PRACTICE OBSERVED

Practising Prevention

Helping agencies

SIMON A SMAIL

Although many programmes of preventive care can be put into effect using resources drawn solely from within the practice there are several other agencies whose help may be invaluable and who may contribute considerably to the success of preventive care.

Local agencies

HEALTH AUTHORITY SERVICES

Health authorities are concerned to ensure that there is an adequate level of preventive care in their areas, but an effective overall strategy in an area demands close co-operation between the community services provided by the authority and general practitioners. Health authorities often take responsibility for preventive care for certain groups of patients and may, for example, provide paediatric screening and immunisation clinics, family planning clinics, and cervical cytology clinics. Local practice and deployment of resources varies from one authority to another, but it is vital that there is good communication between those who are responsible for running the clinical services of the authority and local practitioners to avoid obvious gaps in the provision of preventive care or, on the other hand, unnecessary duplication of effort. Many community medicine specialists are now more sensitive to the potential for practising preventive care in the practice, since it is often more logical for activities such as immunisation, antenatal care, family planning, and cervical cytology to be provided by the practitioner. Community medicine specialists will be able to provide practitioners with advice about local epidemiology but also can often give specific advice about the practicalities of initiating a preventive programme, such as a screening programme for hypertension.

Carrying out a programme of preventive care in a practice will often require the services of district nurses, health visitors, and midwives, who are employed by the health authority. If a practice is planning a new initiative it is important to discuss the plans not only with the nursing staff but also with the nursing officer. There may be the need for resources, but often a need for further training as well. For example, if a treatment-room sister is to help to run an immunisation clinic the health authority will need to be satisfied that the nurse is competent to undertake the additional tasks. Usually the specialist in community medicine will be able to advise if any problems arise.

HEALTH EDUCATION OFFICER

Virtually all health authorities now have the services of at least one full-time health education officer (HEO). He or she is responsible for co-ordinating health education services in the area or district and for providing advice and resources. Many HEOs have a background in nursing or health visiting and some in education. About a third of all HEOs have undertaken further training and hold the diploma in health education. Most are likely to hold this diploma in the future.

The HEO can provide a most important service for practitioners. He routinely keeps health visitors fully informed about local health education plans and about new initiatives, but he will always be willing to provide direct advice to practitioners. He holds stocks of health education material, ranging from displays and posters to films and film strips suitable for different audiences. Most health education units stock the full range of pamphlets from the Health Education Council and Scottish Health Education Group and often many others as well, including material produced locally. Some units have the services of a graphic artist or audiovisual technician and will lend slide or film projectors.

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PATIENT GROUPS

Some practices have now set up patient participation groups, which can supply a valuable framework for a preventive campaign. The group itself may help to run the campaign and organise meetings of patients. In some areas Community Health Councils have become interested in preventive care and run co-ordinated local campaigns. Some CHCs have taken a particular interest in tertiary prevention (managing established disease) by seeking out and publicising facilities for patients with chronic disease and disability. Other local groups may also be helpful. Mother and baby groups are often attended by the health visitor who may be able to influence the health beliefs of those attending the group, but subsequently individual members of the group may have a more general effect by disseminating ideas of preventive care in the community.

Although there has been a history of difficult relationships between some self-help groups and the medical profession there is no doubt that many self-help groups, such as branches of the Eczema Society, British Diabetic Association, British Epilepsy Association, Alcoholics Anonymous, or weight control groups, can be invaluable for many patients and can supplement the efforts of the practitioner in both secondary (early detection of disease) and tertiary prevention.

LOCAL AUTHORITY

The local authority must also be seen as an important resource. The education department is responsible for health education in schools and may welcome advice from local health visitors or doctors. Adult education programmes always include keep fit classes of various kinds. Patients can often be encouraged to take a little more exercise by joining a keep fit class, but other classes that aim to teach new hobbies may also be valuable in helping patients to find new interests. Cooking classes may even help people to learn something about nutrition. Recently some local authorities have started to run classes that are based on the successful Health Education Council campaign "Look After Yourself" and include straightforward advice about diet and exercise.

Social services departments are responsible for running day centres for elderly people and in England and Wales employ occupational therapists—both of importance in tertiary prevention. They also have details of local self-help groups.

