Fig 1—Decrease in blood lead concentrations in groups at risk of increased lead uptake from traffic emissions and in control subjects living in areas without heavy traffic and in general population, United Kingdom, 1984-96

sure of the general population to lead from traffic emissions would have been intermediate between that of the exposed and control groups. Figure 1 shows that, since 1984-7, blood lead concentrations have fallen by a factor of 2.6-3.0 in adults and by a factor of 3.6-5.0 in children.

A wide range of measures to reduce lead were implemented in Britain throughout the 1980s—for example, lead solder was removed from tins containing food, lead in paint was controlled, and lead in petrol was reduced. All of these, together with the reduced emissions of lead by vehicles owing to the increased sales of lead free petrol since 1987,⁵ will have contributed to the substantial decline in blood lead concentrations that we observed.

H T DELVES (consultant biochemist), S J DIAPER (medical laboratory assistant), University of Southampton, School of Medicine, Southampton General Hospital, Southampton SO16 6YD; S OPPERT (principal biochemist), Clinical Biochemistry Department, West Middlesex University Hospital, Isleworth, Middlesex TW7 6AF; P PRESCOTT-CLARKE (head of research group), J PERIAM (senior programmer), W DONG (lecturer in epidemiology and public health), H COLHOUN (lecturer in epidemiology and public health), Health Survey for England, Department of Epidemiology and Public Health, University College London, London WC1E 6BT; D GOMPERTZ (senior consultant), MRC Institute for Environment and Health, University of Leicester, PO Box 138, Leicester LE1 9HN

- 1 Tong S, Baghurst P, McMichael A, Sawyer M, Madge J. Life-time exposure to environmental lead and children's intelligence at 11-13 years: the Port Pirie cohort study. *BMJ* 1996;312:1569-75. (22 June.)
- 2 Delves HT. A micro-sampling method for the rapid determination of lead in blood by atomic absorption spectrometry. *Analyst* 1970;95:431-8.
- 3 Department of the Environment. *UK blood lead monitoring programme 1984-1987. Results for 1987*. London: HMSO, 1990. (Pollution report No 28.)
- 4 Centers for Disease Control. *Preventing lead poisoning in young children. A statement*. Washington, DC: US Department of Health and Human Services, 1991.
- 5 Department of the Environment. *Digest of environmental statistics No 17*. London: HMSO, 1995.

Predicting which psychiatric patients are at risk of suicide

More information needs to be taken into account

EDITOR—In the past the *BMJ* has published several articles pointing that "absence of evidence is not evidence of absence."¹ John A Dennehy and colleagues' short report on the prediction of suicide among psychiatric patients after discharge from hospital is a good example of this.² The authors conclude that, because they found no significant difference in several

variables thought to be associated with suicide between patients who had committed suicide and controls, there is no association. They then go on to state that these factors cannot be used to identify those patients who go on to commit suicide. The wide confidence intervals for the variables linked to past or present contact with psychiatric services indicate that there is considerable uncertainty about the true odds of these variables predicting suicide. For example, a duration of illness of less than five years could be over four times more common in those who kill themselves than in those who do not. Unfortunately, the chance of detecting a difference in this variable with the numbers in this study is less than 50%. Having more than one control per case would have increased the chance of detecting a significant difference.

The case for these factors not being clinically useful remains unproved. The prediction of suicide is difficult and has a high false positive rate. Traditionally, as in this study, attempts to predict which patients are at high risk of suicide have relied on the history and demographic characteristics. Perhaps a more useful approach would be to combine this with information about the nature of the difficulties faced by the patient.

SIMON HATCHER
Senior lecturer

School of Psychiatry and Behavioural Science,
University of Manchester,
Manchester M20 8LR

- 1 Altman DG, Bland JM. Absence of evidence is not evidence of absence. *BMJ* 1995;311:485.
- 2 Dennehy JA, Appleby L, Thomas CS, Faragher EB. Case-control study of suicide by discharged psychiatric patients. *BMJ* 1996;312:1580. (22 June.)

