particular reference to cancer of the colon in over 61,000 men from 11 prospective studies. The group found that when early tumours were excluded an inverse relationship did not persist for either colonic or rectal cancers and that the findings were consistent with the hypothesis that the low cholesterol concentrations were due to the cancer. Similarly, a recent large prospective study found no relationship between serum cholesterol and breast cancer. In summary, support for fat as a cause of cancer in man consists largely of the crudest type of evidence—namely, positive correlations between fat intake in populations (or indirect measures of intake, such as faecal steroid output and blood cholesterol concentrations) and certain cancers. It is interesting to compare the findings in coronary artery disease. This condition shows similar positive international correlations with fat but in addition prospective studies of individuals have certified a positive relationship with blood lipid concentrations. In contrast, such evidence from individuals is scarce in relation to cancer. Indeed, if a positive relationship does exist there are suggestions that the relevant fatty components are not those that cause coronary artery disease (and raise serum cholesterol concentrations). Our knowledge has advanced relatively little in the past 15 years since the international correlations between fat and cancers of the colon and breast were first pointed out and also the fact that certain fatty residues in human faeces resemble substances that are carcinogenic for animals. Fat diets are complex substances, and research on coronary artery disease has indicated the different effects of different dietary fats and blood lipoproteins. Very little is known about these in relation to cancer, and more information is needed from prospective studies of individuals.

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Immunisation policies

Environmentally determined diseases of adult life are principally related to tobacco and alcohol and are largely the responsibility of the adult concerned, who is free to choose whether or not to take the risk. Children need the active support of society in avoiding their environmentally related diseases (chiefly from infection and road accidents), and in 1983 Britain stands indicted of negligence, though the new sexual legislation is a small step in the right direction. Each year in Britain 100,000 children have measles and 20 die in the 12 months to December 1982 60,000 cases of pertussis and 13 deaths were notified. There has been no change in the overall incidence of malformations of the heart or eye, and the abortion rate on grounds of contact with rubella...
is constant. Recent data indicate a considerable increase in the incidence of neonatal rubella in Britain in 1982, which has already been reflected in the number of children with congenital rubella reported to the southern registry of the National Congenital Rubella Surveillance Programme (W C Marshall, personal communication).

All this suggests that our immunisation policy needs review, and figures for immunisation in the last five years in the Brent health district may have some messages. While an average of 85% of infants completed primary courses of immunisation against diphtheria, tetanus, and polio, only 45% were immunised against pertussis and only 39% of children completed a primary course of immunisation against measles. Since 1970 the Department of Health and Social Security has followed a policy of immunising girls between the ages of 11 and 13 against rubella, and uptake was expected to be about 70%. This degree of compliance has been achieved in Brent—but that necessarily means that one third of women and two thirds of the total population remain as a reservoir of infection. Clearly we are reaping the consequences of our own inaction, so what can and should be done?

Firstly, with health visitors closely in touch with young families it should not be difficult to increase immunisation rates against diphtheria, tetanus, and polio. Health workers should be clear that the risk of sustaining brain damage from natural pertussis is several times greater than the risk of sustaining brain damage from the immunisation. This message should be widely propagated among clinic doctors and nurses, and every effort should be made to increase the uptake of what is demonstrably an effective prophylactic treatment. Official advice on the postponement of immunisation if the patient is suffering from any acute illness should be reconsidered. It is my experience that very minor snuffles may indefinitely postpone the immunisation of just those children who are most in need of it. Defensive medicine may be taken too far, and a competent doctor ought to be able to spot whether or not a child is clinically ill, which is the only real contraindication to proceeding.

If the clinic shows an active interest in immunisation procedures, especially towards the first child, the chances must be greatly increased of that child receiving measles vaccination at the end of the first year and of subsequent children also being immunised. Whether we should move towards compulsory immunisation as a precondition to school entry (as currently practised in the United States) may be debated, but child health registers and the system of primary care in Britain ought to be equal to the task of matching the United States Public Health Service, which has set as its goal the early eradication of measles.

No scientific defence is possible of the current British approach to rubella vaccination. It has failed to protect women of childbearing age, with immense costs in human terms let alone in the provision of services for handicapped children. This year should see a redirection of our policy, designed firstly to protect women of childbearing age and then to interrupt the transmission of rubella and eradicate the disease. Implementation of the first priority entails vaccinating all women and girls of reproductive age and the second requires that all children currently aged 1-14 should be vaccinated thereafter vaccinating all children at 1 year. There is no alternative to this policy in a caring society, and doctors have a duty plainly to tell these facts to the nation.

Finally, several newer vaccines are available but have been ignored. There has been little discussion of mumps immunisation in Britain, and, though the benefit of such immunisation might seem to be marginal, it is not for the patient who develops mumps orchitis, pancreatitis, or diabetes. Pneumococcal vaccine, of value for children older than 2 years who are highly susceptible to pneumococcal infections, is seldom used in Britain at present. Varicella vaccine is undergoing clinical trials in the United States at present and has been used extensively in Japan and might again be of benefit to susceptible children.

This brief survey of our current vaccination practices suggests that it is time that some recent advances were put to good effect in Britain. The policy of the DHSS has changed little in the past decade, and this complacency is detrimental to the health both of living children and children as yet unborn.

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Antidepressant effects of electroconvulsive therapy: current or seizure?

Nearly 20 years ago two large multicentre trials established that electroconvulsive therapy (ECT) was superior to placebo tablets in the treatment of endogenous depression. These findings, together with the work of Cronholm and Ottesson, apparently showing that attenuation of ECT induced seizures with lidocaine reduced their antidepressant effects, seemed to establish that ECT was effective in depression and that its mechanism of action depended on inducing seizures. In recent years, however, this consensus has been undermined. Increasing public concern may have been responsible for renewed interest in the part played by the electric current and that played by the induction of seizures in the antidepressant efficacy of ECT.

Since 1978 four studies have compared courses of real versus simulated ECT (anaesthesia only) in depression. The results ranged from no difference in efficacy to the striking superiority of real over simulated treatment reported by West—a study described as “double blind” by its single author. Between these extremes, the Northwick Park trial reported a small and short lasting superiority of real ECT and results from Edinburgh claimed a beneficial effect of real over simulated detectable after only two treatments.

No satisfactory explanation for these discrepant findings has emerged. Much attention has focused on explaining the small differences between real and simulated ECT observed in the Lambourn and Gill and Northwick Park trials. Two main areas of criticism have been that the treatment was ineffective.