

age of overall drug expenditure, are only one reason why financial separation needs to be re-examined. The absurdity of a patient drawing on two drug budgets is unsustainable in the long term.

The profession itself, however, also has a responsibility to patients and the public to resolve some of the current difficulties. Firstly, hospital prescribers need to know more about drug costs and the resource consequences of starting long term treatment with expensive agents. Secondly, we need to develop to a much greater extent the concept of shared care of patients who are the joint responsibility of both hospital consultants and general practitioners. Such patients usually have a multiplicity of problems which require the skills of both groups. Thirdly, where shared care might reasonably include the prescription of unfamiliar and expensive drugs by a general practitioner, certain cardinal principles must apply. The request should be from one doctor to

the other and not via the patient; and it should be accompanied by written information about the product, including the appropriate dose, the duration of treatment, special monitoring requirements, potential interactions, and possible adverse effects. If this sounds like yet another plea for better communications between hospital staff and general practitioners we make no apology.

ROGER JONES

William Leech Professor of Primary Health Care

MICHAEL D RAWLINS

Ruth and Lionel Jacobson Professor of Clinical Pharmacology

University of Newcastle upon Tyne,

Newcastle upon Tyne NE2 4HH

- 1 Wilkie P, Sibbald B, Raftery J, Anderson S, Freeling P. Prescribing at the hospital-general practice interface. I: Hospital outpatient dispensing practices in England. *BMJ* 1992;304:29-31.
- 2 Sibbald B, Wilkie P, Raftery J, Anderson S, Freeling P. Prescribing at the hospital-general practice interface. II: Impact of hospital outpatient dispensing policies in England on general practitioners and hospital consultants. *BMJ* 1992;304:31-4.
- 3 Orme M. How to pay for expensive drugs. *BMJ* 1991;303:593-4.

Age associated memory impairment

Too broad an entity to justify drug treatment yet

Why cognitive function falls with age is poorly understood, although there is no shortage of explanations. The brain is smaller (by the age of 90 it has shrunk by one fifth), and characteristic changes are present: accumulations of lipofuscin,¹ granulovacuolar degeneration,² dendritic atrophy,³ and plaques and tangles.⁴ Neurofibrillary tangles are usually limited to the hippocampus (in contrast, in Alzheimer's disease they are widespread) and are present in almost everyone who lives to the 10th decade, while senile plaques are found in three quarters of people who reach 90.⁴

The term "benign senescent forgetfulness" was used by Kral to describe the mild memory impairments he noted among some residents of an old people's home in Montreal.⁵ He characterised the syndrome as difficulty in remembering names and dates of the past which were easily recalled at other times—suggesting a problem with memory retrieval. He considered this to be non-progressive and distinguished it from "malignant" forgetfulness (dementia) by its lower mortality at four year follow up.⁶ Although he believed that the group with benign forgetfulness was distinct from healthy old people, he could not show any objective differences between the two groups.

Few attempts have been made to validate this syndrome or to determine whether it is part of normal aging, an early manifestation of Alzheimer's disease, or a distinct pathological condition. Reisberg *et al* reported that at 3.6 year follow up a group of 40 patients with mild forgetfulness was clinically unchanged, though no objective measure of memory was used.⁷ Larrabee *et al* attempted a cluster analysis of 88 healthy volunteers, finding 10 who could be classified as having benign forgetfulness.⁸ Although no deterioration occurred after a year, no evidence was found to support the contention that people with benign forgetfulness formed a distinct group.

Could benign forgetfulness and Alzheimer's disease form a continuum as Kral and others have speculated?^{9, 10} This is unlikely given the amount of evidence suggesting that normal aging and Alzheimer's disease may be distinguished pathologically,¹¹ psychologically,¹² and genetically.¹³

Because of the diagnostic uncertainties the National Institute of Mental Health convened a working group in 1986 to establish research criteria that would "describe the memory

loss that may occur in healthy elderly subjects in the late years of life." The group proposed using the term "age associated memory impairment" if the following criteria were satisfied: age over 50, gradual onset of memory dysfunction in the activities of daily life, subjective complaints of forgetfulness substantiated by performance in a well standardised memory test at least one standard deviation below the mean for young adults, and absence of global impairments or dementia.¹⁴ The adoption of such broad inclusion criteria based on normal values derived from young adults departed from earlier work, which sought to define only a subgroup of elderly people with memory impairment. Though the prevalence of age associated memory impairment is unknown, some researchers have estimated that most people over 50 are affected.¹⁵

