PRACTICE OBSERVED

Practising Prevention

What is preventable?

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"Prevention is better than cure." But it is one thing to know the cause and another to remove or modify it—and yet another, by doing so, to prevent the disease. One difficulty is that there are many uncertainties about the effectiveness of various preventive measures. Not that this is peculiar to preventive medicine: few aspects of therapeutic medicine have been shown to be of undoubted benefit when rigorously appraised. General practitioners are used to having to act on less than adequate information, and there is evidence that some important preventive activities are effective.

The general practitioner is particularly well placed to practice preventive medicine because he has ready access to a defined population; it is frequent contact with those most in need; can identify those at particular risk; will be concerned with the management of any problems detected; and can combine prevention with cure and care. Most importantly, opportunities for intervention arise during normal care when the patient has sought medical help, albeit for an unrelated problem.

Immunisation

Immunisation against infectious diseases is one form of primary prevention, the value of which is undisputed. For most doctors diphtheria is a disease of historical interest only, but many will have personal knowledge of the effects of others such as polio and measles before effective immunisation was introduced. More recently the resurgence of whooping cough after the decline in pertussis immunisation has been a reminder of the importance of this form of prevention. Moreover, despite the availability of safe reliable vaccines, there are still about 100

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cases of tetanus (with its high fatality rate) each year and several hundred babies born with congenital malformations due to rubella.

Contraception

Contraception is another important aspect of primary prevention and one in which general practitioners have played a greater part in recent years—25%, now provide family planning services. Despite this, more than 100 000 pregnancies are

terminated each year, indicating that there is considerable scope for promoting contraceptive practice.

Pregnancy and childbirth

Other preventive activities that have been incorporated into the routine work of many practices for some considerable time are antenatal care and paediatric surveillance. Antenatal care was the first screening procedure to be widely adopted in general practice. Identifying those women at greater risk of having an abnormal pregnancy or confinement is an important function of antenatal care, and though many of the procedures conducted on pregnant women remain unevaluated the overall benefits of antenatal care are generally accepted. The value of routine screening examinations in childhood is more debatable, though few would dispute the worth of selective ones.

Cancer of cervix and breast

Although cervical cytology was the first screening procedure to be introduced for the detection of malignant disease its effectiveness has only recently become fully acknowledged. The major problem in implementing screening, particularly applying to those most at risk of having cancer of the cervix. The case for breast cancer screening is, however, less clearly established. Although this is the commonest malignancy in women, killing about 12 000 every year (more than five times as many as gastric cancer) is the commonest cause of death in women aged 25 to 54, scope for its prevention seems limited.

Cardiovascular disease

But the main cause of death in developed countries is arterial disease—particularly coronary heart disease and strokes. As the figure illustrates, together they account for roughly half of all deaths and coronary heart disease alone for almost half of all deaths in middle-aged men. A recent review said that "about half of all strokes and a quarter of all deaths from coronary heart disease in people under 70 are probably preventable by the application of existing knowledge."

This presents a major challenge for general practitioners, particularly because it requires a shift towards doing more health education. The need for this arises out of the fact that arterial disease—and coronary heart disease in particular—seems to be largely determined by an unhealthy lifestyle and harmful habits. Smoking, overeating, faulty diets, excessive

alcohol intake, lack of exercise, and raised blood pressure have been shown with varying degrees of certainty to contribute to cardiovascular disease.

Psychiatric disorders

Prevention of psychiatric illness has been especially neglected. The importance of psychosocial factors in illness presented to the general practitioner and the high proportion of patients consulting their general practitioner who have psychological illness highlight the potential scope for its prevention. Preventive action at times of life change, such as parenthood, retirement, and bereavement, may avert the development of psychiatric disorders and alcoholism and reduce the risk of self-injury and suicide.

Chronic disease

Finally there are opportunities in general practice for tertiary prevention—managing established disease so as to prevent or limit disability or handicap. The careful supervision of patients known to have diabetes, hypertension and other chronic diseases is preventive medicine in a form which is perhaps more readily identified with the therapeutic role of the doctor.

Compliance

All these aspects of preventive medicine require not only action by doctors—but it is advice or "clinical" action—but also co-operation or "compliance" by patients. In case it should be thought that this problem is peculiar to prevention, we should remember that the fate of the medication we prescribe may be at least as uncertain as that of our advice.

