On the other hand, syncope, angina, or dyspnoea at the end of exercise should raise the question of dynamic subaortic stenosis of hypertrophic obstructive cardiomyopathy.

M SUNDARARAJAN

Toomey Cardiovascular Laboratory,
St Joseph's Hospital,
Syracuse, New York 13203,
USA

¹ Braunwald IE, Lambrew CT, Rockoff SD, Ross J Jr, Marrow AG. *Circulation* 1964;30(suppl IV): LV3-119.

Medical charities and prevention

SIR,—I am surprised at the outburst from the medical charities (19 January, p 178, and 26 January, p 249) on your recent leading article on medical charities and prevention (22-29 December, p 1610). They make so many points (excuses?) that I am reminded of the saying "The best way of hiding a leaf is in a forest."

Both cancer and heart disease have a common connective factor, that of smoking. But one charity says that "the means of changing people's social habits have yet to be devised . . . and further research is needed into preventive education before large sums are committed to propaganda." Yet we know 25% of cancers could be prevented if we could stop the smoking epidemic.

If the charities are worried about the public and their need to be accountable to it, then I as a member of the public—a concerned general practitioner and one who donates to these charities—will be looking for more effect in the preventive field before I next contribute.

D W GAU

The Simpson Centre,
Beaconsfield, Bucks HP9 1HL

Introduction of U-100 insulin

SIR,—Dr C Hardwick and other specialists in diabetes make out a strong case for the planned introduction of U/100 insulin (24 November, p 1363). Insulin preparations containing 100 units/ml used with syringes graduated to contain one unit per division have been under trial by the British Diabetic Association and successful results have been reported in 18 insulin-dependent diabetic children receiving not less than 16 units of insulin daily.¹

Paediatricians will welcome the additional safety and simplicity which would follow the change to U-100 insulin. We do have reservations, however, about the implicit suggestion that 100 units/ml insulin will be the only strength of insulin preparation available. The problem arises when very small insulin doses are required and this is likely to increase as monocomponent insulins are more widely used. Dr Hardwick describes such cases as "very rare"; but reviewing 40 new cases referred to our paediatric clinic over four years we found that 24 (60%) required maintenance doses of 4 units of insulin or less at some time during their clinical course.

Children's needs are different from those of adults. It is to be hoped that the small advisory committee supporting the officer co-ordinating the introduction of U/100 insulin will include a paediatrician so that the need for a small syringe (0.5 ml) and methods of administering

small doses of insulin can be given consideration.

J J COGSWELL
R M SIMPSON

Paediatric Unit,
Poole General Hospital,
Poole, Dorset BH15 2JB

¹ McKinlay I, Farquhar JW. *Arch Dis Child* 1976; 51:796-8.

Control of proliferative diabetic retinopathy

SIR,—Dr P J Watkins's review article (9 February, p 350) on insulin infusion systems reminds that mildly affected diabetics who do not require insulin can often be excluded from the likelihood of developing proliferative diabetic retinopathy by the chlorpropamide-alcohol-flush test.¹

This could be quite important practical news because Kohner and Leaver explain² the importance of having an expert retinoscopist rather than a GP to identify the early proliferative lesion to provide easier, quicker, and much more effective photocoagulation. This would omit from the expert "mild" diabetics who do not or cannot be persuaded to attend diabetic clinics. The omission might in practice be clearly limited if these mild diabetics were to have the "flush" test.

Annual retinoscopy to catch the early lesion³ is necessary despite photocoagulation's ability in 60% of eyes to halt or reverse retinopathy where vision has not progressed beyond 6/36.⁴ Visual acuity is too late a casualty in the proliferative lesion, but it remains interesting that use of the insulin mini-pump can cause regression of lesions.⁵ Retinoscopy for the whole diabetic population could be tedious and expensive.

GEOFFREY P WALSH

Blackburn, Lancs

¹ Leslie RDG, Barnett AH, Pyke DA. *Lancet* 1979;ii: 997-9.

² Kohner E, Leaver P. *Br Med J* 1979;iii:48.