Author's reply

EDITOR—Simon Hatcher makes an important general point about statistical significance, but it does not apply to our study as we did not make the statement that he attributes to us. Our conclusion that risk factors for suicide in the general population do not identify people with mental illness who go on to commit suicide was based not on the absence of significant differences between cases of suicide and controls but on the fact that the rate of some putative risk factors was virtually identical in the two groups. We drew no conclusion about the duration of illness, for the reasons that Hatcher gives.

We suspect that the difficulty in predicting suicide from risk factors is explained partly by findings such as ours and partly by the oversimplification of risk factor models. Risk of suicide may be better understood as a balance of both risk and protective factors, with suicide occurring after a sequence of key events in which risk accumulates. Our research is now directed at identifying models of cumulative risk which may be the target of preventive intervention.

LOUIS APPLEBY
Professor

School of Psychiatry and Behavioural Sciences,
Withington Hospital,
Manchester M20 8LR

Care programme approach does not focus on need for services

EDITOR—John A Dennehy and colleagues comment on the limited value of the care programme approach in identifying the risk of suicide in psychiatric patients.¹ Similar findings were observed when documentation relating to the care programme approach was studied for all psychiatric patients from Warrington who died unexpectedly of unnatural causes and were the subject of a coroner's inquest since the implementation of the approach some four years ago.

Of the 31 patients identified, 19 were on the register for the care programme approach and had had at least one admission since the introduction of the approach. Ten of the patients had required admission to hospital in the year that the death was reported. Only nine of the 19 patients on the register had an identifiable care plan for low or medium intensity care. None of the patients had a full care programme of the type normally reserved for patients with serious mental illness and those considered to be at a distinct risk. A suicide verdict was recorded for seven patients, only three of whom had an identifiable care plan, and a verdict of misadventure or an open verdict was recorded for 12, six of whom had an identifiable care plan. Although lengthy documentation for the patients showed that some needs had been identified, there was no mention of risk of suicide or any other risk or unmet needs for any of the patients who had a care plan and an identifiable key worker.

We agree with Dennehy and colleagues that the care programme approach does not seem to detect unmet needs or risk of suicide in this vulnerable group of patients. It seems to focus on service needs and not on need for services, with an increasing emphasis on the completion of numerous forms. There is a danger that the excellent concept of the care programme approach may end up as yet another exercise in paperwork that does not work.

EMAD SALIB
Consultant psychiatrist

ANN JOSEPH
Senior house officer in psychiatry

Winwick Hospital,
Warrington Community Health Care (NHS) Trust,
Warrington WA2 8RR 1

- 1 Dennehy JA, Appleby L, Thomas CS, Faragher EB. Case-control study of suicide by discharged psychiatric patients. *BMJ* 1996;312:1580. (22 June.)

Mental health teams should concentrate on psychiatric patients with greatest needs

EDITOR—Valerie Murray and colleagues measured the needs for care of patients with major mental illness who were and were not in contact with their community mental health team.¹ They have usefully moved the debate on community care on from simplistic arguments about the adequacy of numbers of psychiatric beds.

The methods they used to identify patients, however, are likely to have missed a considerable proportion of people with psychotic illnesses, and their sample cannot therefore be regarded as representative. Studies have shown consistently that around one in four patients with psychosis have no contact with mental health services and are looked after entirely within general practice.² Simply asking the local practices for the names of such patients known to the general practitioners is inadequate. Even if all the practices in the Hamilton district had cooperated with the authors (which they did not), many patients with psychosis would have been missed in the absence of searches of general practice records. We have shown that identifying patients through searches of repeat prescription systems and diagnostic labels on computer is quick and identifies many more patients than the general practitioners can remember.³ Murray and colleagues' paper sheds little light on the needs, met or unmet, of patients with psychosis who are in contact only with general practitioners.