Further articles in this series will explore specific aspects of preventive medicine in general practice.

Further reading

Health and prevention in primary care. Report from General Practice No 18. London: Royal College of General Practitioners, 1981.
Prevention of arterial disease in general practice. Report from General Practice No 19. London: Royal College of General Practitioners, 1981.
Prevention of psychiatric disorders in general practice. Report from General Practice No 20. London: Royal College of General Practitioners, 1981.
Family planning: an exercise in preventive medicine. Report from General Practice No 21. London: Royal College of General Practitioners, 1981.

entitle him to be so called; the second is the prevalent opinion that, in pursuit of the study of his great theory, he wasted from morning to night. The truth is, that the delicate state of his health rendered him incapable of prolonged thought for more than about three hours daily. His success was due to the fact that he concentrated all his powers of thought on one subject, so that the yearly sum of the very few hours devoted on each day to such thought amounted to the high display of mental energy, the result of which is demonstrated by his works, and by the great influence they have exercised on modern science and philosophy. More than one daily paper has compared Darwin to White, of Selborne fame; but they only resembled each other in being genial and scholarly gentlemen, living in the country, and saved from the disadvantages of constant interruption to thought by deficient worldly means. The author of the *Natural History of Selborne* was not a profound thinker on deep biological questions, but rather an active observer of the habits and instincts of animals, which he described in that picturesque manner and a pleasant literary style which has justly made him a popular favourite. (*British Medical Journal*, 1882.)

ONE HUNDRED YEARS AGO We have been favoured with information as to the medical history of the great naturalist, which will be read with much interest. Under the domination of a many-sided, sensitive, and highly strung nervous system, the health of the late Charles Darwin was always delicate, and often seriously impaired. For many years, he was a sufferer from diarrhoeal dyspepsia; later, he suffered from various irregular manifestations of a gory constitution, such as eczema, vaso-motor nerve-storms, vertigo, and other disorders of sensation. Nevertheless, by means of great care in diet, exercise, and regularity of sleep, he managed to keep himself in sufficiently good order for almost continual work of the highest kind. A year ago, he became subject to attacks of palpitation, with irregularity of the heart's action, occasionally accompanied by pain in the chest, spreading to the arms. A few months since, it was found that the heart and greater blood-vessels were degenerating. The arterial attacks became more frequent, and signs of heart-failure more serious; and it was, as we understand, in one of these attacks that our greatest naturalist expired. There are two common errors concerning Charles Darwin: one is, that that illustrious man was a professor, whilst in fact he never held any chair or fulfilled any educational duties which would

The Course Organiser

A case for change?

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We worry about our course organisers in this region; too few have grown old along with us. We have lost 11 of the 16 who were in post in 1977 and only seven of those now serving have worked with us for more than three years. Some would say that this is a good thing—new ideas can flourish and enthusiasm is kept high. But they make two assumptions: that the job can be learnt and performed effectively in a relatively short time and that many are eager to take up the challenge. Neither is true. Others would ask, "Do we need course organisers at all?" All regional advisers would at the least feel a pang or two if course organisers disappeared. (Most would deplore the consequences, since inevitably more responsibility would pass to the centre.) We believe that course organisers are an essential part of the whole structure of training for general practice and that it could not work without them. The expansion of such posts in every region demonstrates that others feel the same.

This region has more reason than most to make this assertion; it recognised the need early and claims to have conceived and given birth to the first of the species. A feature of our first scheme in 1969 was the appointment of a "tutor"—a general practitioner, Dr Ivor Haire. Until his death last year he took each trainee for the early weeks in general practice and was responsible for the trainee throughout the three-year course. The pattern was set and general practitioners "tutors" were appointed to all subsequent training schemes in this region. In those early days the "tutors" were classed as clinical assistants to the clinical tutor and paid for two sessions. Each was a local general practitioner who had taken a prominent part in preparing for a scheme and was on good terms with his colleagues, both in hospital and in general practice. The arrangement was due to the good offices of the then regional dean, Dr A A Lewis and the then area medical officer, Dr Keith Porter; it proved an indispensable resource in launching vocational training in the region.

