

view of the heterogeneity of criminality).¹ He does not, however, mention food intolerance despite the widespread recognition that hyperactivity in children is often followed by criminality (this is acknowledged in the preceding editorial on preventing crime and violence²). The fact that many hyperactive children can be cured by diet has been established by two controlled trials, so if such treatment also prevented subsequent criminality this would provide more reason for optimism than the ones that Alper lists; more work on this is therefore needed.^{3,4}

The fathers of several of the patients I successfully treated with diet for this condition had criminal records and a similar history in childhood. One patient abandoned his diet in mid-teens and burnt his school down. I visited him in prison, when he said that he would like to try the diet again, but I do not think that this was achieved.

I believe that this food intolerance is allergic and is likely to be familial but of complex inheritance. I have no idea how commonly it causes criminality, but it is important for those in whom it does.

J F SOOTHILL
Emeritus professor of immunology

Axminster,
Devon EX13 5RT

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Sedation in fiberoptic bronchoscopy

EDITOR,—I wish to reply to the letters¹ on the paper on sedation during fiberoptic bronchoscopy of which I was an author.² S P Hanley is correct in stating that nasal anaesthesia with lignocaine is unpleasant: patients often comment that this is the worst part of the procedure. Although some studies have been published in which nasal lignocaine has been given before sedation,³ it was our routine practice to give sedation first.⁴ M R J Parker and colleagues question the amount of topical anaesthesia used during the bronchoscopy. This was not formally measured but did not seem to differ among the three bronchoscopists or among the patients regardless of sedation.

Several letters discuss the recent report on sedation by the Royal College of Surgeons; owing to insufficient space this reference was not included. The report highlights the provision of monitoring equipment and staff trained in life support. This is important for chest physicians, who often perform bronchoscopy in isolation from other medical staff and need to be responsible for both the sedation and the bronchoscopy. Adequate nursing support is essential if sedation is used.

Gareth Thomas and Christine McBeth and Parker and colleague discuss the depth of sedation. This was not formally assessed, but a combination of reassurance and sedation was used to ensure that the patients were relaxed and cooperative—level 2 on the suggested scoring system.⁵ Patients received broadly similar amounts of sedation, and some were more sleepy than others after the procedure; nevertheless, the bronchoscopists had some difficulty in identifying patients who were sedated.

The use of sedation has financial implications and direct risks to patients' welfare,⁶ as Fraser W H Sutherland suggests. Patients who remain sleepy after the bronchoscopy, especially if they live alone, may need to stay in hospital overnight, which increases the costs of the procedure. Alternatively, patients may be allowed home after the sedation has been reversed by specific antagonists,

although differences in the half lives of the sedative and antagonist need to be considered. If sedation is used patients should be given clear instructions not to drive after the bronchoscopy, which potentially increases costs further if transport home needs to be provided.

MARTIN B ALLEN
Consultant physician

St Luke's Hospital,
Bradford BD5 0NA

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Albumin in the nephrotic syndrome

EDITOR,—We challenge Fehmi Akcicek and colleagues' argument against the use of albumin in the nephrotic syndrome on two counts.¹ The first concerns the selection of patients. The urinary protein loss, plasma creatinine concentration, and prior drug treatment are not given in their report, but we assume that the patients had not received either corticosteroids or diuretics. The mean excretion of 2.96 litres of water and 275 mmol of sodium after intravenous frusemide, implying weight loss of about 2 kg in 24 hours, indicates that these patients were not resistant to diuretics. The absence of synergy between albumin and frusemide in such patients is not surprising and confirms that changes in oncotic pressure have no impact on the natriuretic response to loop diuretic.² We agree that albumin infusion is neither useful nor necessary in unselected nephrotic patients. Patients resistant to diuretics do, however, exist; they fail to achieve natriuresis despite strict bed rest, supervised restriction of sodium, and maximal intravenous diuretic treatment. Albumin infusion may be beneficial in these uncommon cases,³ and data from nephrotic patients who are sensitive to diuretics² should not guide management.

The second point concerns the timing of administration of albumin and diuretic. Akcicek and colleagues gave parallel infusions. Optimal efficacy of the combination occurs when loop diuretic is given at the end of a one hour infusion of 40 g salt poor albumin, possibly because the peak diuretic concentration then coincides with maximal expansion of intravascular volume. The table shows the results of this regimen³ in five compliant nephrotic patients, who satisfied our criteria for resistance to diuretics given above and attended our unit during 1994. Only one patient had minimal change disease. Satisfactory and sustained natriuresis was readily achieved; all

Details of five patients given loop diuretic at end of one hour infusion of salt poor albumin

Case No	Age (years) and sex	Diagnosis	Urinary protein (g/day)	Serum albumin (g/l)	Dose of intravenous frusemide before infusion (mg/day)	Serum creatinine (μmol/l)		Weight loss (kg)	
						Before infusion	After infusion	In first week	Total*
1	68 F	Diabetic nephropathy	15	18	100	107	112	4	10
2	20 M	Focal sclerosing glomerulosclerosis	21	16	330	235	169	4	7
3	77 F	Membranous glomerulopathy	8	15	200	122	105	4	10
4	54 M	Minimal change disease	14	21	200	263	172	3	8
5	58 F	Focal sclerosing glomerulosclerosis	16	26	250	287	199	6	16

*Determined retrospectively after treatment.

of the patients who had a deteriorating serum creatinine concentration improved within one week.

