

of their early environment were still in excellent health, but only 1 of the 10 men with the lowest childhood ratings.

Mental health was assessed on a 10-item adult adjustment scale, which correlated well with assessment of maturity of defences, with chronic depression, with objective evidence of mental illness and with having received a psychiatric diagnosis from a physician. There were further correlations—with the frequency of physiological symptoms under stress, with inability to concentrate under stress and with the use of tranquilizers. These correlations lend support to the credibility of the main thesis.

Other investigations along similar lines also point to a link between mental and physical health. For example, Berkman and Syme (1979) have provided impressive evidence that patterns of social interaction correlate with striking differences in longevity. They show that the risk of death in those with the fewest social ties is 2.8 times higher in women and 2.3 times higher in men than in those with the most social ties. This remains true even when the influence of initial health status, social class, health practices and the use of health services has been taken into account.

One is reminded of a study (Kessel and Shepherd, 1965) in which patients who consulted less than once in 10 years were compared with those consulting every year at least once. The main difference was found to be in their attitude to health and sickness rather than in their actual experience of minor or major diseases. Taylor (1968), reviewing sickness absence in industry, came to

the same conclusion when comparing those who rarely went sick with those who went sick frequently.

Vaillant's work demonstrates that chronic anxiety, depression and emotional maladjustment, measured in a variety of ways, can predict early ageing, defined as irreversible deterioration of health. Put differently, the data suggest that positive mental health significantly retards irreversible mid-life decline in physical health.

This work does not identify the mediating causative links, but, on the basis of the study and on evidence from previous work, Vaillant speculates that it not so much a question of stress killing, but of ingenious adaptations to stress—good coping mechanisms—promoting survival (Vaillant, 1977; 1978).

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Prevention: where next?

THE publication of three major documents on prevention in primary care earlier this year was a milestone along the road that this College is travelling towards a position of greater involvement in the community, of a more positive attitude to promoting healthy living (as opposed to a perfectly correct but now historically dated concentration on treating established disease) and of generally spelling out what it feels primary care can and cannot do. Now joining these documents is a paper from the Royal College of Physicians' Committee on Thoracic Medicine on the prevention and care of disabling chest disease. This is a most useful review. It discusses prevalence, prophylaxis, the treatment of acute and chronic conditions, how to provide effective help, employment and the cost of rehabilitation, and it ends with a series of recommendations, including the appointment of respiratory health workers, who might be tuberculosis health visitors transferred to new duties. It is unfortunate that several of the paper's recommendations depend for their success on such unlikelihoods as nicotine addicts stopping

smoking, food addicts losing weight and politicians voting new money into new channels. The report also refers very little to the place of the primary care team in managing disabling chest disease, although some of its recommendations affect the work of general practitioners ("As a major contribution to early detection of airflow obstruction, the DHSS should arrange for each general practitioner to receive one peak flow measuring device and instruction in its use"). However, the report is excellent on the problems of unemployment, and has several good suggestions to make. It is probably correct to devote so much space to discussing the social aspects of chest diseases, since it is far more likely that the patterns of illness will be altered in a major way by social factors than they will be by advances in medical care.

It is here, then, that we should ask, as Lenin did, "What is to be done?" At its June 1981 meeting, the College and its Council decided to set up a working party to look at ways of implementing its preventive medicine reports, and heard suggestions from several

members. Co-operation with the Health Education Council was urged, for here would be found the combined expertise of health workers and educators. The teaching practices could also be an ideal site for action. Accreditation of trainers could be contingent on, for instance, the existence of an up-to-date and functional age-sex register. If young doctors could be challenged to think in terms of preventive medicine, and given the tools to turn their thoughts into action, prevention could become built into clinical standards and practice policy.

These are measures which the College, its faculties and its members can undertake, but much more will be needed. The report from the Royal College of Physicians offers further ideas, and there is no doubt that co-operation between Royal Colleges, which are the profession's standard-setting bodies, will increasingly

become the norm. Standing together, the Colleges might even begin to apply influence where it will be most immediately effective—the legislature.

The report, *Disabling chest disease: prevention and care*, is published in *The Journal of the Royal College of Physicians of London*, 15, 69-87.

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Continuing education

THIS month, we publish a major educational research paper. It shows that continuing education can have a measurable desired effect on performance.

During the 1970s the College's Experimental Courses Study Group withdrew from running trainee courses because they were being organized locally, and switched its main attention to so-called refresher courses, which were falling into disrepute.

Much effort was put into providing a rheumatology course. Hospital clinics were unable to cope with the flood of general practitioner referrals and patients were being kept waiting too long for treatment. The possibility of a hospital-based course was explored, with much encouragement from consultants, but it seemed likely that, whilst such a course would be informative for general practitioners, it would not make them more competent and self-reliant.

At that point a fresh start was made and a general practitioner course organizer was discovered with three special attributes. First, he had worked as a clinical assistant in rheumatology; second, he had analysed his experience in general practice and at hospital clinics (a sort of audit) and so knew the common problems and the learning needs; and third, he was interested in education.

Dr Griffin worked with Ms Barry, the evaluator of the Nuffield Course, and together they accepted the Experimental Courses Study Group brief to run and evaluate a short rheumatology course designed to remedy a small number of deficiencies in general practice, rather than teach a more general smattering of rheumatology. Furthermore, they were to revise and repeat the course and describe it so that others could copy. All this they have done, and the resulting package awaits takers.*

Whilst this has been happening in the UK, similar

work has been going on in North America, where eight studies have reported changes in physician behaviour as a result of continuing medical education (Stein, 1981). All eight identified learning needs and a specific audience, had clear goals and objectives, used learning methods which emphasized participation and clinical setting and made systematic efforts at evaluation.

It is becoming evident that continuing education can be effective, but that it will need more resources. As Williamson and colleagues (1968) have pointed out, the courses should concentrate on common problems where we could be doing more for our patients. Such problems need not necessarily be those of clinical specialties, though the newer specialties of rheumatology and geriatrics are obvious fields. The courses could also include new concerns, such as decision-making, the philosophy of medicine and medical ethics, and communication with patients and colleagues—all the subject of intense interest and ripe for down-to-earth application in our daily work.

The DHSS is funding further research into continuing medical education, and 1 in 20 general practitioners have been canvassed for their views. This interest could help revitalize refresher courses and life-long continuing education.

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*The educational package referred to here and described on pages 661-668 is available from G. A. Griffin, 42 Poverest Road, Orpington, Kent BR5 2DQ.