

# Perinatal mortality: surveillance and audit

**P**ERINATAL mortality is news: the Court Report (Committee on Child Health Services, 1976) emphasized that the perinatal mortality rate in England and Wales is considerably higher, and the rate of decline slower, than in other countries; the Social Services Committee, 1979-80, under the chairmanship of Mrs Renée Short, has made 152 recommendations aimed at reducing perinatal and neonatal mortality; and a study group of the Royal College of Obstetricians and Gynaecologists (Chalmers and McIlwaine, 1980) has proposed setting up a national enquiry system into perinatal mortality. This proposition, inspired by the success of the Confidential Enquiry into Maternal Deaths, needs to be carefully examined, especially by general practitioners.

Perinatal death is much more common than maternal death—in 1975 for each maternal death, excluding abortion, there were 175 perinatal deaths, that is stillbirths or deaths under one week. These figures mean that a health district with a population of a quarter of a million could expect, on average, one maternal death every three years, but could expect about 60 perinatal deaths a year—more than one a week.

On the evidence of experimental surveys, collecting the information for perinatal audit and surveillance on a national scale would require a considerable expenditure

of time and resources. Furthermore, in a population of 250,000 serviced by about 50 practices, it would be inevitable that not only hospital staff, but also general practitioners with their attached midwives and health visitors, would become involved in the audit within a comparatively short space of time. If a voluntary system of perinatal audit is to succeed, it is clear that all those taking part will need to know that the local procedure will be, and will remain, confidential, that identifiable documents will not be used under subpoena for litigation, and that those involved in local case conferences shall be limited to those with clinical responsibility. Such a scheme will fail unless the professionals involved have confidence in those who collect the information.

Finally, the prospect of locally based audit into perinatal mortality raises the whole question of locally based audit procedures, how they may be organized and financed. It is not too early for College faculties to start discussions on this theme.

## References

- Chalmers, I. & McIlwaine, G. (1980), *Perinatal Audit and Surveillance: Proceedings of the Eighth Study Group of the Royal College of Obstetricians and Gynaecologists*. London: RCOG.
- Committee on Child Health Services (1976). *Fit for the Future*. Court Report. 2 vols. London: HMSO.

## Body and mind

**D**OES good mental health retard the decline of physical health in middle age?

“Of 59 men with the best mental health, assessed biennially from the age of 21 to 46, only two became chronically ill or died by the age of 53. Of 48 men in the worst mental health from the age of 21 to 46, 18 became chronically ill or died by that age.”

This quotation is from a study of 204 healthy male university students which started in 1942, when they were 21 years old. They were questioned every two years for the next four decades and examined at longer intervals. One hundred and eighty-eight of them remained in the study. It is from this number that the above statement is derived. The assessments of physical and mental health were conducted by two separate

teams; neither team knew of the other's findings. The results remained statistically significant when the effects on health of alcohol, tobacco use, obesity and the longevity of ancestors were excluded. All the variables used to define poor adult adjustment from the age of 19 to 46 were found at least twice as frequently in men who were chronically ill or dead by the age of 53.

This study was reported by Dr George Vaillant (Vaillant, 1979). It is an important paper for anyone interested in the relationship between mind and body, both in the findings and in the discussions surrounding them. As the product of nearly 40 years of sustained observation, it describes a remarkable achievement and offers a challenge to general practitioners.

A particularly interesting finding relates to the strength of childhood environment, based on data gathered when the men were at college. By 53 years of age, 11 of the 13 men with the highest ratings for the strength

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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 tranquillizers. 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).

## References

- Berkman, L. F. & Syme, S. L. (1979). Social networks, host resistance and mortality: a nine-year follow-up of Alameda County residents. *American Journal of Epidemiology*, **109**, 186-204.
- Kessel, N. & Shepherd, M. (1965). The health and attitudes of people who seldom consult a doctor. *Medical Care*, **3**, 6-10.
- Taylor, P. J. (1968). Personal factors associated with sickness absence. A study of 194 men with contrasting sickness absence experience in a refinery population, *British Journal of Industrial Medicine*, **25**, 106-118.
- Vaillant, G. E. (1977). *Adaption to Life*. Boston: Little Brown & Co.
- Vaillant, G. E. (1978). Natural history of male psychological health. 4. What kinds of men do not get psycho-somatic illness? *Psychosomatic Medicine*, **40**, 420-431.
- Vaillant, G. E. (1979). Natural history of male psychologic health. Effects of mental health and physical health. *New England Journal of Medicine*, **301**, 1249-1254.

## 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