

of physical, psychiatric, and developmental problems of these patients. Specialist psychiatrists now work largely in outpatient services, where the support that they can offer may be restricted.⁷

Difficulties in providing medical care have been highlighted in the *BMJ* recently, with further examples in this week's correspondence (p 536).⁸ Poor uptake of screening for cancer has been reported in women with learning disability.⁹ Cognitive difficulties may prevent some of these patients appreciating the benefits of screening, and even those with more independence may be unaware of available medical services.¹¹ There are also practical obstacles to providing screening tests.⁸ However, doctors may also fail to recognise and treat medical problems in these patients. We have recently reported that osteoporosis is common in adults with learning disability¹² but that underlying causes of bone loss may not be treated.¹³

How might the problems of adults with learning disability in the community best be addressed? Much research in learning disabilities has been on service delivery, particularly in the community, but it now needs to address broader issues and it needs to be published in journals where it can be read by all those offering care, including general practitioners, gynaecologists, dentists, and geriatricians, and not just psychiatrists. One suggestion has been to devolve responsibility for providing services to primary health care, with advocacy¹⁰ and the appointment of case managers¹⁴ helping within this model. In England the new primary care groups, responsible for medical care in the local community, should be in a good position to tailor services for these patients. However, liaison will be required with mental handicap services and agencies representing patients and families, such as MENCAP. Finally, the training of doctors in medical and social issues related to learning disability should be a priority.⁴ The inclusion of these subjects in undergraduate teaching should be the responsibility of the medical schools, and the royal colleges of psychiatrists, general practitioners, and physicians should collaborate on higher professional training.

Care in the community should promote greater autonomy and improve patients' quality of life. In achieving these grand objectives we must include patients' priorities in the delivery of primary health care. Unless the medical and emotional needs of those with learning disability are addressed we risk replacing institutional care with community chaos.

Terence J Aspray *Lecturer*

Roger M Francis *Senior lecturer*

Department of Medicine, Medical School, University of Newcastle upon Tyne, Newcastle upon Tyne NE2 4HH

Stephen P Tyrer *Consultant psychiatrist*

Prudhoe Hospital, Prudhoe, Northumberland NE42 5NT

Stephen J Quilliam *General practitioner*

Castle Surgery, Prudhoe, Northumberland NE42 5PW

- 1 Nirje B. The normalisation principle and its human management implications. In: Kugel RB, Wolfensberger W, eds. *Changing patterns in residential services for the mentally retarded*. Washington, DC: President's Committee on Mental Retardation, 1969:181-94.
- 2 Lindsey M. *Signposts for success in commissioning and providing health services for people with learning disabilities*. Leeds: NHS Executive, 1998.
- 3 Community care for the mentally handicapped: a consultant psychiatrist's point of view. *British Society for the Study of Mental Subnormality Newsletter* 1986.
- 4 Singh P. *Prescription for change*. London: Royal Society for Mentally Handicapped Children and Adults (MENCAP), 1997.
- 5 Tyler CV, Bourguet C. Primary care of adults with mental retardation. *J Family Pract* 1997;44:487-94.
- 6 Meerding WJ, Bonneux L, Polder JJ, Koopmanschap MA, Van der Maas PJ. Demographic and epidemiological determinants of health care costs in the Netherlands: cost of illness study. *BMJ* 1998;317:111-5.
- 7 NHS Management Executive. *Health services for people with learning disability (mental handicap)*. London: Department of Health, 1992.
- 8 Hall P, Ward E, Djuretic T et al; Whitmore J. Cervical screening for women with learning disability. *BMJ* 1999;318:536-7.
- 9 Pearson V, Davis C, Ruoff C, Dyer J. Only one quarter of women with learning disability in Exeter have cervical screening. *BMJ* 1998;316:1979.
- 10 Piachaud J, Rohde J. Screening for breast cancer is necessary in patients with learning disability. *BMJ* 1998;316:1979-80.
- 11 Edgerton RB, Gaston MA, Kelly H, Ward TW. Health care for aging people with mental retardation. *Mental Retardation* 1994;32:146-50.
- 12 Aspray TJ, Francis RM, Thompson A, Quilliam SJ, Rawlings DJ, Tyrer SP. Comparison of ultrasound measurements at the heel between adults with mental retardation and control subjects. *Bone* 1998;22:665-8.
- 13 Aspray TJ, Francis RM, Rutter M, Walker M. Consequences of withholding testosterone treatment. *Lancet* 1996;348:609.
- 14 Ardito M, Botuck S, Freeman SE, Levy JM. Delivering home-based case management to families with children with mental retardation and developmental disabilities. *Journal of Case Management* 1997;6:56-61.

Managing osteoporosis in older people with fractures

Needs to be taken as seriously as coronary artery disease

Papers p 500

The World Health Organisation has compared osteoporosis to hypercholesterolaemia and hypertension, which are both asymptomatic conditions until an important tissue damaging event such as myocardial infarction or cerebrovascular accident occurs. Bone fracture, especially fracture with minimal trauma, is the feared endpoint of osteoporosis. Fractures of the wrist, hip, and vertebrae are well recognised consequences of the loss of mechanical strength that occurs as bone thins. These fractures are common in many countries, particularly among elderly people, and the burden they produce is expected to rise enormously in the next few decades. Pal's article in

this issue (p 500) underscores the hesitancy with which doctors currently approach this silent epidemic of osteoporosis.¹

The cost of osteoporosis is huge in both human and economic terms. Data on patients with hip fractures are the most complete, since nearly all such patients require hospital admission for treatment, whereas those with vertebral and wrist fractures do not, making data collection difficult. Although not all of Pal's patients necessarily had an osteoporotic fracture, those with hip fracture might consider themselves lucky to be able to participate in his questionnaire study since a third of patients with osteoporotic hip fracture die as a direct result of their

BMJ 1999;318:477-8

fracture. Awareness is growing about the morbidity associated with osteoporosis: a further third of patients require continuing institutionalised care and many of the remaining third suffer a significant loss in their independence and ability to perform daily tasks.² How much suffering occurs as a consequence of loss of vertebral height, with persisting mechanical back pain and other postural consequences, remains unknown.