More importantly, their data offer no basis for the conclusion that expanding their community service to include all patients with psychosis would be beneficial. Many such patients may not wish to be referred back to psychiatric services. Also, patients who comply with drug treatment and whose illness is stable may not need long

term specialist care. There is some evidence that where community mental health teams routinely follow up all identified patients with major mental illness they are less able to respond quickly when really needed for patients with more acute and more difficult problems.⁴

It seems unlikely that the numbers of mental health professionals working in community teams will increase greatly. A more efficient way of providing community care may involve general practitioners monitoring the more compliant and stable patients (perhaps with a specialist review every few years) while the mental health team concentrates on those patients with greatest needs. By no means all of these patients have psychotic illnesses.

TONY KENDRICK

Senior lecturer in general practice

TOM BURNS

Professor of community psychiatry

Division of General Practice and Primary Care,
St George's Hospital Medical School,
London SW17 0RE

- 1 Murray V, Walker HW, Mitchell C, Pelosi A. Needs for care from a demand led community psychiatric service: a study of patients with major mental illness. *BMJ* 1996;312:1582-6. (22 June.)
- 2 King MB. Management of schizophrenia—the general practitioner's role. *Br J Gen Pract* 1992;42:310-1.
- 3 Kendrick T, Burns T, Freeling P, Sibbald B. Provision of care to general practice patients with disabling long-term mental illnesses: a survey in 16 practices. *Br J Gen Pract* 1994;44:301-5.
- 4 Wilkinson G, Piccinelli M, Falloon I, Kerkorian H, McLees S. An evaluation of community-based psychiatric care for people with treated long-term mental illness. *Br J Psychiatry* 1995;167:26-37.

Presentations of pituitary insufficiency and Addison's disease in insulin dependent diabetes may be similar

EDITOR,—We agree with Lynne Armstrong and Patrick M Bell that a high degree of suspicion is required to diagnose Addison's disease¹; we too have encountered falling insulin requirements and recurrent severe hypoglycaemia as a presentation of Addison's disease in insulin dependent diabetes.² Addison's disease is not, however, the only cause of glucocorticoid deficiency: pituitary insufficiency may present as falling insulin requirements and recurrent hypoglycaemia in insulin dependent diabetes.² Unlike in Addison's disease, however, glucocorticoid deficiency in pituitary insufficiency does not present with pigmentation, the electrolyte disturbances of hyponatraemia and hyperkalaemia, and mild uraemia. Moreover, hypoglycaemia in pituitary insufficiency may be more severe than that in Addison's disease because of coexistent deficiency of growth hormone, another potent counter-regulatory hormone.

If glucocorticoid deficiency is not to be missed, clinicians must have a low threshold for performing a short tetracosactrin test in patients with insulin dependent diabetes who have falling insulin requirements; a 30 minute serum cortisol concentration of <550 nmol/l suggests glucocorticoid deficiency and the need for steroid replacement and further investigation.

KEVIN HARDY
Consultant physician
JOHN SCARPELLO
Consultant physician

Department of Medicine,
Whiston Hospital,
Merseyside L35 5DR

- 1 Armstrong L, Bell PM. Addison's disease presenting as reduced insulin requirement in insulin dependent diabetes. *BMJ* 1996;312:1601-2. (22 June.)
- 2 Hardy KJ, Burge MR, Boyle PJ, Scarpello JHB. A treatable cause of recurrent hypoglycaemia. *Diabetes Care* 1994;17:722-4.

Government's expert group has reached consensus on prognosis of chronic fatigue syndrome

EDITOR,—The chronic fatigue syndrome is a complex problem that has attracted a great deal of controversy. Against this background, doctors working for the Department of Social Security and its executive agencies have to give informed and consistent advice. To help in this process I set up an expert group to give me advice on the subject. A consensus view was sought on prognosis and chronicity, which are critical factors in determining a person's entitlement to a benefit or pension.

The expert group was drawn from a range of medical disciplines with an interest in the condition, so that it reflected a range of opinions; it first met on 6 March this year. A consensus emerged on most of the topics discussed. A report of the meeting has been published and circulated to those who have a direct interest in the findings.¹

Clinical scenarios were identified that represented a good and a poor prognosis. A good prognosis was indicated by:

- A definite history of viral illness (particularly glandular fever) in the presence of an uncomplicated psychological background
- A pattern of evolution towards functional recovery
- An early diagnosis aimed at eliminating associated physical disorders and identifying psychiatric illness and any other complicating psychological or social factors
- A management regimen encompassing physical, psychological, and social elements that concentrates on modification of the person's lifestyle, striking a balance between overactivity and the risks of deconditioning and taking a stepwise approach towards achieving functional improvement while addressing factors such as sleep disturbance.