In 1972 progress was reviewed. Six schemes were in operation with 29 trainees in post. A target of training 90 doctors a year was suggested, and the case argued for a proper local structure both for training and for continuing education for general practitioners. As a first stage, "advisers" should be appointed in each area to supervise training programmes, to develop courses for trainees and for trainers, and to help meet the educational needs of established principals; later a network of general practitioner tutors similar to the network of clinical tutors should be established. For these tasks we needed general practitioners who had a long-term commitment to education; much that was new and unfamiliar had to be learnt, and when learnt it should be put to use over a long time.

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A paper on these lines was presented to and accepted by the Conference of Advisers of the United Kingdom. Soon afterwards the Department of Health authorised the appointment of what were called "local course organisers." Each was to be responsible for running a course for up to 30 trainees; the duties thus were limited to training and covered several districts. The course organiser was to be paid from Executive Council funds at the same rate as a trainer and on the same terms except that, to quote the "Red Book" (Statement of Fees and Allowances payable to General Practitioners in England and Wales), he would "not normally be expected to assume responsibility for an individual trainee concurrently with undertaking course organising duties."

An anomaly

The consequences of classing organisers as non-training trainers is a curious restriction; since only one training grant is payable to a trainer at any one time the course organiser who also has a trainee will not be paid for both jobs. This is an anomaly. There is no restriction on earnings from other sources in the case of a general practitioner who is not a trainer; other trainers may take on all kinds of other work provided that they satisfy the selection committee that they can devote sufficient time to training; advisers (who are paid by universities) can do both jobs and be paid for both. There seem to us to be good reasons why a course organiser should do both at least part of the time and why he should be paid for doing so.

There is also a strong case for enhanced remuneration for the duties required of a course organiser. The course organiser has a more difficult task than has a trainer. The job requires a good deal of flexibility and willingness to innovate. The sort of person who can determine his own duties and monitor his own performance is needed—the standard expected of an executive in business or of a first or second line officer of a health authority or of a senior lecturer in medical school. The work is demanding and time consuming; organisers, as well as running day-release courses for trainees, run workshops for trainers, administer training schemes, negotiate with hospital staff, offer careers advice, are often asked to advise and help with postgraduate education, and are expected to improve their knowledge and skills by in-service training. We are not surprised that the turnover is high.

We therefore consulted our own 19 (four sharing duties)—that is, each working one notional session a week) course organisers about their work and views. We talked to those who had resigned; we asked those still in post to describe their work and to estimate the amount of time that they spent on it. Of course the pressure is great during term time and less at other times, but the average time spent each week on work connected with course organising was estimated to be over 11 hours; of this almost five hours were devoted to the day-release course, the remainder to planning, preparing, reading, and careers advice. Twelve thought that it was helpful for a course organiser

to have his own trainee; 13 had actually had a trainee since their appointment.

Reasons given for resignation (and for the lack of new applicants) were that the job is unpopular with wives and families and that, since in many instances the remuneration represents an insignificant addition to the income of a practice, partners all too willing to accept time spent on the day-release course seldom make allowance for the six and a half hours a week our average course organiser devotes to his other duties.

Next we sent a questionnaire to the 180 course organisers in England and Wales, with specific reference to the restriction on taking trainees. The response rate was 99%; 160 (89%) replied to our first mailing and a further 18 to a second reminder. The table shows the numbers of course organisers in each region who were in post in December 1980. In two regions some course

Course organisers in England and Wales

	No.	Age		Length of service (years)		
		Average	Range	2	2-5	5+
Northern	12	45	36-56	3	5	4
Yorkshire	12	49	36-61	1	6	3
Trent	18	43	28-55	3	9	3
East Anglia	8	36	33-43	4	3	1
SE Thames	13	40	33-51	4	3	6
SW Thames	14	40	36-55	4	4	1
SE Thames	19	47	36-51	9	2	4
SW Thames	2	46	36-51	3	2	4
West Midlands	10	44	34-47	3	2	4
West Midlands	2	46	36-41	3	2	4
West Midlands	17	45	32-56	5	9	6
West Midlands	2	46	36-41	3	2	4
North Wales	9	46	35-61	1	5	3
South Wales	9	46	35-61	1	5	3
Total*	180	40	28-65	51	69	58

*Length of service unknown for one course organiser in each of these regions.

