

probably requiring large numbers of elementary nutritionists working in the community as members of primary care teams.

HYPERLIPIDAEMIAS

Severe familial hypercholesterolaemia is rare, causing less than 1% of all hyperlipidaemias. Homozygotes mostly die from coronary occlusion under age 30 unless they are controlled by arduous dieting supported by drugs. With a heterozygote frequency of 1:500, screening of the first-degree relatives of every case of coronary occlusion under 50 would detect children at a treatable stage.¹¹

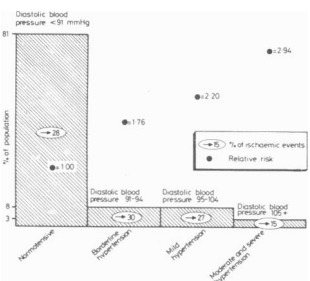


FIG. 2—Proportions of a screened population of 9538 American men aged 55 to 64 in four categories by mean diastolic pressure, mean of three readings, from the National Health Examination Survey, 1960-62, and the relative risks of myocardial infarction or stroke during one year for the same categories, from the Framingham "blue books." Source: Epstein.¹²

Raised total or low-density lipoprotein (LDL) cholesterol increases the risk for myocardial infarction synergistically with the other major risk factors—smoking and hypertension. The association is high in young men and women and declines with age. High-density lipoprotein (HDL) cholesterol, on the other hand, protects against coronary disease, it probably reflects cholesterol mobilisation, while LDL cholesterol reflects deposits as atheromatous plaque. The protective effect of HDL cholesterol persists in elderly people,¹³ but this fraction is influenced more by smoking and exercise than by diet. Consequently advice about diet needs to be concentrated on people under 50. There is little evidence that specific cholesterol-lowering diets are more effective than diets that simply at reducing body weight to within 10% of its ideal level. This can be easily calculated by the formula for body mass index (BMI)—metric weight divided by the square of metric height. BMI should lie between 20 and 25 for adult men and 19 and 24 for women. Triglyceride concentrations, which are also a positive risk factor for coronary disease, are so closely linked to fatness that there is little point in measuring them.

The safe and effective way to reduce LDL cholesterol is to follow a prudent diet, with calories restricted to attain ideal weight, all fats reduced to about 30% of total calorie intake, and more high residue foods. The disadvantages of clofibrate in promoting gall stone formation probably outweighs any advantages. Shifts in dietary habits leading to a reduction of LDL

cholesterol are probably occurring now because of changes in public opinion about the wholesomeness of foods. In 1980 the consumption of sugar in Britain went down by 8%, eggs by 10%, milk by 10%, white bread by 20%, and butter by 22%; whereas consumption of potatoes rose by 23%, margarine by 27%, and brown bread by 41%.¹⁴ All the indications are that people are able and willing to change, but in addition to needing better, informed help from their own doctors, food manufacturers will have to make labels more informative and less promotional. Perhaps as a profession we need to press for the legislation to secure such a change.

EXERCISE

Retrospective studies tend to show lower coronary risks for those who take vigorous daily exercise, though the differences are less than those attributable to smoking, hypertension, or hyperlipidaemia.¹⁵⁻¹⁷ Such people, however, obviously differ from those who make other uses of their leisure time. Controlled prospective studies of exercise programmes after myocardial infarction in people under 57 showed no improvement in survival after four years, though fitness as measured by a bicycle ergometer was appreciably improved, and effort tolerance in those with angina had increased 100%.¹⁸

Regular exercise, however, could have an important indirect effect on other, more potent risk factors by providing an essential part of a more general changed lifestyle emphasising active creativity rather than passive consumption. Much more needs to be done to link primary care with local sports facilities (as in the sitting of health centres at Milton Keynes new town), to assist those who need to acquire or maintain non-competitive sporting activity.

A plan for general practice

Looking at the whole field of atheromatous arterial disease, stroke as well as coronary occlusion, the Royal College of General Practitioners' working party on prevention¹⁹ recommended immediate action on three points for the whole adult population up to age 65: (i) control of hypertension when the diastolic pressure is 105+ (which we would now reduce to 100 mm Hg in the light of the Australian trial); (ii) personalised advice on smoking; and (iii) measurement of weight and height in all who look fat, calculation of ideal weight, and advice and support for those who want to try to attain it. Three further points for immediate action were suggested for subgroups: known diabetic patients should be reviewed for their arterial pressure monitored regularly and be advised on smoking; and the need for thiazide diuretics should be reviewed regularly to avoid unnecessary use of these eventually diabetogenic drugs.²⁰⁻²²

We have to start from where we are. Half our hypertensive patients are unknown, and half of those who are known are not controlled. Our diabetic patients seem to be equally divided between those who receive interpersonal—and therefore inefficient—advice, and those who see their GPs but receive little effective monitoring, and those who pick up repeat prescriptions but receive no regular medical supervision.²³ Step one for every practice that is seriously interested in preventing coronary disease must surely be to improve the quality of care and follow-up of these two very high-risk groups. Few of them rightly belong in hospital outpatient departments, for their clinical needs are simple—regular monitoring of arterial pressure and serum glucose, and advice on smoking, diet, and exercise. Patients and regular monitoring of optic fundi, glycosylated haemoglobin, and weight for diabetic patients, and sustained pressure to give up smoking for both. Step two is to ascertain all hypertensive patients by a regular system of case-finding, updated