Patients with the nephrotic syndrome are haemodynamically heterogeneous. Measures of plasma volume and oncotic pressure correlate poorly with response to treatment. Albumin infusion is not routinely indicated in the nephrotic syndrome, and, as with all blood products, use should be minimised. In selected cases, however, an appropriately administered combination of hyperoncotic albumin and loop diuretic facilitates removal of extracellular fluid and can ameliorate uraemia induced by diuretic.

D W EADINGTON
Senior registrar
W D PLANT
Research fellow
R J WINNEY
Consultant renal physician

Department of Renal Medicine,
Royal Infirmary,
Edinburgh EH3 9YW

- 1 Akcicek F, Yalnz T, Basci A, Ok E, Dorhout Mees EJ. Diuretic effect of frusemide in patients with nephrotic syndrome: is it potentiated by intravenous albumin? *BMJ* 1995;310:162-3. (21 January.)
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Advance directives

EDITOR,—George S Robertson acknowledges the considerable work of the BMA's medical ethics committee in refining the concept of an advance directive in Britain.¹ Following the recommendation of the House of Lords Select Committee on Medical Ethics that a code of practice for health professionals should be developed, the BMA, the Royal College of Nursing, and the medical royal colleges have worked together to develop such a code; it was published at a special conference on 5 April after the final report of the English Law Commission. Both the Department of Health and the English and Scottish Law Commissions have participated in the drafting of the BMA's code of practice. The medical ethics committee will consider the finalised version of the code and present it to the BMA's council for approval.

The working group and the medical ethics committee do not share Robertson's conclusion that a standard form offers the best way forward. In our view, an advance directive must be tailored to the needs of the individual patient rather than the patient being constrained by the necessary rigidities of a standardised form. It is often assumed that patients wish to make detailed arrangements about all aspects of their care or, alternatively, to express a general wish to avoid overenthusiastic medicine. In our experience, however, patients often wish to use an advance directive to control only a small and apparently minor aspect of their terminal care, leaving all other decisions to the doctor. A patient may, for example, wish to signify only a desire to die at

home. The code of practice produced by the working group will provide helpful guidance for health professionals in evaluating both advance statements and advance directives (refusals of treatment).

STUART HORNER
Chairman

Medical Ethics Committee,
BMA,
London WC1H 9JP

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Measles campaign

EDITOR,—Towards the end of last year Elizabeth Miller¹ questioned whether Britain could match the results reported from measles immunisation campaigns in less industrialised countries.² Ninety two per cent of 7.1 million children aged 5 to 16 were immunised in England through the measles and rubella immunisation campaign last November. Of the 172 district health authorities or NHS trusts, 37 achieved coverage of >95%, 96 achieved coverage of 90-95%, 31 achieved coverage of 85-90%, six achieved coverage of 80-85%, and two achieved coverage of <80%.

Since the beginning of November last year the Public Health Laboratory Service has been able to use salivary antibody diagnosis to confirm measles in suspected cases. There were more than 100 positive reports in November and December last year. By 1 April this year, despite more than 800 samples having been tested, there had been only 21 confirmed cases, with full details available in 21. Only one case occurred in a child whose age was covered by the campaign; that child's parents had withheld consent. All other cases were in children under the age for routine immunisation (9); children under 5 who had received one dose of measles, mumps, and rubella vaccine previously (3); or people aged 17 or over (8).

The purpose of the campaign was to prevent an expected epidemic. There can be little doubt that this has been achieved. Early indications are that in most areas transmission of measles among school-children has been interrupted.

D M SALISBURY
Principal medical officer
S D HORSLEY
Chairman, campaign implementation group

Department of Health,
London E1 8VG

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Injury to child pedestrians

EDITOR,—Ian Roberts concludes that the key to preventing injuries to children by motor vehicles is a change in transport policy.¹ He argues his case on the basis that the recent decrease in death rates probably reflects reduced exposure (fewer pedestrians), that personal characteristics are not strong predictors of injury, that education has had little effect on rate of injury, and that traffic management has been shown to work.

While transport policy is a key item on the agenda for preventing injury to pedestrians, other factors are also important, particularly until transport policy alters. These include children's knowledge, attitudes, and behaviour; parental attitudes to prevention of childhood injury, and towards giving permission for children's independent activities; enforcement of current traffic legislation; and optimum traffic management and environmental design based on current traffic policy. Whatever the ultimate solution, many

of the factors that have been identified as contributing to accidents are behavioural.² For example, most children are running across the road when an accident occurs³ and pedestrian fatalities are associated with alcohol drinking.³

Measuring the direct benefits of educational programmes is difficult. Nevertheless, accident records of the members of traffic clubs—children who received six monthly educational programmes on traffic safety—showed lower accident rates than for non-members (P Schioldborg, fifth congress of the international federation of pedestrians, Gello, Norway, 1976). Innovative educational programmes (and their evaluation) will continue to be necessary pending major environmental change.