Hypothetical entities such as age associated memory impairment, which have no aetiologically based diagnostic test, are commonly encountered in psychiatry, and criteria for validating them have been proposed.¹⁶ These include detailed clinical description, delimitation from normality and other already accepted diagnoses, laboratory (including necropsy) investigation, and family and follow up studies. No work has yet been reported that attempts to apply these criteria to age associated memory impairment, yet already trials of drug treatment have been widely reported.^{17, 18}

Concluding much from such trials might be considered to be premature in an entity that has not yet been adequately validated and that, given its broad definition, will include many normal elderly people. The safety and cost of any proposed treatment would need to be carefully balanced against possible benefits. Such benefits will be difficult to assess until further research has helped to clarify factors such as whether age associated memory impairment is an early manifestation of dementia or just a benign inconvenience of growing old.

We believe that age associated memory impairment is too broad a clinical entity to be useful. A narrower concept, closer to Kral's original formulation, would be better. Memory impairment should be redefined using age standardised normal values (rather than those of young adults), and long term follow up studies should be done. Whatever definition is adopted, however, it is important that careful attention should be paid to proper investigation of the syndrome and its

natural course before consideration is given as to whether treatment is justified.

JOHN T O'BRIEN

Senior Registrar in Old Age Psychiatry,
Fulbourn Hospital,
Cambridge CB1 5EF

RAYMOND LEVY

Professor of Old Age Psychiatry,
Institute of Psychiatry,
London SE5 8AF

- 1 Brody H. The deposition of aging pigment in the human cerebral cortex. *J Gerontol* 1960;15:258-61.
- 2 Tomlinson BE, Kitchener D. Granulovacuolar degeneration of the hippocampal pyramidal cells. *J Pathol* 1972;106:165-85.
- 3 Scheibel ME, Scheibel AB. Structural changes in the ageing brain. In: Brody H, Harman D, Ordy JM, eds. *Aging*. Vol 1. New York: Raven Press, 1975:11-37.
- 4 Tomlinson BE, Henderson G. Some quantitative cerebral findings in normal and demented old people. In: Terry RD, Gershon S, eds. *Neurobiology of ageing*. New York: Raven Press, 1976:183-204.
- 5 Kral VA. Neuropsychiatric observations in an old people's home. *J Gerontol* 1958;13:169-76.

- 6 Kral VA. Senescent forgetfulness: benign and malignant. *Can Med Assoc J* 1962;86:257-60.
- 7 Reisberg B, Ferris SH, Shulman E, Steinberg G, Buttinger C, Sinaik O, et al. Longitudinal course of normal ageing and progressive dementia of the Alzheimer's type: a prospective study of 106 subjects over a 3.6 year mean interval. *Prog Neuropsychopharmacol Biol Psychiatry* 1986;10:571-8.
- 8 Larrabee GJ, Levin HS, High WM. Senescent forgetfulness: a quantitative study. *Developmental Neuropsychology* 1986;2:373-85.
- 9 Kral VA. Benign senescent forgetfulness. In: Katzman R, Terry BD, Bick KL, eds. *Alzheimer's disease: senile dementia and related disorders* (Ageing vol 7). New York: Raven Press, 1978:47-51.
- 10 Brayne C, Calloway P. Normal ageing, impaired cognitive function, and senile dementia of the Alzheimer's type: a continuum? *Lancet* 1988;i:1265-7.
- 11 Bowen DM, White P, Spillane JA, Goodhart MJ, Curzon G, Iwagoff P, et al. Accelerated ageing or selective neuronal loss as an important cause of dementia? *Lancet* 1979;ii:11-4.
- 12 Huppert FA, Kopelman MD. Rates of forgetting in normal ageing: a comparison with dementia. *Neuropsychologia* 1989;27:849-60.
- 13 Hyslop PHStG, Tanzi RE, Polinsky RJ, Haines JL, Nee L, Watkins PC, et al. The genetic defect causing familial Alzheimer's disease maps on chromosome 21. *Science* 1987;235:885-90.
- 14 Crook T, Bartus RT, Ferris SH, Whitehouse P, Cohen GD, Gershon S, et al. Age associated memory impairment: proposed diagnostic criteria and measures of clinical change—report of a National Institute of Mental Health work group. *Developmental Neuropsychology* 1986;2:261-76.
- 15 McEntee WJ, Crook TH. Age-associated memory impairment: a role for catecholamines. *Neurology* 1990;40:526-30.
- 16 Robins E, Guze SB. Establishment of diagnostic validity in psychiatric illness: its application to schizophrenia. *Am J Psychiatry* 1970;126:983-7.
- 17 Wyke A. Memory boosters blow up a storm. *Daily Telegraph* 1991 June 10:12(col 5-6).
- 18 Crook TH, Tinkleberg J, Yesavage J, Petrie W, Nunzi MG, Massari DC. Effects of phosphatidylserine in age-associated memory impairment. *Neurology* 1991;41:644-9.