LOCAL MEDIA

Local newspapers often run features or series on aspects of preventive care. This may stimulate local interest that a practice can use to advantage. Editors always welcome ideas, and practitioners can often act as a resource themselves, either by writing for the newspaper or by providing material or ideas for a features writer. Local radio also has a considerable impact and many practitioners act as the popular local "radio doc." Although listeners may not remember a great deal of specific information given in radio chat programmes they do respond to the general tone of the programme. Producers always like doctors to discuss the latest headline-catching miracle cure, but most radio doctors manage to temper their producers' enthusiasm and include regular preventive advice in their programmes.

National agencies

CENTRAL INFORMATION SERVICE FOUNDATION

An information service is available free of charge to all practitioners in Britain and provides information and advice about all aspects of practice management. For example, practitioners may obtain advice about setting up an age/sex register, a recall register, or a morbidity register—any of which may be valuable in providing preventive care in the practice.

HEALTH EDUCATION COUNCIL
SCOTTISH HEALTH EDUCATION GROUP

Both the HEC and SHEG have similar functions as central co-ordinating bodies for health education activities. They publish leaflets and pamphlets, many of which are co-ordinated with national campaigns. Some are now specifically designed for general practice—for example, the Give Up Smoking kit. The HEC also has a resources centre, which consists of a lending library and a collection of health education material including audiovisual aids and facilities for viewing. A bibliographic service is also available.

VOLUNTARY ORGANISATIONS

Many charitable bodies produce educational material for patients with chronic disease—for example, the British Diabetic Association and the British Epilepsy Association produce excellent pamphlets. Some charities also produce leaflets and audiovisual aids that can be used when giving talks in the practice, in school, and in youth clubs, for instance. Many of these are of a general nature and not necessarily linked to specific disease. A comprehensive index of this material is published biannually,[1] and a full list of charitable organisations concerned in health care is available from the Family Welfare Association.

Useful addresses

BMA BLAT Film Library
BMA House
Tavistock Square
London WC1H 9JP
Tel: 01-387-4499

Central Information Service Foundation
14 Princes Gate
London SW7 1PU
Tel: 01-581-3232

Family Planning Information Service
St Andrew's House
27-35 Mortimer Street
London W1N 7RJ
Tel: 01-636-7866

Family Welfare Association
(publishes *Charities Digest*)
501-505 Kingsland Road
Dalston
London E8 4AV
Tel: 01-254-6251

Health Education Council
78 New Oxford Street
(Resources Centre, 71-75 New Oxford Street)
London WC1A 1AH
Tel: 01-637-1881

Scottish Health Education Group
Woodburn House
Canaan Lane
Edinburgh EH10 4SG
Tel: 031-447-8044

Reference

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Practice Research

Drug treatment in elderly patients: GP audit

CEDRICK R MARTYS

The percentage of elderly people in the population is growing; more than 14%, are aged 65 years and over.[1] Half of these people may be on drug treatment.[2 3] In one survey of elderly inpatients[3] the average number of drugs prescribed was 3·3. Older patients are at greater risk than younger people from polypharmacy, drug interactions, and adverse effects of drugs.[4-6] Most reported work, however, is based on studies and experience in hospital.[7] As a step towards identifying problems associated with drug treatment of elderly patients in the community I studied patients in my practice. I aimed at identifying all patients in the practice who were over the age of 65 and were on long-term drug treatment (long-term being defined as treatment of more than one month's duration), and to review each patient's treatment regimen for potential drug interactions and adverse effects and to correct this when required.

Method

All patients over the age of 65 who were on drug treatment were identified from the age-sex register and the prescription record card that is inserted in the medical records of every patient in the practice who is on long-term treatment. Each of these patients was interviewed over six months, either during attendance at surgery or on a home visit, and questioned about his or her treatment. Symptoms complained of at the time of the interview were recorded on a data sheet together with details of drug and dosage regimens, including self-treatment. Patients were also asked if they had taken their drugs as recommended.

After patients were given an opportunity to state in their own words whether they had developed any new or unexpected symptoms since starting treatment a checklist of specific symptoms was then gone through. Information was particularly required concerning symptoms that might be drug-induced, and though the use of checklists has been criticised on account of suggestibility they have been successfully used in several surveys.[8 9]

All of the interviewing was done by a drug monitor, who is a State-registered nurse and health visitor employed by the practice and trained by me in techniques of drug monitoring. She interviewed each patient once only, and after explaining the study to the patient completed the data sheet. A blood sample was taken for full blood count, to estimate urea and electrolyte concentrations, and when appropriate to estimate serum digoxin concentrations.

