is introduced to out-of-hours service, accompanying the doctor on emergency calls, emergency consultations, and casualties, and even a night visit if time permits—the doctor collecting the student from the local hospital where he stays. Occasionally the student may stay in the doctor's home overnight and take part in all the out-of-hours activity.

Day 3—The student joins the fourth partner for an early surgery and then joins the teacher for the second half of the morning. The patients are all elderly citizens in one clinic, and there is ample time for teaching, history-taking, and evaluating the many clinical findings and how these findings control the management of the patient's problem. The afternoon surgery is timed at longer intervals so that the student can take five or six major problems and examine them in depth, which allows the teacher to assess the student's ability and identify the obvious gaps in knowledge and methods of dealing with the patient as a whole person and not as one specialised system.

Day 4—Starts off with an early morning round of visits to chronically sick and house-bound patients. Discussion can take place on housing conditions, housing adaptations, nursing aids,

services of the occupational therapist, the problems of the elderly living alone, the difficulty in getting medicine, and the only one of getting patients to take the medicines prescribed. This is followed by an immunisation clinic and a discussion of immunisation procedures from the general practice point of view. The rest of the morning is spent observing the teacher writing repeat prescriptions and explaining drug regulations, prescription writing, and regulations pertaining to exemption from prescription charges. In the afternoon a full consultation programme with a different partner continues as a clinical session.

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Another point not always appreciated about radiotherapy is its flexibility. At least two major decisions have to be made, only one of which needs to be considered in chemotherapy or surgery. Firstly, as in chemotherapy, what dose? This will depend on assessment of the likely radiosensitivity of the tumour (some need a much higher dose than others) and of the current tolerance of the patient and his normal tissues.

Secondly, how much of the body should be radiated? In the case of local radiation given as an alternative to surgery—for example, for carcinoma of the cervix or larynx, two types of cancer frequently cured by radiotherapy alone—this is a similar decision to that made by the surgeon when he decides how much apparently normal tissues around the tumour to remove. As with surgery, there is a dilemma. Include too little "normal" tissue and we fail to cure. Include too much and we add to risks and side effects. Unfortunately, this is even truer when large parts of the body are radiated. The greater the volume radiated, the lower the dose that can be safely given.

Apart from achieving cures and long remissions, chemotherapy and radiotherapy may each be useful in relieving symptoms. Radiotherapy has the advantage that, if desired, it can be directed solely at those areas of disease that are causing symptoms, thus improving the balance between benefit and side effects. Examples include pain (which often dramatically improves, especially when due to bone metastases); ulceration (which may heal); bleeding (which usually stops); or one of the many symptoms due to local obstruction or pressure (dyspnoea from bronchial occlusion, dysphagia from oesophageal narrowing, oedema from lymphatic or venous pressure, and so on).

Unfortunately, chemotherapy and radiotherapy often go hand in hand, and there is no kind of cancer (however radio-resistant its textbook image) where local symptoms of this kind respond better to chemotherapy than to radiotherapy. Often the reverse is the case.

Reactions

The best reply to an anxious patient who asks "Will I be sick? Will my hair fall out?" is often "Ask at the hospital; every case is different"—perhaps adding a word of encouragement, such as, "You may find it easier than you think." A recent patient of mine was pleasantly surprised. This helps to counteract the undiluted horror stories about chemotherapy and radiotherapy so often handed out by a "friend" or neighbour. Some middle-aged women seem especially fond of frightening others in this way.

Chemotherapy sickness can be a serious problem with some drugs, but causes little trouble with others. Radiation sickness

(which occurs mainly with abdominal radiation) is less of a problem than it once was. Many patients never have it, or even the mildest nausea—especially if their morale is good; if they travel by private car rather than ambulance; and if they can be kept away from other patients suffering such side effects, radiation sickness being very "infectious."

If there is any nausea or vomiting more than a week after radiotherapy or chemotherapy has been completed some other cause should be sought. Blaming treatment when symptoms are really due to progressive disease—the idea being to reassure the patient—is understandable but often shortsighted and should seldom be necessary. It can damage confidence in the radiotherapist (who probably discusses side effects with the patient before treatment), confuse relatives, and lead to patients refusing further treatment that could have helped them.

Temporary alopecia is a serious psychological disadvantage with certain kinds of chemotherapy. Some drugs never cause it, some occasionally, some frequently. Radiotherapy cannot cause it unless the scalp itself has to be radiated. There is a big variation in how much a patient minds it; and this needs to be discussed and assessed. Some men mind a lot; some women surprisingly little. Wigs look much better than they used to, especially on women.

Radiation skin reactions—which are really no different to sunburn or sunburn—are sometimes unavoidable, even essential, but in many cases modern skin sparing techniques can be used and there will then be no skin reaction whatever. Unfortunately, there is no way of sparing mucous membrane in the same way. So if a high dose of radiation has to be given to lip, tongue, larynx, bowel, bladder, and so on, predictable local symptoms will follow for a period of one to three weeks, maybe longer, due to the local inflammatory response.

Radiotherapy and chemotherapy may each be very hard on the patient or marvellously gentle and easy. The severity of most side effects depends on the dose given; but unpredictable individual variations are a problem. Difficult decisions have to be faced. Where cure is unlikely, much may still be achieved, but it is also all too easy to do more harm than good. Like every other clinical specialist, our job is to decide not just what we think is possible, but what we think is wise.

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Diary of Urban Marks: 1880-1949

My bowler has seemed to have an attraction for people. One night I went to the Metropolitan Music Hall, where the rule was one house nightly. When I had taken my seat there were very few present. I put my bowler on the seat in front of me. Gradually some Mary's men trickled in, and then more and more until it seemed as if all Mary's students were there. I asked a man why this was and he informed me that the Hospital Football Club had won the Inter-Hospital Cup. It had been decided to have a "rag" in honour of the victory. Johnny Le Bas happened to be sitting alongside of my seat. He had had a few over drinks and was half way through the programme when Julie Nickay had stopped the band and appealed for a hearing Johnny staggered up and cheered and cheered. He came violently sick and made use of my hat, which was removed together with Johnny by an attendant. Julie then went on to complete her appeal. She said that she could understand the exuberance of spirit in young men who had taken all the cups available in all-hand volume (which was the case for that year), but she pointed out that other people had also paid to see the performance and asked us to behave

like gentlemen and not like hoodlums. This only inflamed the men more, and Julie declined to go on with her performance. Then Mr Edgar, the manager, came on the stage and threatened that if the "rag" went on he would have every student thrown out. After that there was peace. But I did not get my hat back, and Johnny did not buy me a new one.

Correction

Blood pressure recording by general practitioners in north-east Scotland

We regret that an error occurred in table V of the paper by Drs L D Ritchie and Dr Ann M. Dornie in table V in the 10th column: diastolic blood pressure (mm Hg) for patients aged 20-59 years and >60 years should have read <100; 100-109; 110-119; 120.