³ Cheng H. *Br Med J* 1979;ii:365-6.

⁴ Irsigler K, et al. *Lancet* 1979;ii:1068.

⁵ Hercules BL, Gayad II. *Br Med J* 1979;ii:1710.

Unwillingly to school?

SIR,—Dr G F Goddard's Personal Paper (5 January, p 21) on the reasons for children developing emotional and behaviour problems made interesting reading, and I share his concern at the level of bullying in some of our secondary schools. However, some of his sweeping generalisations should surely not be allowed to go unchallenged any longer.

"Children go to school only because they have to and not because they want to"—really, when Mitchell and Shepherd¹ found only 5% of Buckinghamshire children disliked school according to parental report, 30% of boys and 40% of girls liked school very much, and the remainder fell into an intermediate category. Dr Goddard's experience as a child psychiatrist is likely to have been with a selected sample, as there was a high risk of children disliking school, showing poor academic attainment, anxiety at home, and problem behaviour in school. "Peer persecution is responsible for . . . school phobia, truancy. . . ." But a mass of evidence² suggests that these problems are multifactorially determined, and the clinical experience of others supports the notion that fear of separa-

tion from home is often of paramount significance.

"Good schools are almost non-existent." Perhaps Dr Goddard should give us his definition of a good school so that we can evaluate this statement. Professor J A Davis, in his letter (2 February, p 333) supporting Dr Goddard, suggests that we should consider the need for two types of school—therapeutic schools for the deprived and schools primarily concerned with education, in its academic sense, for ordinary children. He may be right, though it is only fair to point out that current educational thinking³ is opposed to this view, and lays emphasis on the value of firm educational objectives in teaching maladjusted children, and on the sense of pride and achievement which disturbed, chronically failing children enjoy when at last they experience educational success. What is needed is more evaluative research into special schooling, so that different approaches can be more rationally compared.

PHILIP GRAHAM

Institute of Child Health,
London WC1N 3JH

¹ Mitchell S, Shepherd M. *Br J Educ Psychol* 1967; 37:32-40.

² Rutter M, Hersov L. *Child psychiatry: modern approaches*, ch 19 and 21. Oxford: Blackwells, 1976.

³ Committee of Enquiry into the Education of Handicapped Children and Young People. *Special Educational Needs*. London: HMSO, 1978.

Medicine and the humane society

SIR,—I am sorry Dr Martin F Shapiro (9 February, p 398) has misunderstood my review of his book (17 November, p 1285). Of course I believe in our "ability to transform society and . . . sustain all that is good in science and medical practice while so doing," but the whole question is *how* this may be done. It is my view that the logic of medical science will increasingly lead those doctors who are loyal to it into collision with the social forms that at present constrain and distort it, and into entirely new social alliances. I therefore see all the caring professions, particularly the doctors, as a reserve of progress rather than reaction, despite all outward appearances to the contrary. I am in this respect a committed optimist, and he a pessimist.

We have to start from where we are, with the people we have.

JULIAN TUDOR HART

Glyncorrwg Health Centre,
Port Talbot, Glam SA13 3BL

Meningococcal infection

SIR,—In their communication Drs J R Oakley and A N Stanton (25 August 1979, p 468) reminded practitioners of the importance of maintaining a high index of suspicion of possible serious meningococcal disease in infants who show altered behaviour and haemorrhagic skin rashes. As the authors emphasised, such patients must be promptly hospitalised and, if the diagnosis is confirmed, treated without delay. A subsequent leading article (20 October 1979, p 953) agreed with the concluding remarks of this paper—namely, that practitioners ought to administer an injection of benzylpenicillin en route to the hospital. In fact, the practice of administering "a shot of penicillin" or other antibiotics prior to hospitalisation has been noted in about 50% of the patients admitted to hospital with