Results

In a practice population of 3300 patients 538 (16%) were over the age of 65 years at the start of the survey, and 167 patients (31%) had been taking at least one drug for more than a month (table I). The average number of drugs taken was 3·2, but 61 patients (36% of those on treatment) were taking four or more (figure). Of the 167 patients on drug treatment, 137 (80%) thought that they were taking their drugs as prescribed. The remaining 20%, were either confused over multiple drug treatment or had deliberately reduced the dosage for no clear reason. Occasionally side effects were cited as the cause of non-compliance, but the patients with side effects usually had only a hazy recollection of how long they had been suffering from them.

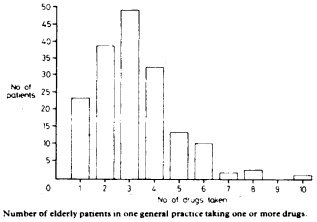
Sixty-one patients (36%) were thought to have a possible drug-related symptom or sign, including dyspepsia, dizzyness, confusion, tremor, and paraesthesiae (table II). Eighty-four (50%) were taking a diuretic (table III), and 67 (80%) of these were also taking a slow-release potassium supplement. Although 22 patients who were taking a diuretic had a serum potassium concentration below 3·5 mmol (mEq)/l (the lower limit of the normal range of the local laboratory), only one patient had a concentration (2·7 mmol(mEq)/l) that was considered to be seriously below normal. All samples for estimation of serum potassium concentrations were delivered to the laboratory within four hours of collection.

Twenty-two patients (13%) were taking digoxin. The results of laboratory measurement on samples taken between four and six hours after the last dose showed that three patients had a serum concentration of digoxin that was above the normal therapeutic range of 0·8-2·0 μg/l, and three were below. Six patients on oral corticosteroid and anti-inflammatory drugs had mild iron deficiency anaemia, which may have been caused by increased occult blood loss from the bowel as a result of drug treatment.

There was evidence of impaired renal function in 61 patients (36%) with raised blood urea concentrations, and 55 (33%) had impaired creatinine clearance. Many of these patients were taking digoxin, diuretics, slow-release potassium, and analgesics, all of which are excreted by the kidney, and thus were at greater risk from drug toxicity owing to abnormally high blood concentrations because of impaired renal excretion of these drugs.

TABLE I—*Patients over 65 years of age on drug treatment*

	No patients over 65 years of age	No (%) taking one or more drugs
Men	218	70 (32)
Women	320	97 (30)
Total	538	167 (31)



Number of elderly patients in one general practice taking one or more drugs.

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TABLE II—*Symptoms and signs that were potentially drug-related*

Symptom/sign	No of patients (total=61)	Drug treatment	No of patients
Dyspepsia/flatulence	11	Prednisolone	5
		Indomethacin	1
		Naproxen	2
		Ibuprofen	1
		BC powder	1
		Dextropropoxyphene	1
Dry mouth	20	Bendrofluazide	10
		Frusemide	6
		Bumetanide	4
Constipation	2	Bendrofluazide	1
		Paramol 118	1
Dizzyness/fainting	10	Propranolol	4
		Bethanidine	2
		Methyldopa	3
		Paramol 118	1
Tremor	7	Bendrofluazide	2
		Salbutamol	3
		Chlordiazepoxide	2
		Glyceryl trinitrate	2
		Propranolol	2
Headache	4	Salbutamol	1
		Diazepam	2
Paraesthesiae	1	Dextropropoxyphene	1
Drowsiness	2	Sodium amytal	1
Confusion	2	Dextropropoxyphene	1
		Diazepam	1
Depression	2	Dextropropoxyphene	1

TABLE III—*Diuretic treatment and serum potassium concentrations in 84 patients*

		Low K (<3·5 mmol(mEq)/l)		
Diuretic	Normal K	Diuretic + K	Diuretic alone	Not on diuretic
Bendrofluazide	23	12	8	—
Frusemide	25	1	1	—
Other	14	0	0	1(—)
Total No	62/74	13/15	9/11	1(—)

Discussion

Fourteen per cent of the British population are now aged over 65 and account for 33% of national expenditure on drugs.[1] Some prescribing for elderly people may be unnecessary, ineffective, or inappropriate,[10 11] and they are particularly at risk from both adverse effects of drugs and polypharmacy.[12] My survey identified many prescribing problems and suspected adverse effects.