The economic cost is also difficult to establish, but osteoporosis is undoubtedly an expensive business. In New Zealand (population 3 million) the combined total cost for caring for women in the two years after a hip fracture in 1994 was NZ\$66 637 355 (£22 000 000).³ The estimated world wide annual cost of hip fracture alone will reach US\$131.5bn (£82 000m) in the year 2050.⁴

Despite increasing media attention, it is disappointing that only 34 of 82 of the patients with recent fracture surveyed by Pal were aware of the condition of osteoporosis and that this knowledge came from doctors in only 29%. Effective treatments are available; these not only increase bone mineral density but also significantly reduce fracture rate. These treatments have been shown to be effective in all age groups. Bone mineral density increases of around 6% a year, as measured by dual energy x ray absorptiometry (DEXA) scanning, are achieved with agents such as oestrogen, vitamin D analogues, and bisphosphonates. All these have been shown to reduce the fracture rate by around 50%. There is also an increasing appreciation of the prevalence of vitamin D deficiency in elderly people, particularly those in institutional care.⁵ Measurement of serum 25-hydroxyvitamin D concentrations should be routine in elderly people, with vitamin D replacement therapy offered as necessary.

A major difficulty in managing patients with recent fracture and in identifying underlying osteoporosis is the availability of bone density measurement. Dual energy x ray absorptiometry has become the international standard tool, but it is not widely available, particularly to patients who cannot afford the test outside a publicly funded system. This is akin to trying to manage patients at risk of myocardial infarction or stroke without access to serum cholesterol concentrations or blood pressure measurements. Dual energy x ray absorptiometry can identify patients at high risk and allow prioritisation for treatment, thereby increasing the cost benefit ratio. In patients with a fracture a baseline measurement is required not so much to establish the diagnosis of osteoporosis as to document a baseline level with which to monitor treatment efficacy. The non-response rate to treatment seems to be about 15%, making progress monitoring essential. Without access to dual energy x ray absorptiometry management of osteoporosis must be speculative.

Alan Doube *Consultant rheumatologist*

Waikato Hospital, Private Bag 3200, Hamilton, New Zealand

- 1 Pal B. Questionnaire survey of advice given to patients with fractures. *BMJ* 1998;318:500-1.
- 2 Cooper C. The crippling consequences of fractures and their impact on quality of life. *Am J Med* 1997;103(2A):12S-9.
- 3 Lane A. Direct costs of osteoporosis for New Zealand women. *Pharmacoeconomics* 1996;9:231-45.
- 4 Johnell O. The socioeconomic burden of fractures: today and in the 21st century. *Am J Med* 1997;103(2A):20-65.
- 5 Chapuy MC, Arlot ME, Duboeuf F, Brun J, Crouzet B, Arnaud S, et al. Vitamin D₃ and calcium to prevent hip fracture in elderly women *N Engl J Med* 1992;32:1637-42.

London's health: a role for the new mayor

The mayor could have more influence on London's health than its hospitals

London is not a healthy city. Overall mortality is falling more slowly than in the rest of England,¹ and infant mortality compares unfavourably with that of other European capitals.² The city is blighted by pollution,³ and there are particular problems with HIV infection, substance misuse, teenage pregnancy, tuberculosis, and severe mental illness.⁴ The seven million people who live in London are aware of the problems: a poll revealed that they regard their city as an unhealthy place, and they think it is going to get worse.⁵

Last May Londoners voted in favour of establishing a Greater London Authority (GLA), made up of an elected mayor and an elected assembly. The legislation is on its way through parliament, elections will be held in May next year, and the mayor and assembly will start work on 3 July 2000. The new authority will be responsible for "promoting economic and social development in London and improving the environment." The mayor will have sweeping executive powers and with the exception of the president of France will have the largest direct democratic mandate of any politician in Europe.

The new authority will have a tremendous opportunity to make an impact on the capital's health. Although it will not be involved in managing or providing health services, it will produce policies on matters that are inextricably linked with health—such as transport, jobs, and housing. There is, however, concern that health considerations will be neglected. A report just published by the King's Fund notes that although the government was originally explicit about the mayor's "duty" to improve the health of Londoners,⁶ the present bill refers only to the "desirability" of promoting health.⁷ The report calls for health "to be an integral and essential component of all the GLA's policies."⁷

London's most conspicuous need is to tackle poverty and inequalities. Thirteen of the 20 most deprived boroughs in England are in London, and across its 33 boroughs there is a good correlation between deprivation score and standardised mortality ratios.⁸ The city is divided by extremes of wealth and poverty and the income gap is growing: from 1979 to 1997 the earnings of the highest paid 10% of people increased from 2.8 to 4.5 times that of the lowest paid 10%.⁹ The

BMJ 1999;318:478-9