Organising a Practice

Clinical policies

E GRAHAM BUCKLEY

In a previous article¹ I discussed policies concerned with the organisation of a general practice. Policies that affect clinical work may be more straightforward and easier to agree on owing to our clinical training. Discussion about managing patients with conditions such as urinary tract infections can proceed along rational lines and consistent criteria required for diagnosis, the cost of treatment in terms of efficacy, side effects, and the outcome with or without medical intervention. As we found in a study in our own practice,² however, agreeing on a policy is much easier than implementing it since practice does so challenges the doctor to question both the appropriateness of the policy and his own clinical performance.

What are the benefits of policies? A consistent approach to management by different partners in a general practice has advantages even in cases of minor medical importance for which there is a range of possible treatments. Howie³ has shown that although doctors differ widely in their management of upper respiratory tract infections, nevertheless in some practices such conditions are treated in a consistent manner, suggesting that a policy exists even if it has not been formalised. Patients who consult different partners in such practices are concerned that it is worth while to set up special clinics that can be held in collaboration with the specialist from the local hospital.

In most practices, however, the problem for the doctors is that individually they see only a few patients with each chronic illness. A combined structured medical record and information sheet may help to remind the doctor about the agreed policies of management. The card could also be used as a shared medical record between hospital and the general practice.

Assessment of older people at home

It is well recognised that many elderly people who live in their own homes have some unmet medical needs. These patients tend not to report to the doctor symptoms that they consider to be due simply to growing old. The systematic detection of established symptoms and disabilities in the elderly is most appropriately described as case-finding, since it differs fundamentally from classic screening programmes. Does the practice have a policy about the elderly? Do all the partners in the practice routinely visit housebound elderly patients? Is the content and purpose of such visits clear? Is this work co-ordinated with that of the health visitor and the district nurse? Do the medical records identify accurately the needs of the patient? Consideration of these questions is the first step in agreeing on a policy as to how the practice can meet the needs of old people. For instance, it cannot be assumed that a simple request of all patients who are aged 65 or over by making routine visits. Visits could be used to ration services rather than to seek out problems that require attention.

An ageing register is essential if systematic surveillance of

Does your practice have an agreed policy about the management of patients with epilepsy, diabetes, or one of the other common chronic illnesses? Is a policy necessary? Published

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every five years, and to search actively for maturity-onset diabetes by screening fat people over 50 for glycosuria, again using case-finding. This is likely to double work load in both these categories. Step three is to ascertain the smoking status of the whole population aged 12 to 64, and to offer sustained, personalised advice and support in subsequent consultations.

Resources and organisation

Preventing coronary disease requires two big changes in practice organisation. Firstly, means must be found to expand the consultation to include an active search for needs as well as the more passive satisfaction of wants. Now, at least in the over-worked areas where coronary disease is most prevalent, we have an average face-to-face consulting time of five minutes.¹⁴ We can do this in three ways: by delegating clinical measurements to employed staff, by taking on more partners whole-time or part-time, and (doubtfully) by reducing time spent on less useful tasks.

Secondly, we have to make regular monitoring of the whole adult population, or of special groups in it, a normal and necessary part of practice. This requires a record system suitable for such use, with colour tagging, structured display of data, and means of readily identifying tasks not yet done. I do not believe that this can be done within the limits of the Lloyd-George record, and the need to change to A4 has to be faced. It also requires staff time, as well as the support and interest of at least one partner in the group. There can be no greater illusion than that computers will bypass the need for good structured records and substantial staff and medical time devoted to their use. To get beyond our present passive response to breakdown and organise active search for need requires a transformation in the way we work that must precede delegation to machines. Until we have mastered the task it will not be defined or understood, and therefore cannot be computerised. The data inputs will be local, personal, and specific, and can come only from our own work; we cannot buy it off-the-shelf as computer software.

Our immediate need is more staff, and this should not be a difficulty. Though GPs are each entitled to employ two whole-time equivalent supporting clerical or nursing staff with 70% reimbursement of wages (and the remaining 30% set against tax), only 15% of all GPs currently employ their full entitlement. The average number of staff employed by GPs in England and Wales is about 1.2. We seem to be up against our own ancient traditions of counting pennies to let pounds look after themselves—all tactics, no strategy. Except in overworked areas, most of us could also add additional medical staff. Preventive work is predictable, crisis-free, and could be planned to meet the needs of the growing number of women graduates who need less open-ended commitment to practice.

Conclusion

The present state of general practice is too variable to permit a cookery book solution for coronary prevention. GPs are the most highly educated health workers in their communities. Each of us must adapt, as best we can, the general conclusions of medical science to the specific problems and resources of our local community. Few of us can as yet do all the simple things that need to be done; but even fewer are truly unable to make a start on some of them—not for some, but for all of the people.