Drug-induced symptoms—Thirty-six per cent of patients were "certainly" or "probably"[13] suffering from symptoms that were drug-induced. This is higher than the 15% reported for suspected iatrogenic disease in elderly patients in hospital,[4] but comparable figures are not available from other general practices. Although most drug-related symptoms were mild serious potential problems were identified, such as postural hypotension in patients taking methyldopa and bethanidine, and effects on the central nervous system in patients taking diazepam and dextropropoxyphene. The last two drugs were discontinued and the side effects disappeared. Effects on posture due to antihypertensive drugs were alleviated by either changing the treatment regimen or reducing the dosage. Patients with dyspepsia who were taking potent anti-inflammatory drugs were changed to drugs less likely to cause gastrointestinal side effects. In some patients it was necessary to continue treatment with prednisolone but they were given enteric-coated preparations, and oral anti-inflammatory drugs were discontinued in those who had to take prednisolone long term.

Potassium—No life-threatening adverse effects owing to abnormal potassium concentrations in patients taking diuretics were detected. These are rare even among hospital inpatients,[14] where hyperkalaemia and hypokalemia are most frequently the cause. Hypokalaemia was detected in 26% of patients in the survey, but it is doubtful if this needs to be corrected unless the serum concentration falls below 3·0 mmol(mEq)/l.[15] Potassium supplements were of little benefit to patients taking diuretics.[16] Although severe hypokalaemia (3·0 mmol(mEq)/l) can potentiate digoxin toxicity it is unlikely that mild hypokalaemia is harmful.[17] Thus, potassium supplements have been discontinued in all elderly patients who take thiazide diuretics and also in those who have evidence of impaired renal function. But patients who take the more potent loop diuretics, such as frusemide, and have good renal function continue to take potassium replacement treatment.

Digoxin—None of the patients taking digoxin had clinically important adverse effects. Of the three patients with drug concentrations above the accepted therapeutic range, adjusting the dosage resulted in a reduced drug concentration to normal at a second estimation. Digoxin was discontinued in patients whose concentrations were below the therapeutic range with no apparent ill effect. Estimations of serum digoxin concentrations are useful to determine the optimum therapeutic dose in general practice and to monitor patient compliance.[18] In most instances when the patient is taking the drug but serum concentrations are below the accepted range discontinuing treatment produces no ill effects.[19 20]

Anti-inflammatory drugs—When anaemia was found in patients taking oral corticosteroids and other anti-inflammatory drugs an attempt was made to change to preparations less likely to increase occult blood loss from the bowel. It was difficult, however, to discontinue prednisolone treatment. In most cases this had been introduced many years before to treat rheumatoid arthritis, and I thought that it was better to leave patients on this drug (all five so affected were taking 10 mg or less daily) and to introduce regular blood film examinations than to reduce the dose gradually to nil and risk an exacerbation of their arthritis. They were prescribed an enteric-coated preparation.

Survey—There were problems in interpreting the symptom checklist on the data sheet that was completed for each patient. Elderly patients often have multiple symptomatology and pathology, and most symptoms elicited were thought to be a result of the patient's illness rather than of treatment. Only symptoms that were thought to be certainly or probably drug-induced were identified as adverse effects, according to current definitions.[21] Undoubtedly some symptoms that were not drug-related were classified as such, and, more seriously, some drug-related symptoms may have been overlooked, especially if they were not on the checklist. But this method of intensive surveillance is more likely to produce a much more comprehensive picture of ill health due to drugs in elderly patients on long-term treatment than a method that relies on spontaneous, voluntary reporting, which is invariably incomplete and haphazard.

The patients generally welcomed the survey. They appreciated the interest shown in their complaints and their treatment, and in every case agreed to provide a blood sample when the reasons were explained. The drug monitor spent on average 30 minutes with each patient and often had to travel several miles on home visits in this semirural practice. Many individual prescribing problems were identified and corrected. We have learnt something of the problem of drug-related disease in elderly patients in our practice and have arranged for regular follow-up of patients on long-term treatment by the doctor or the nurse at six-monthly intervals or less. This must represent an improved standard of care for the patients concerned.

