know slightly fewer overall; less than 30% of the doctors knew the constituents of the final drug, which was prescribed most frequently by the general practitioners, including those who had not known what it contained.

Most doctors favoured an improved system of naming but many suspected that it would be very difficult to implement, although insistence that the name chosen was related to the generic name or that the generic name was always given in brackets beneath the proprietary name, even if cumbersome, might be helpful.

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Prevalence of multiple sclerosis in north-east Scotland

SIR,—It is interesting to note in the epidemiological study reported by Drs D I Shepherd and A W Downie (29 July, p 314) that there is a "significant deviation from a random distribution" in the prevalence of multiple sclerosis in north-east Scotland. The local differences in observed prevalence may not reflect the true geographical incidence of the disease. The observed rate should be standardised for age, as the existence of a higher proportion of the population in early and mid-adult life, in areas of Aberdeen, for example, would increase the prevalence.

The other feature of note is the tendency for the observed prevalence to increase the nearer the area is to Aberdeen. This increase may reflect easier access to specialist diagnostic services, which are concentrated in Aberdeen.

The geographical distribution of HLAA3 and B7, if significantly correlated with the local prevalences, might support the observed differences in the latter. Such a study within a population at high risk would be of interest.

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Lorazepam unsuitable for day surgery

SIR,—A leaflet entitled "Ativan Injection in Day Surgery" has recently been circulated to hospital doctors and I am anxious to prevent any misconceptions that may arise. To my relief the manufacturers, John Wyeth and Brother Ltd, assure me that this document was not intended as promotion for the use of lorazepam (Ativan) in this situation but rather as a data sheet for anyone wishing to use it for day cases.

As an anaesthetist I strongly believe that a long-acting drug such as lorazepam, while excellent for use in certain situations, is in fact contraindicated in day-case procedures. Indeed, it has recently been shown¹ that significant plasma levels of lorazepam are still detectable 24 h after a single dose of the drug, and, although intravenous administration results in an initially rapid decline in plasma levels, this is followed by a very slow fall over the subsequent 24 h irrespective of the route of administration.

In their leaflet the manufacturers have, quiet correctly, included warnings about the

need for patients to be accompanied home and to be cautioned against doing anything requiring any degree of judgment for the rest of the day. However, when there are other, shorter-acting drugs on the market I feel that it would be a shame if a drug as promising as lorazepam for use in certain circumstances were discredited by adverse reports following its use in an inappropriate situation.

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¹ Dundee, J W, *et al*, *Anaesthesia*, 1978, **33**, 15.

Health education in schools

SIR,—Minerva may have been abashed (5 August, p 441) to hear an American health educator say that American schoolchildren have 180 hours of health education in their schooldays. The fact is that the hours of British-style health education cannot possibly be counted in this seemingly superficial way. I should like to know what constitutes the 180 hours in the USA—lectures followed by multiple choice questionnaires marked by a computer, perhaps?

In Britain health education is rarely taught as a curriculum subject in which the hours spent could be "clocked up." It should never be taught just as a series of facts to be poured into empty vessels. It is frequently integrated into the whole school curriculum—ideally, from the primary school to the end of the school career.

In secondary schools it crops up in the obvious subjects such as biology, home economics, and PE; it may also appear in rather more subtle form in drama, art, English, science, social studies, environmental studies, and religious education. Do we have to attach a special label to a topic for it to be considered as "education for health"? Doesn't the school medical officer or school nurse have a part to play in informal health education? I hope we never reach a state where health education is so tightly defined that we can indeed state that every schoolchild will have "done" x hours of it. Would it change their health-related behaviour for the better anyway?

To answer Minerva, perhaps that explains why American children often ask for Coke instead of milk.

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PUVA treatment of psoriasis

SIR,—I refer to the letters from Professor M J Ashwood-Smith and Dr S Igali (29 April, p 1138) and Dr M Whitefield and others (27 May, p 1418) concerning risks associated with the PUVA treatment of psoriasis. Dr Whitefield and his colleagues suggest that the 8-methoxypsoralen used in the photochemotherapeutic treatment, on excitation to its triplet state by light of wavelength around 365 nm, might act as a photosensitiser for dimerisation of adjacent thymine molecules in a single DNA strand as well as forming addition compounds with two thymines on opposite strands of the DNA spiral, which by blocking cellular division reverse the psoriatic

process. It was suggested that such photosensitised formation of thymine dimers may cause mutagenic and carcinogenic changes normally only associated with absorption of light directly by DNA in the higher energy region around 260 nm.

I wish to point out that the triplet energy levels of 8-methoxypsoralen (263 kJ/mol)¹ and thymine (315 kJ/mol)² are such that the triplet energy transfer from 8-methoxypsoralen to thymine invoked by Dr Whitefield and his colleagues may be excluded on energetic grounds, although the reverse triplet energy transfer process from thymine to 8-methoxypsoralen would be expected to be efficient. Psoralen triplet states can in fact only be quenched by thymine by non-energy transfer processes.³ Photochemotherapy of psoriasis by PUVA is therefore unlikely to lead to side effects due to reactions of excited states of pyrimidines or purines in DNA.

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¹ Mantulin, W W, and Song, P-S, *Journal of the American Chemical Society*, 1973, **95**, 5122.

² Eisinger, J, and Shulman, R G, *Science*, 1968, **161**, 1311.

³ Bensasson, R V, Land, E J, and Salet, C, *Photochemistry and Photobiology*, 1978, **27**, 273.

Stroke after acute myocardial infarction

SIR,—I read with interest the paper by Drs P L Thompson and J S Robinson (12 August, p 457) on the relation of stroke after myocardial infarction to infarct size. While I accept their conclusions on the basis of the analysis of aspartate transaminase levels, which showed a correlation coefficient of 0.85 with creatine kinase levels, I find the choice of the latter as the index of infarct severity rather unfortunate in the context of the study, since it is also present in brain and released into the blood in cases of cerebrovascular accident.

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Injuries to cricketers

SIR,—There has been considerable interest of late regarding the use of protective headwear in cricket by batsmen and close-in fielders. I am writing this letter in the hope that some British-based doctors will be motivated to conduct a survey of cricket facial injuries. If the extent of the problem can be defined by such a study surely this will be a further stimulus for cricketers to adopt the use of protective headwear—and, probably more important, facewear. Many readers will be familiar with the story of the county cricketer who, this season, was fielding close to the bat while wearing protective headwear but not facewear. He was hit by the ball and sustained severe facial injury.

Experience in Canadian ice hockey illustrates how a study of sports injuries can add impetus to the introduction of safety measures. Pashby *et al*¹ reported in 1975 a Canadian Ophthalmological Society study of eye injuries in ice hockey. A questionnaire was sent on two occasions to the 525 ophthalmologists who are COS members: 540 hockey-related eye injuries were reported, 15% of all injured eyes being rendered legally blind. The highest number of