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elderly people is to be attempted. The register will give the total number of patients who might be concerned in a case-finding programme, and the register will also identify individual. Subsequent examination of their medical records will show how big the work load is from this group of patients, and with this information it should be possible to devise new policies that would make more efficient use of the existing doctor-patient contacts. For example, hypotensive and psychotropic medications are together the commonest group of drugs prescribed for elderly patients. Making repeated home visits to renew prescriptions for such drugs may be inefficient and possibly inappropriate. The strategy used to identify unmet medical needs will depend on the characteristics of the elderly patients in the practice and on the resources of the primary care team. It is possible to be dogmatic about one policy, however: foot problems are so common in old people that case-finding is virtually unnecessary, and all people over the age of 75 years should be offered an assessment by a chiropodist.

Prescribing

A general practitioner's prescribing pattern is one of the most easily measured clinical activities. In addition to the regular analysis provided by the Prescription Pricing Bureau there have been many surveys and studies of prescribing by general practitioners. Marsh⁴ showed how a definite policy of encouraging self-medication for minor self-limiting illnesses can be implemented and assessed the impact that such a policy has on prescription costs in the practice and the effect of this policy on subsequent consultation rates for these illnesses.

Several policies for prescribing can be discussed. The doctors could try to restrict the range of analgesics and antibiotics that are prescribed, for example. Such a policy could be of direct benefit to the pharmacist as well as to the Treasury. There will necessarily be many deviations from an agreed policy of this kind, and the reasons for such deviations are themselves instructive and will help to develop the policies further.

The cost of drugs prescribed by general practitioners exceeds their own income, and the emphasis on the huge cost of prescribing is understandable. In addition to the existing analysis of prescribing costs, the new computer analysis provided by the Prescription Pricing Bureau will allow general practitioners to assess their own prescribing of different groups of drugs and will permit the evaluation of prescribing policies in more detail.

REPEAT PRESCRIBING

It is easy to forget how recent is the phenomenon of repeat prescribing. Before 1950 it would have been unusual for patients to receive a prescription without seeing a doctor. Nowadays repeat prescribing is an accepted part of general practice, and systems have been introduced to cope with the numbers scripts required. A sad comment on our times is that computers can now memorise and print the repeat prescription for psychotropic drugs to patients whose problems may be related to job redundancies caused by the introduction of automation. Patients should aim to clarify the reasons for starting to give repeat prescriptions and also to ensure that patients who receive such prescriptions are seen regularly.

A typical system might be: the decision to initiate repeat prescribing is stated at the time of consultation; a specific card is given to the patient describing the drugs, their purpose, dosage, and time of administration; the card also informs the patient how to obtain repeat prescriptions and gives the number of occasions that this can occur before an appointment with the doctor is required. Every request for a repeat prescription results in the doctor having placed in front of him a blank

prescription form, the special card, and the medical record of the patient. Details of the prescription are entered on the special card and also put in the medical record. The system may be evaluated by comparing the number of prescriptions issued with individual medical records will then show whether the policy is being implemented and whether there are any differences in the pattern of repeat prescriptions issued by different doctors. Evaluation of this kind may lead to modification of the policy and may also lead to changes in the doctors' prescribing habits.

Hospital referrals

Most referrals made to hospital by general practitioners are for outpatient appointments rather than for emergency admissions, and of these referrals the most common are to ear, nose, and throat departments. Wide variations in criteria for ENT referral exist among practices and among doctors in the same practice. What are the reasons for this disparity? Can practice policy engender more effective and efficient use of hospital resources? It is clearly inefficient to refer children for tonsillectomy in large numbers to an otolaryngologist whose policy is to carry out tonsillectomies only in unusual cases. From discussions between this specialist and his GP colleagues there may emerge agreed policies. Clear criteria could be established that had to be fulfilled before referring a child for tonsillectomy. Similarly, it may be possible to obtain the views of the ophthalmologist about the appropriate management of a child with a squint: a clear policy in this area would avoid premature referral on the one hand and unnecessary delay on the other.

Many general practitioners can admit patients to hospital beds. Since the practice as a whole will be providing on-call cover for 24 hours for the patients in these beds a policy is necessary to identify the types of cases that might be considered suitable for such admissions and to define which of the doctors will be responsible for providing medical care in the ward.

Conclusion

In our training in clinical medicine we have become accustomed to the concept of curative medicine, which requires the skills of diagnosis and treatment. Much of general practice is in the sphere of caring and prevention rather than curing, and managerial qualities of accessibility, organisation, and effectiveness are essential. Practice policies should be seen as a tool in the development of such qualities. They are simply guidelines that should help to make medical care more rational and more efficient. Deviations from such guidelines are to be expected, and indeed the guidelines themselves must be under constant scrutiny and expected to change. As in politics ideal policies are impossible. They represent our best attempts to reconcile infinite patient needs with finite medical resources.

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