Conclusions

In a semirural practice every patient over the age of 65 years who had been receiving treatment with at least one drug for more

than one month was interviewed by the practice drug monitor, a State-registered nurse. She had been trained to evaluate problems associated with drug treatment and to identify drug-related morbidity occurring in elderly patients on long-term treatment. Of 167 patients so identified, 36% were thought to be suffering from unwanted effects of drugs at the time of the interview. When appropriate, measures were taken to reduce the incidence of iatrogenic disease in such patients.

I thank Hilda Mellor for her help as drug monitor in the survey, and Ann Morton for typing this article. I am grateful to my wife Shirley for help with proofreading and artwork, and to the staff of Chesterfield Hospital laboratories for the analysis of haematological and biochemical samples.

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Research in General Practice

A nurse's experience in the MRC's hypertension trial

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My introduction to general practice research coincided with the pilot study of the Medical Research Council's trial for mild hypertension[1] nine years ago, before any participants had been recruited. Over half a million people have now been screened, trial recruitment is complete, and 176 group practices have provided 16 415 (95%) of the 17 362[2] trial participants.

Why I started

Initially, doctors were going to carry out the research, with perhaps a little help from a practice nurse or secretary. Detailed trial methods were left to individual centres but had to include screening, a medical examination including electrocardiogram, blood and urine tests, randomisation to active or placebo treatment, and follow-up visits every two weeks for three months, three monthly for the rest of the first year, and at least six monthly thereafter for five years, with full medical examinations yearly.

Doctors in a group practice from Stratford-upon-Avon who were interested in taking part were somewhat perturbed at the extra work load that the trial would entail for an already busy practice unless they employed someone specifically for the trial. I was asked at a social occasion by a friend who was one of the GPs whether I was prepared to be involved. My interest was aroused because I would be given, or rather I was expected to have, total responsibility for the planning and organisation of the study in the practice. In return for this I could plan my hours to fit around the needs of my three young children. Also, although all the partners had agreed to participate in the study, one of them was known to be enthusiastic about treating hypertension, and I therefore was assured of support. I recollect, though, that it was the whole concept of research and its potential in general practice that appealed to me.

What I did

For every step forward I seemed to take two back, but eventually a screening programme was set up in the practice and over 15 months all patients aged between 35 and 64 were invited to be screened. Those who fulfilled the trial criteria were given a medical examination by the doctor and were entered into the trial.

During the expansion of the pilot trial, Dr W E Miall, the trial co-ordinator at Northwick Park Hospital, asked me if I would develop and teach screening, trial organisation, and research methods to clinics new to the trial. By this time I was

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aware that our screening programme had been far too slow for research purposes and that if the main trial was sanctioned a much quicker and more efficient screening method was needed. I began to realise the importance of standardising all trial procedures and the necessity for a structured training programme for nurses, as it was evident that with training the nurse was well able to play a major role in the trial.

All GPs who were considering joining the study visited me at Stratford-upon-Avon before fully committing themselves to collaboration to learn more about how the trial would be run at the clinic level. The potential pitfalls and problems of setting up a research clinic in general practice were discussed, and particular reference was paid to the MRC trial logistics and the necessity of employing an intelligent, motivated nurse who had administrative and organisational abilities.

In the early days I visited each new clinic to teach screening and trial procedures, but when the main trial was underway it was not possible to do this as there were so many clinics and they were so widespread. I chose and trained five nurses who had been particularly competent in their own clinics and who had the teaching qualities necessary to train others.[2] The trainers lived in selected parts of the country and taught in their own geographical area.

What I found

I found that most practices were unable to carry out a fast screening programme owing to lack of space, and mobile screening facilities were assessed and found to be an efficient method of screening.[2] The trial nurse at each clinic was the leader of the team of locally recruited screening nurses, and a practice with 10 000 patients could screen their defined population in 28 days. It was thought appropriate that I should co-ordinate the screening programme, and this was carried out from an office at my home. My responsibilities included scheduling six mobile units, publicity for the screening programme, overseeing the training of screening nurses, analysing screening data, and providing screening equipment. Our field provided a site for the units each year during the summer break when maintenance, spring-cleaning, and restocking took place.