Democracy at work

That GPs fill in next week's survey is important not only for them

Next week sees one of the BMA's biggest exercises yet in practical democracy. All Britain's 35 000 general practitioners will receive a 19 page questionnaire survey asking them how they see the future of general practice. The questionnaire comes from the General Medical Services Committee of the BMA and is part of the consultation surrounding *Building Your Own Future*—its attempt to provide a blueprint for general practice in the 1990s.¹ The committee hopes for an excellent response rate. If its hopes are fulfilled the exercise has lessons beyond general practice.

All big organisations risk growing out of touch with their members, but few are tested quite so starkly as was the General Medical Services Committee when the government imposed a new contract on general practitioners in 1990. Stuck between an intransigent government and a profession unwilling to compromise, the general practitioners' negotiators found themselves ignored by government and untrusted by the members, clutching a briefcase of obsolete policies. Their response has been a determined attempt to raise fundamental questions—to think the unthinkable—and to find out what general practitioners want from general practice in the new NHS. Starting from scratch in this way means that the profession can set its own agenda and not simply be forced to react to that of a more radical government.

Next week's survey is only one part of a carefully planned consultation. The process started when *Building Your Own Future* was sent to all general practitioners last June. This raised an exhaustive set of questions about general practice—its organisation, financing, quality, and content. From the responses, which have come from local medical committees, trainees' groups, outside organisations, a *BMJ* series,² and individual practices and doctors, four main subjects have so far emerged. *Your Choices for the Future*, sent out in October, discusses these four issues in detail: means of payment, the 24 hour commitment, the content of general practice, and maintaining standards.³ Now comes the survey, covering these issues and others and designed to avoid throwing up simplistic answers. Once the answers have been analysed the findings will be sent to all general practitioners and discussed at a special conference in the summer. Each local medical committee will also receive a breakdown of the responses in its own area.

Consultation—with members, staff, customers, clients, patients, the public—is part of the spirit of the times. The BMA's document *Leading for Health*⁴ does for the entire health service what *Building Your Own Future* does for general practice, and the BMA too is looking for an informed debate to help it devise coherent future policies. In the NHS itself providers are being urged to find out what their patients think and purchasers what their publics need. Debates about what choices to make in health are difficult enough to conduct among professionals.^{5,6} To engage the public as well will demand a sophistication of the process of debate not seen before in the NHS—or in any other sphere of public life. The GMC's technique of raising the questions, listening to the feedback, providing balanced information to inform the debate, going out again with a more detailed set of questions (to everyone, not just those who responded first time round) is a good model for how such debates could be conducted. If general practitioners do not respond well to next week's survey their negotiators will not be the only people to be disappointed.

JANE SMITH

Deputy editor, *BMJ*

- 1 General Medical Services Committee. *Building your own future: an agenda for general practice*. London: GMS, 1991.
- 2 *The future of general practice*. London: *BMJ* (in press).
- 3 General Medical Services Committee. *Your choices for the future*. London: GMS, 1991.
- 4 British Medical Association. *Leading for health: a BMA agenda for health*. London: BMA, 1991.
- 5 Cochrane M, Ham C, Heginbotham C, Smith R. Rationing: at the cutting edge. *BMJ* 1991;303:1039-42.
- 6 Smith R. Rationing: the search for sunlight. *BMJ* 1991;303:1561-2.

Corrections

Artificial blood

An author's error occurred in this editorial by S J Urbaniak (30 November, p 1348). The editorial stated that Fluosol DA20 may be used in Britain only on a named patient basis; in fact, Fluosol is fully licensed for use in the United Kingdom.

How well do we manage families with genetic problems?

We regret that the names of two members of the steering committee of the national confidential inquiry into counselling for genetic disorders were missed out of Professor Rodney Harris's editorial (7 December, p 1412). They were Professor Charles Rodeck and Dr Bernadette Modell.