on the degree of disability at the time of diagnosis and does not seem to wear off with time.

A recent study showed that five patients with dopa responsive dystonia had cerebrospinal fluid concentrations of homovanillic acid, 5-hydroxyindoleacetic acid, and biopterin that were below the normal range.[6] The deficiency of biopterin in patients with diurnally fluctuating dystonia was significantly greater than the deficiency in patients with diurnally stable dystonia. The association between dopa responsive dystonia and a deficiency of biopterin can be explained by the fact that reduced biopterin is an essential cofactor for tyrosine hydroxylase, the enzyme that is rate limiting in the synthesis of catecholamines and serotonin.

We were able to find only one necropsy report of a patient with dopa responsive dystonia.[7] The cells of the substantia nigra were round and poorly pigmented like infant cells, suggesting a maturational defect rather than a degenerative problem.

Both of our patients were initially misdiagnosed as having cerebral palsy. This is understandable because hyperreflexia, extensor plantar responses, and muscle stiffness occur in cerebral palsy and dopa responsive dystonia. The onset after birth, the progressive course, and the Parkinsonian features of the disease in these patients, however, are not typical of cerebral palsy.

At present awareness of dopa responsive dystonia seems to be confined to specialists in movement disorders. Unfortunately, these are not the people who look after most of the patients with cerebral palsy, and almost certainly many cases of this type of dystonia are not diagnosed. There are few conditions in which a small dose of a drug can restore a wheelchair bound disabled person to normality. Dopa responsive dystonia needs to be recognised by general practitioners, paediatricians, orthopaedic surgeons, and indeed all doctors responsible for caring for patients with cerebral palsy.

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NHS Review

Aging: Should it be left to chance?

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This article and the interview with Walter Van't Hoff are the thirteenth and fourteenth in a series on the white paper *Working for Patients* and its accompanying working papers. The series started on 18 February (p 437).

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The government created the specialty of geriatric medicine within a national health service and the government is now destroying it. The specialty was created as a solution to misdiagnosis, mismanagement, absent teamwork, and lack of rehabilitation in local government run infirmaries. As a service of last resort geriatric medicine developed into a medical subspecialty concerned with the clinical, preventive, remedial, and social aspects of health and disease in elderly patients. It would be a disaster for the aged if our government, while introducing one American economist's dream, made the health care of the aged poor as bad as that provided in the country from which the fiscal dream emerged.[1] Certainly proposals on the care of the elderly are conspicuous by their absence from the white paper,[2] and by failing to respond to Sir Roy Griffiths's report on community care the government shows its indifference to integrated planning for acute and chronic care.[3]

In 1981 the government thought that it could no longer afford the specialty of geriatric medicine and turned to integration with general medicine instead. Some doctors argued that there was no organ system or procedure that justified the specialty's presence.[4] Sir Roy Griffiths considered that hospitals' responsibilities should cease at rehabilitation, and many managers, thinking of cost implications, support his view and are shedding responsibility for long stay care on to nursing homes.[3]

Those who want hospital consultants to shed any responsibility for long stay care fail to realise that responsibility not interest drives the wheel of rehabilitation. Consultants in geriatric medicine have clinical responsibility for the long term hospital care of patients in their catchment areas. They respond to this by developing strategies of care based on inpatient rehabilitation, day hospital provision, and coordinated aftercare. Theirs is a success story which our country should support.

. . . basic to success is cooperation with other specialties not the erection of defensive boundaries.

Cooperation is basic to success

Illness presents differently in old age. Multiple pathology is the rule rather than the exception. Basic to success in caring for the elderly is cooperation with other specialties not the erection of defensive boundaries. In the United States the Institute of Medicine recognises the need for leadership by physicians in geriatric medicine because care of the elderly is complex and requires specialised knowledge.

Between 1986 and 1996 the number of people aged over 85 will grow by nearly a half; the over 85s have increased from 459 000 in 1976 to 603 000 today and will be 894 000 in 1996. This older group spends more days in hospital and uses a disproportionate amount of the health care budget.[5] Ignore their needs for specialist medical services and the whole house of cards collapses.

Plans to shorten patients' length of stay and to develop outpatient medical services may work for young people living with families but for the aged it is a non-starter. The over 85s are more likely to be single or widowed, to live alone, to be in substandard accommodation, and have income levels at or below the poverty line. To send such people home sicker and

quicker causes them and the hospital staff extreme distress.[6] Such practices lead to rapid readmission and unnecessary permanent institutionalisation.