I discovered that it was extremely important to devise teaching methods that would leave little room for error, and therefore, although verbal training was given by the training nurse, the nurses were always asked to follow the comprehensive written instructions. To avoid confusion two separate training days were held for each practice, one for learning screening techniques, which included the standardisation of observers with the blood pressure training tapes,[3] standardisation in blood pressure measurement, and screening administration, and the other for trial procedures, which included advice on ECG recording techniques, venepuncture, centrifugation, and titration of drug dosages.

A programme of follow-up and quality control was found to be necessary, and clinics that have not yet completed the trial are visited at least yearly by the training nurse so trial techniques and data may be monitored. We hope that these visits allay the feeling of isolation experienced by clinic nurses and help to make them aware of belonging to an organisation. Undoubtedly the most successful clinics are those where both the doctor and nurse are enthusiastic. Clinics, however, can be very satisfactory as long as the nurse is motivated, but if she lacks interest then the clinic tends to be less good. On the whole, nurses who were 30 to 45 years old were the most successful, and 95%, of them were married with children since the hours of work can be manipulated during school holidays. Recruitment of suitable nurses was not a problem.

Perhaps the most important and refreshing aspect of the whole trial was the amount of enthusiasm and good will shown by most of the doctors for both the trial and for the part of the co-ordination for which I was responsible. Here was a largely untapped pool of motivated practices who, when provided with adequate help, finance, and facilities, enjoyed and successfully contributed to a multicentre trial.

Problems I experienced

Maintaining motivation and standardisation is probably the biggest problem of any large trial of long duration. Good clinics seem to cope well, but less good ones often require more frequent visits from the training nurse. I have found it necessary to be aware wherever possible of internal problems in clinics and to be available to give encouragement and advice. Annual conferences for all the participating clinics at which trial progress reports are given and scientific issues presented and discussed have proved stimulating and have done much to maintain enthusiasm in the clinics.

Inevitably, co-ordinating a screening programme for half a million people has not been without its problems. The programme had to be tight, fast, efficient, and as economical as possible, and, apart from disorganised clinics, which was rare, the biggest problem initially was ensuring that the sphygmomanometers were always accurate and in good working order.

The doctors as well as the nurses needed to be standardised in blood pressure measurement, and for all trial purposes a Hawksley Random Zero sphygmomanometer was used to remove observer bias. Phase V had been chosen as the diastolic end-point, which was fortunate as it made agreement less difficult. It was not always easy, however, for a doctor to be tested by a nurse (teaching stethoscopes were used for this purpose). It was noticeable that the less enthusiastic doctors were least keen on being standardised by a nurse, and a combination of tact, charm, and toughness was required by the training nurse.

Over the first few years there were occasional periods of underwork as a result of the delay in the authorisation of funds for the main trial, followed by periods of excessive work once the trial was sanctioned. The doctors and reception staff at the Stratford practice have been very tolerant of my work in piloting sub-studies and new projects. Unfortunately—but understandably—much of the effort has been to no avail.

I have found it a little frustrating that there is no career structure for someone in my position; apparently I have a "one off" job. I am no longer a nurse in the usual sense, but I am not MRC scientific staff either. An unexpected problem has been the necessity to develop confidence in public speaking at symposiums and scientific meetings. I have also had to learn to put the point of view of the research nurses and trial clinics to fellow members of the MRC trial working party, which sometimes has not been the easiest of tasks.

The conclusions I was able to draw

Given the right conditions, general practice can undoubtedly be an extremely rewarding and successful area in which to carry out clinical research and need not necessarily overload the doctor. A research nurse can be successfully integrated into the practice team and be given responsibility for the organisation and running of a project or projects, provided at least one of the GPs is interested and motivated and is prepared to give her support and advice. Equally important is the necessity to establish that the other partners consider the project worth while and ethically justifiable, even though their involvement need be minimal.

It is probable that adhering to a trial protocol comes more easily to a nurse than a doctor, as a nurse is trained to follow directions and a doctor to issue them. It is worth noting that by keeping strictly to a structured drug schedule nurses, under medical supervision, are well able to titrate drug dosages to achieve good control of blood pressure for patients randomised to active treatment.

The patients seem to enjoy their participation in the MRC trial and the extra care they receive. Most of them identify the research programme with their own practice rather than with the MRC, and their sense of loyalty might explain the high level of compliance found in the trial clinics.