Neisseria meningitidis or other forms of acute bacterial meningitis.¹

"Pretreatment" of patients with bacterial meningitis is rendering in a significant number of cases blood and cerebrospinal fluid cultures (and in many also smears of CSF) negative for bacteria; these effects have been most notable in patients with *N meningitidis* meningitis.² Although in most patients with bacterial meningitis who have been "pretreated" the initial lumbar puncture on admission to the hospital still disclosed polymorphonuclear predominance, hypoglycorrhachia, and elevated levels of protein in CSF (which is most compatible with bacterial meningitis), occasionally pretreatment has resulted in CSF findings compatible with "aseptic" meningitis.³ Even by using counter-immunoelectrophoresis, the problem of differentiating aseptic from bacterial meningitis in patients with equivocal CSF findings and negative bacteriological studies has not been resolved. This is particularly relevant when commercial antisera have been used for counterimmunoelectrophoresis, since cross-reactions and false positives have occurred, making the interpretation of results difficult at times.⁴ It should also be mentioned that the association of skin petechiae with meningitis is not pathognomonic of *N meningitidis* meningitis, since haemorrhagic skin manifestations have been observed in *Acinetobacter* (*Mima polymorpha*), *Staphylococcus aureus*, and other forms of bacterial meningitis^{5,6} and even in "aseptic" meningitis due to enteroviruses.⁷

Finally, the practice of "pretreatment" of patients with bacterial meningitis prior to hospitalisation has never been shown to reverse the progressive deterioration of untreated disease. We reviewed 1316 cases of community-acquired purulent meningitis admitted during the antibiotic era, and found that antibiotics had been given prior to admission to 54.6% of patients.⁸ There were 103 fatalities, 70.8% of which occurred within the first 48 hours of hospitalisation. Among the 103 fatalities, 49.5% had been pretreated with antibiotics. Thus the practice of pretreatment with suboptimal doses of antibiotics prior to hospitalisation is to be condemned.

P JAN GEISELER

Division of Infectious Diseases,
University of Illinois,
Abraham Lincoln School of Medicine,
Chicago, Illinois 60680,
USA

¹ Underman AE, Overturf GD, Leedom JM. *Disease-a-Month*, 1978;24:7-63.

² Geiseler PJ, Nelson KE, Moses VK. *Clinical Research*, 1979;27:344A.

³ Converse GM, Gwaltney JM, Strassburg DA, Hendley JO. *J Pediatrics* 1973;83:220-5.

⁴ Finch CA, Wilkinson HW. *J Clin Microb* 1979;10:519-24.

⁵ Murray HW, Tuazon CU, Sheagren JN. *Arch Intern Med* 1977;137:844-7.

⁶ Fred HL, Allen TD, Hessel HL, Holtzman CF. *Arch Intern Med* 1958;102:204-6.

⁷ Lerner AM, Klein JO, Cherry JD. *New Engl J Med* 1963;269:678-85, 736-40.

⁸ Geiseler PJ, Nelson KE, Levin S, Reddi KT, Moses VK. *Rev Inf Dis*, in press.

*The "blind" administration of oral antibiotics to the febrile, sick child, which often continues for two to three days, in inadequate dosage, should not be confused with the injection of a single therapeutic dose of penicillin at the time the child is sent to hospital. While agreeing that the former may mask the diagnosis of pyogenic meningitis we do not believe that one dose of antibiotic will appreciably alter the cell count or biochemistry of the cerebrospinal fluid over a period of an

hour or so. In some patients, however, meningococcal disease follows a relentless course and may be fatal despite apparently adequate chemotherapy. General practitioners do often administer a single dose of penicillin and this is found to be helpful. In one hospital that recently reviewed 113 consecutive patients admitted with meningococcal meningitis, only three died, a mortality of 2.6%. A haemorrhagic rash may indeed occur in meningitis caused by organisms other than the meningococcus. This, however, appears to be uncommon.—Ed, *BMJ*.

"The Division in British Medicine"

SIR,—Dr S L Loudon (9 February, p 391) has written a thoughtful review of my book *The Division in British Medicine*, and I wish to respond to the criticisms he made.