Political will is the problem

In the past 15 years there has been an unprecedented expansion in private rest and nursing homes.[7] Much of this expansion is funded by the patient and their families but part is funded by government. Government expenditure over the past decade on board and lodging allowances for aging people has increased from £7m in 1978 to £700m in 1987 and is still rising.[8] Clearly it is not money that is the problem; it is the political will.

A policy of relying on market forces within the private sector in the shape of rest and nursing homes will fail because the profit margin is dependent on beds being 100% occupied. Specialists in geriatric medicine choose to run their departments without waiting lists and work hard to keep some beds empty because they are trying to provide a rapid response service.

Economists state that demand for health care is infinite and resources are finite, but demand for long stay hospital care is not infinite.[9] There can be little doubt, however, that the number of people in care will expand to fill the resources available. Internationally the numbers of institutionalised people bear no relation to age, and nationally the expansion in private rest and residential homes is mainly at the seaside.[10] Geriatric medicine should control that "attractor" by preadmission assessment, rehabilitation, and responsibility for medical aftercare. That was the original recommendation of the BMA in 1947 and it is now time for the recommendations to be implemented.[11]

Ever since the inception of the NHS responsibility for the medical care of the aged in institutions has been split between hospital doctors and general practitioners. In 1981, 42 health districts still had no geriatric beds on the district general hospital site. Rather than developing the hospital service the government chooses to spend the equivalent of 200 hospital beds a year on unsupervised, uncontrolled, unrationed care in private rest and nursing homes. This cannot be right.

Conclusion

The NHS, rehabilitation, and operational planning were the three health care legacies of the second world war.[12] Other countries are planning services based on specialist medicine and rehabilitation to cope with the demographic change: our government is content to let the invisible hand of market forces meet the needs of our aging population. This is too important a subject to be left to chance. The country needs a social policy run by professionals that truly puts the patients first not an economic policy to which entrepreneurs react.

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Welcome for medical audit

Walter van't Hoff

A deputy editor of the *BMJ*, Dr Tony Smith, interviewed Dr Walter van't Hoff on medical audit, the subject of the sixth working paper on the NHS review. In 1979 the physicians at the North Staffordshire Hospital Centre, where Dr van't Hoff worked, introduced medical audit, and in 1985 a medical audit committee was established covering all specialties.

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Much of what the working paper on medical audit says will be welcomed by the profession.[1] Indeed, it reflects much of what most of the royal colleges have been introducing in the past few years—and particularly in the recent report of the Royal College of Physicians, a report which I helped to prepare.[2]

I have, however, some reservations and some doubts. Firstly, I wonder whether the meaning of medical audit to the Department of Health is the same as to the professions. On the first page of the working paper the definition of medical audit is one that doctors wouldn't argue with. Medical audit is described "as the systematic, critical analysis of the quality of medical care, including the procedures used for diagnosis and treatment, the use of resources, and the resulting outcome and quality of life for the patient." But further on it says that an effective programme of audit will help to provide the necessary reassurance to doctors, patients (I would prefer to put patients first but never mind), and managers that the best quality of service is being achieved within the resources available.

Now it is, of course, the duty and responsibility of doctors when doing medical audit to point out any particular aspect where resources are inadequate. I don't think we should be restricted in our thoughts to the resources that are currently available, for we all know there are many features of the NHS with inadequate resources, and this is something that we need to point out.

Furthermore, there are two sorts of resources—money and manpower. Certainly it comes within our remit to consider whether it is proper use of a doctor's time, for instance, to do cervical screening every year when the time might be better employed doing other things.

Indeed, this is one of the problems of medical audit generally—doctors could spend so long auditing themselves or other people that there would no longer be time to do the work that they are really meant to be doing. The obvious solution is to pick on a few aspects that obviously need looking at, home in on those, and examine them in detail. We cannot possibly look at everything in the time available.

Taking advice

We are also told that the government wishes to work with the profession in addressing issues of medical audit and it has recently asked the Standing Medical Advisory Committee to consider and report on this. I'm just a little concerned, however, that this committee may be too Whitehall oriented. I would be happier if the government had approached all the colleges and so obtained the views of all specialties. And although the government has introduced a central fund to support medical audit, it is really quite small (£250 000). To do medical audit properly needs the time not only of clinicians but also of records