Roberts equates pedestrians with walkers. For instance, he states that the higher rate of injury in children from poor families and those without access to a car may be because they walk more. Activities other than walking, such as playing in the street, are likely to be equally if not more important.

We are engaged in a study of children's risk behaviour and exposure to risks. Our preliminary observations indicate considerable differences in patterns of play by age, sex, and socioeconomic circumstances, and it would be surprising if such differences did not relate to injury rates.

While agreeing with the thrust of Roberts's editorial, we believe that a broad and balanced approach combining educational, regulatory, technological, and environmental components is essential to prevent childhood accidents. Narrowly focused health promotion has met with failure in other areas, and an integrated approach is essential.^{2,3}

HAMID SOORI
Postgraduate student
R S BHOPAL
Professor of epidemiology and public health

Department of Epidemiology and Public Health,
School of Health Care Sciences,
Medical School,
University of Newcastle,
Newcastle upon Tyne NE2 4HH

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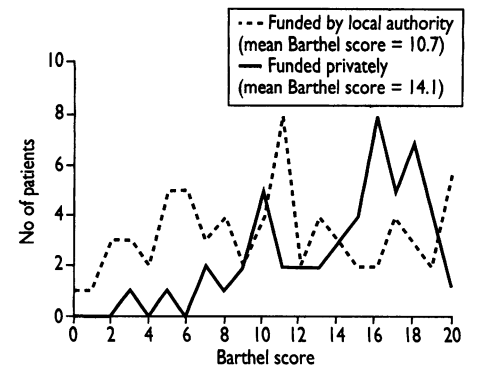
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Success of NHS and Community Care Act 1990 for elderly people

EDITOR,—Victoria Ajayi and colleagues suggest that the reforms relating to the NHS and Community Care Act 1990 have improved arrangements for discharging elderly people from hospital in the borough of Hammersmith and Fulham.¹ This is in contrast to an article by Tonks in 1993, which outlined major concerns regarding community care for frail and elderly people.²

We recently evaluated admissions to nursing homes from the community and from hospitals in Aberdeen since 1 April 1994 (one year after the reforms under the act were implemented) to assess whether selection bias occurred according to whether patients were funded by their local authority or privately. One hundred and nineteen patients were evaluated, of whom 69 were funded by local authorities and 50 privately. The investigators thought that only 81 patients were clearly appropriately placed. Furthermore, a significantly lower proportion of those with private funding were clearly appropriately placed (28 (56%) v 53 (77%), $P=0.017$), and the Barthel score (a



Barthel score in patients funded by their local authority or privately

measure of dependency—the lower the score the greater the dependency) was significantly higher in the privately funded group (mean (SEM) 14.1 (0.56) v 10.7 (0.68), $P<0.001$ on t test, $P=0.001$ on Mann-Whitney test) (figure).

In conclusion, selection bias seems to operate in favour of privately funded patients with a lower level of dependency; this disadvantages patients who require institutional nursing care but need help with funding from their local authority. Hence, for this group of patients the reforms under the community care act are not a success. More rigorous control of the assessment of patients requiring placement in a private nursing home is needed to obviate such bias.

D M NEWNHAM
Senior registrar
W R PRIMROSE
Consultant
D G SEYMOUR
Professor

Department of Medicine for the Elderly,
Woodend Hospital,
Aberdeen AB9 2YS

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The Gulf war syndrome

EDITOR,—Tony Revell's letter concerning the 200 personnel now assessed by the Ministry of Defence raises more questions than it answers.¹ Not the least is why it has taken over four years for the Ministry of Defence to start assessing these men and women when so many complaints were made soon after their return from the Gulf in 1991. Since 98% are (by the Ministry of Defence's own submission) suffering from something, perhaps Revell's medical service should have taken them more seriously in the first place.

The Ministry of Defence should beware, however, of assuming that the diversity of conditions listed implies no link. Three factors are common to all those personnel who have been assessed so far: all were in the Gulf; all were given a large number of inoculations, often in a hurry; and all took nerve agent pretreatment sets (pyridostigmine bromide tablets) as protection against biological and chemical warfare. It is at least possible that one causative link is damage to the immune systems of some individuals. Given that certain immunisation materials were prepared in a non-commercial environment (and details have been classified as secret, even to parliamentary questioners) and that the administration of these materials in the desert seems to have left a lot to be desired, this theory should be tested. If the immune systems of Revell and myself were compromised, even temporarily, we would be vulnerable to different bugs, yet the cause would be the same.

The high incidence of psychiatric conditions