Lessons I learnt

Probably the most important lesson I learnt was to be objective and critical of my own trial methods so others could benefit and learn from my mistakes and experience. I also had to appreciate that all doctors were different and what would please one would not necessarily please another. Although overall standardisation was required it was sometimes difficult for some of the doctors and nurses to accept and achieve this.

About 1200 nurses worked in the screening units during the screening programme, and while screening was in progress I compiled a register of those nurses who were good and wished to be considered for future research programmes. This turned out to be very valuable, not only for the hypertension screening programme, but also for an MRC national survey based at Bristol University.

Advice for others undertaking such research

The MRC trial is the largest therapeutic trial ever to be mounted in Britain but undoubtedly in the future other working parties will contemplate further large scale projects. Establishing a widely representative working party is essential, but perhaps of greater importance is the necessity to convey to all the participating clinics that the success of the trial depends on the major part they play in a collaborative venture. From the point of view of the MRC trial of course it would have been easier to mount the trial knowing what we know now, and others contemplating similar co-operative projects would do well to contact groups nationally and internationally with the right experience.

Present opportunities for research

A large-scale framework for research in general practice has been provided by the MRC trial, and in the view of many should not be dispersed when the trial has been completed. The feasibility of other projects is now being assessed and piloted within that structure with a view to providing answers to other important questions. Many nurses have shown that they have an aptitude for carrying out research procedures, and though it will always be up to the medical profession to identify the most promising fields for medical research the experience of the MRC hypertension trial suggests that there is a definite place for the research-minded nurse in general practice.

I am grateful to Dr W E Miall for his helpful advice and to Mrs J Cater for her support. My thanks are also due to the trial field-workers and the co-ordinating team at Northwick Park Hospital, and particularly to Dr M H F Coigley and his partners and staff at Bridge House Medical Centre, Stratford-upon-Avon.

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Plus Ça Change . . .

Graves Medical Audiovisual Library: 1957-82

VALERIE GRAVES

In the *BMJ* of 10 July 1982 Dr G B Taylor[1] wrote about discussion groups. Twenty-five years ago my husband John and I were helping general practitioners to teach one another in groups. 1957 was the year in which Harold Macmillan became prime minister, and a little dog called Laika circled the earth in Sputnik. TV licences had gone up to £4 and prescription charges to one shilling. There were polio epidemics and angry questions in Parliament about vaccine shortages. Smallpox broke out in Tottenham, and tetanus immunisation was not yet routine. Syringes were made of glass, but plastic tubing was coming in for infusions. New drugs included nystatin, tolbutamide, paracetamol, and synthetic penicillin V. Chlorthiazide was beginning to replace mercurials, but the new tranquillisers, such as meprobamate, were regarded with suspicion. Prednisolone became available for general practitioners' use.

General practitioners felt the need to prove themselves. They were very unhappy, not only about money (arguments about low pay nearly resulted in mass resignation) but also about low status (dropouts from the consultant ladder). Refresher courses were few and hospital-oriented. We were among the enthusiasts who had started the College of General Practitioners in 1952. John was a principal in a semirural practice; I joined him later, but was then temporarily retired with four small children. Having been a preclinical lecturer, my knowledge of research methodology was useful to the infant college in handling data such as their 1955 measles survey and 1956 questionnaire about the needs of members. This showed such a desire for better learning facilities for general practitioners that we were encouraged to start some kind of do-it-yourself courses. We decided to record good speakers on tape and send tapes round to volunteers picked from the replies to the questionnaire.

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Some of our speakers were general practitioners, some specialists. Some of the topics seem naive today, but they were burning issues then. The response astonished us. We must have picked a crucial moment when general practice consciousness was waiting to express itself, for within five years 450 groups were meeting regularly to hear and discuss recordings. We had started an avalanche.

In an article we wrote for the *BMJ* in 1961[2] we looked at the 308 general practitioners who were running discussion groups at that time. They were an interesting selection: mostly fairly young (averaging 16 years from registration); 86 had higher qualifications, including 22 MDs, seven MRCPs, two FRCSs, and one FRCP. Being a member of a study group, then as now, meant self-examination. (We call it audit now.) Many of these GPs went on to start departments of general practice and vocational training schemes and to set up local postgraduate centres. The tape groups, having played their part in fermenting this enthusiasm and activity, gradually became less important.