A poor prognosis was indicated by:

- The onset of symptoms without any clear precipitating factor but set on a complex background of adverse psychological and social factors or occurring after a severe infective illness
- Severe and unremitting symptoms, particularly if lasting for over four years. The presence of multiple symptoms, especially those suggesting somatisation
- Delayed diagnosis and especially self diagnosis, with the patient becoming convinced of a single cause to the exclusion of all others
- A management regimen overemphasising the importance of complete rest or advocating a rapid return to pre-illness levels of physical activity. Failure to recognise the need to treat such features as depressive illness or sleep disturbance.

The report of the meeting is an important document that brings some consensus to an area of controversy; it will be helpful to all those who work with patients with the chronic fatigue syndrome.

MANSEL AYLWARD
Chief medical adviser

Department of Social Security,
London WC2N 6HT

- 1 Department of Social Security. *Chronic fatigue syndrome: prognosis and chronicity. Chief medical adviser's expert group: report of the first meeting.* London: DSS, 1996.

Magnetic resonance imaging is uncomfortable for patients

EDITOR,—I was interested to read Keith Duncan and colleagues' response to Helen Rosenthal's account of her severe distress while undergoing magnetic resonance imaging.^{1,2} I underwent magnetic resonance imaging three times last year

as part of a drug study (in addition to having undergone it once for diagnostic reasons five years previously). While I had no anxiety about a possible malignancy and as a doctor I had some prior knowledge of the imaging procedure, the procedure is more uncomfortable than some medical staff think. The requirement to keep still for minutes on end while encased inside the scanner leads to a sense of claustrophobia; having undergone scanning both with and without the plastic head mask being used, I can state that the presence of the mask for some 40 minutes greatly exacerbates the feelings of claustrophobia.

The noise is considerable and sufficient to make one feel uncomfortable. I had a vague headache for some hours after each procedure. The platform on which one lies is uncomfortably hard when one is unable to move for minutes on end. The temperature is often quite cool as a result of the air conditioning in the imaging suite.

While many of the discomforts are unavoidable (the feeling of being encased inside the scanner, the noise, and the need to keep still), more could be done to improve physical comfort. An effective pair of earplugs, warm blankets, and much more cushioning on the lying platform would certainly help.

I agree with Duncan and colleagues that old fashioned communication skills and kindness are paramount in putting patients at their ease during what can be a distressing experience. If I as a doctor found magnetic resonance imaging uncomfortable, it must be much more so for a lay person suffering from a fear of the unknown in addition to the physical discomforts of the procedure.

KAREN J SHELTON
General practitioner

Medical Centre,
RAF Marham,
King's Lynn,
Norfolk PE33 9NP

- 1 Rosenthal H. Inside the oven. *BMJ* 1996;312:319. (3 February.)
- 2 Duncan K, Baker PN, Johnson IR, Gowland P. Treat patients with kindness during magnetic resonance imaging. *BMJ* 1996;312:1421. (1 June.)

Advice to authors

We receive more letters than we can publish: we can currently accept only about one third. We prefer short letters that relate to articles published within the past four weeks. Letters received after this deadline stand less chance of acceptance. We also publish some "out of the blue" letters, which usually relate to matters of public policy.

When deciding which letters to publish we favour originality, assertions supported by data or by citation, and a clear prose style. Wit, passion, and personal experience also have their place.

Letters should have fewer than 400 words (please give a word count) and no more than five references (including one to the *BMJ* article to which they relate); references should be in the Vancouver style. We welcome pictures.

Letters should be typed and signed by each author, and each author's current appointment and address should be stated. We encourage you to declare any conflict of interest.

Please enclose a stamped addressed envelope if you would like to know whether your letter has been accepted or rejected.

Letters will be edited and may be shortened.