Most of the faults he finds deal with the years before 1911 and after 1948, periods which I did not attempt to cover comprehensively. Indeed, at the moment I am working on a sequel which will examine the whole period from 1948 in greater detail. Some of his criticisms, moreover, are not clear and the most important reflects a basic misunderstanding. Dr Loudon suggests that I did not give sufficient attention to the influence of the referral principle—but he fails to see that the establishment of this principle was a symptom, not a cause, of the division in British medicine. Furthermore, though the principle was established in the nineteenth century, it did not become fully operational until the Health Service was created in 1948. Dr Loudon does not seem to be aware of the many difficulties encountered before it could be made to work. Until 1948 the GP did not always retain the patient but sometimes lost him in a competitive struggle with consultants and specialists.

With regard to the query raised about the relative influence of the various medical-political groups, I thought my study made clear the central importance of the BMA in the development of health policy. In fact, it was the BMA—in conjunction with the TUC—that set forces in motion which led to the Beveridge Report. This is the most surprising point to emerge from my study and it is one that should be emphasised to a BMA audience. From my book it can be seen that, to a large extent, it was the doctors themselves who created the National Health Service and other aspects of the welfare state. This has great relevance to current problems because the BMA has recently come out in favour of an insurance-financed service. It would be ironic, indeed, if after spending so many years trying to abolish an insurance system the BMA managed to recreate one in the 1980s.

To understand how the alliance between the BMA and the TUC arose, one has to examine closely the development of the panel system and its intimate links with workmen's compensation. This is why my study focuses primarily on the panel doctor. Other aspects of general practice are discussed in less detail because they did not exert the same historical influence. The panel system, in all its essentials, is still with us today—whereas the wide-ranging group practice that flourished between the wars changed character after 1948. Moreover, the panel system occupied a much more important place in the provision of medical care than many have thought. Of the 20-odd thousand GPs in Britain in 1936,

19 000 were on the panel and, before the National Health Insurance Act ended in 1948 they treated half the population.

So far as my comments about social class are concerned, Dr Loudon attaches more significance to them than I intended. Social class differences within the profession were important in the nineteenth century—that is generally accepted—but the main influences in the twentieth century undoubtedly arose from State intervention and the advance of specialisation. My study is concerned primarily with the former but I did not neglect the effect of advancing specialisation (see pp 117, 155, and 163 in particular).

It is unfair to suggest, therefore, that I saw "the hardening of the division entirely as the result of a bitter conflict between the wars." The words "bitter conflict" are Loudon's, not mine. I do not think that the conflict was all that bitter because GPs did not put up much of a fight to enter the hospital world. Most were content to stay in their surgeries.

As for the blank cover on the dustjacket, it appears only on review copies. The completed cover was not ready at the time the book was sent for review.

FRANK HONIGSBAUM

London W2 5BS

Preoccupation with hypertension

SIR,—My fellow Bristolian, Dr J A Moss (26 January, p 251), is worried about the number of "medicated neurotics" from over-diagnosis and over-treatment of hypertension.

A recent leading article (5 January, p 4) indicates that casual blood pressure readings may often be valid, and in any case "catching" the younger male with a borderline blood pressure gives one the opportunity to "grill" him about smoking, weight, and proper exercise, which one needs to be doing whether the patient has a true hypertension or not. Admittedly, one gets some puzzled reactions from the men who "only came in" for their sore throat or sprained wrist, but eventually they even produce a word of thanks for the aggressive approach. After a few months of possibly unnecessary treatment, the patient is delighted if the pills can be stopped, and he is then persuaded to attend twice a year, which I fondly believe gives him an added incentive towards good health behaviour.

The patients don't look the slightest bit neurotic about it, not in East Bristol anyway.

PETER MOFFITT

Bristol BS15 3EL

Blood pressure and ambient temperature

SIR,—Your recent series on blood pressure measurement has emphasised the need for clinicians and epidemiologists to estimate the true biological value of blood pressure as accurately as possible, the former in the interests of the "borderline" patient, the latter to determine more precisely relative and attributable risks for the individual and the community. Ambient temperature has often been reported as affecting observer error. Recently we had the opportunity to confirm this finding in a review of data collected in a longitudinal, multiphasic screening study of the employed and general populations in west central Scotland.^{1,2}