Twenty-five years later we see the wheel turning round again: Dr Taylor's article describes the same principles and aspirations. There is no shortage of courses now, but many general practitioners again find that self-education in small groups is more rewarding. Dr Taylor's article appeared under the title "Overcoming Isolation." In our day we talked about academic isolation. Even in urban areas general practitioners could feel cut off and were reluctant to expose their ignorance to bright young registrars. A tape brought friendly personal teaching—you could criticise the speaker and admit your shortcomings without anxiety. Perhaps the new wave of audit groups will produce another generation of young general practitioners who will effect great changes.

Developing a library

The scheme which we called the Medical Recording Service might well have faded away with its discussion groups, but to our surprise it did not. By the mid 'sixties it was developing into a lending library. It continued to grow from a part-time hobby to a cottage industry. It spread from room to room of our house, to a prefabricated building in the garden, and then to its own premises in nearby Chelmsford. The idea of tape-slide teaching spread to hospital doctors, to nurses, students, remedial therapists, social workers, first-aiders, and people in many different types of training courses. From the beginning doctors overseas wanted to use our tapes. By the mid 'seventies we were sending out on loan or for sale roughly 20 000 tapes a year; about a fifth of these went overseas, especially to new medical schools in the developing world. Correspondence and visitors from all over the world have added colour to the sometimes humdrum life of a rural general practitioner, in which capacity we both still earned our living.

What was the appeal of tape-slide teaching?—for it is still popular in spite of the encroaching videocassette. Probably its simplicity and cheapness, using only what we called "High Street technology"—that is, playback equipment that everyone has at home. Video recorders are High Street technology now, and so may one day take over many educational functions. A good teacher on tape-slide can make difficult concepts more real and easy to understand.

We had a lot of fun in our time, meeting hundreds of celebrities and getting lost in countless medical schools and institutes. We have sat in on independent charity, Group, and Alcoholic Audiovisual meetings in St Martin's crypt, exchanged scurrilous doggerel on tape with the immortal Richard Asher, and sweated over currency problems with Arab banks. We had a lot of fun, too, recording annual clinical meetings with the *BMJ*. Our tapes have travelled on llama-back in Peru, in submarines, and in lifeboats, and taught nuns in Nigeria and medical aides in Fiji. Our visitor's book and stamp collection are a geographical Aladdin's cave.

Independent charity

It stopped being fun when John died of cancer in 1980 at the early age of 57. But the work has gone on. In 1977 the service became an independent charity, Graves Medical Audiovisual Library. As well as making tapes of our own commissioned material we make tapes for the Royal Colleges of Surgeons and of Physicians, for organisations such as the British Orthopaedic Association and the Association of Clinical Pathologists, and distribute programmes made in many medical schools. We provide funds to assist new productions and research.

In 1957 people thought we were a little mad; but imitation is flattery and nowadays we have many commercial competitors. We are proud to have been concerned in our small way in broadcasting the best of British teaching for 25 years, and we hope to continue for many more.

I thank Mrs Jean Judd for typing this manuscript.

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SHOULD A DRUGGIST PRESCRIBE? Now the question is, what restrictions should be affixed to the business of a druggist. Some of our members say, "he should not be allowed to practise at all, not even give a dose of medicine"; and looking only to their own interest are very anxious upon this point. But it appears to me, that it is impossible to do this consistently with the advantages that the public derive from the druggists. I shall take the liberty of stating a thing that happened to a friend of mine, a gentleman, a Member of this House. Going home at night he finds himself unwell, goes into the shop of Mr Grindle, the druggist in Pall Mall, and says, "Mr Grindle, I have a pain in my stomach and should like a dose of medicine." Mr Grindle says, "I cannot give it to you, because you have not been prescribed for by a physician or surgeon; and the Act of Parliament will not allow me to do it." My friend replies, "Have you not got the very prescription which Mr So-and-so gave me last week?" Mr Grindle answers, "Yes, I have Sir, here it is." "Well, give me that." "No, that was not for this complaint, and the Act of Parliament says I must not give a dose of physic.—GEORGE JAMES GUTHRIE, FRCS. (Select Committee on Medical Education. *Parliamentary Papers* 1834.)