*Includes some course organisers with half-time appointments.

organisers share half-time appointments. The average age of all course organisers was 46 years, and only in East Anglia was the average age appreciably different: 36 years. At the time of the survey 51 doctors (28%) had been in post for less than two years and 120 (67%) had less than five years. Only one had been in post for more than 10 years. The experience was broadly similar in all the regions: only in Oxford had as many as half the course organisers been in post for five years or more. In East Anglia and Wessex a half had been in post for less than two years. These figures do not prove that the "life" of a course organiser is short one, but bearing in mind that most schemes have been in existence for five years or more it seems that the turnover is high in every region. More than half (55%) of the course organisers said that they would be prepared to act also as trainers if both appointments were paid; they thought that it was helpful to have a trainee and could make the time. Eleven course organisers are paid from sources other than the family practitioner committee (six from regional funds; four as clinical assistants; one unclassified). All but one of these regularly take trainees and are presumably paid for doing so.

Many of the respondents made interesting comments. One doctor felt "boredom symptoms" when he gave up his trainee; another would regard himself as having "no credibility" as a course organiser if he were not continually concerned with the day-to-day responsibilities of a trainer; another felt that trainers' workshops were best run on the basis of "We better teaching and benefits from the fact that I am doing both jobs." Others expressed sympathy with the view that they would not have time to do both jobs, and that their trainee might therefore not receive sufficient attention. Many who had been trainers said that being a course organiser was by far the more onerous duty.

Discussion

It seems that less than a third of course organisers have been in post for more than five years. This and the experience in our own region suggest that we do not have a network of general practitioners with a long-term commitment to education that we desired. A rapid turnover cannot be good for the well-being of training, and since there is no formal way of identifying and training a successor there must be many times when change causes great difficulties.

About half the course organisers wish to take a trainee and believe that they have time to do so. There seems no good reason why those who are paid by the family practitioner committees should not also be eligible for further payment as trainers, just as those who are paid from other sources. It can surely be left to trainers to decide whether to judge whether those appointed can do both jobs. Is that all that needs to be done? We think not. About a third of our respondents were reluctant to take a trainee; most of them consider, as Whitfield and Hughes's survey¹ also showed, that their work is more onerous than that of trainers and takes up more time than the two notional sessions paid for. The case for better remuneration is a good one.

Our fear is that this system, so important in launching vocational training, may now be hindering the development of training. It is not flexible enough to be adapted to meet the widely differing local needs, yet at the moment it is not possible to make radical changes. Surely what we now ought to have is a specific budget for each region to cover all teaching and administrative costs. It would then be up to each region to decide in the light of local requirements how best to meet its needs. Some will put more emphasis on local responsibility, others will put more emphasis on fewer but better paid "organisers" who might cover two or more districts, others may give priority to courses of organisers so as to train people to replace existing organisers in due course.

And should we not also seize the opportunity to bring together training and continuing professional development? They are, after all, a continuous process and the same people are usually concerned in both. It has been said that the business of training for general practice requires the creation in each region of what is in effect a vast new extramural postgraduate medical school. Its students are the trainers, its trainers the first-line academic staff, its course organisers the senior lecturers, its associate advisers the departmental heads. A complex and growing programme is managed by few senior academic staff, all part-time. All work hard, and all know that there is more work to do than they have time for. All depend on the others to keep things going; a weakness in one tier threatens the whole.

Our thanks are due to the course organisers, who responded so magnificently to our questionnaire, and to Michael Curwen for advice and help.

Reference

1 Whitfield MJ, Hughes RCW. The course organiser. *Br Med J* 1981;282:213-17.

ONE HUNDRED YEARS AGO The following is an extract from a letter from a medical officer in one of the hauntic asylums in the west of Ireland. The writer says: "I have been thinking of something that will at last be done to restore order in the country. I have had two men admitted here lately who have been driven out of their minds by fear of assassinations: one of them from near this town, whose house was fired into because his sons worked for Mr. —, and the other is the son of the old man —, who was shot while sitting at his son's bedside." (*British Medical Journal*, 1882.)