developed chronic hepatitis. Their sera were checked by Dr Eddleston and were also e-antigen and e-antibody negative.

As reported,[1] we have been using a test of in-vivo macrophage (Kupffer cell) function by means of the clearance of microaggregated iodinated human serum albumin. Our normal values expressed as half life are $14{\cdot}1 \pm 3{\cdot}3$ min, and these particular patients had values of 25, 40, and 40 min respectively. The last two patients have died. These results are in contrast to those of other patients with chronic hepatitis who have been studied and have been found to have normal Kupffer cell function.[2]

Dr Galbraith and his colleagues have evidence that their patients had some cellular and humoral immunity. We have evidence that the patients at risk have impaired macrophage function. Indeed it has previously been postulated that one of the important functions of the Kupffer cell is to protect the hepatic parenchymal cells from viral infection.

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[1] Drivas, G, Uldall, P R and Wardle, E N, *British Medical Journal*, 1975, **4**, 743.
[2] Drivas, G, Uldall, P R and Wardle, E N. To be published.

Febrile fits

SIR,—I am glad to see that Drs S Livingston and Lydia L Pauli have once more (19 June, p 1530) explained febrile fits to the confused. It is high time that doctors learnt about the completely different prognosis of benign febrile convulsions, which satisfy the criteria laid down long ago by Livingston and others, from that of fits precipitated by fever in epileptics. It is the term "febrile fits" which is unfortunate. It would be better to use the term "benign febrile convulsions" if they satisfy Livingston's criteria.

Another source of confusion is the fact that any severe prolonged convulsion may itself cause a rise of temperature.

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Screening for Down's syndrome

SIR,—Dr Spencer Hagard and Miss Felicity A Carter are to be commended on their timely article (27 March, p 753). In general the authors' approach to the subject is straightforward and sound. However, there are a number of specific points that are of concern.

Firstly, the authors calculate cost based on two assumptions: with and without pregnancy replacement. The net economic benefit to the community of preventing the birth of handicapped people is the net cost to the community of their care. Consideration of replacement is irrelevant. The authors' assumption confuses the prevention of the birth of a handicapped person with the prevention of a birth per se. (Of course, increased terminations of pregnancy, for whatever cause, may affect the birth rate. However, cost-benefit calculations are usually performed ceteris paribus.)

Another troublesome point is the authors' consideration of lost maternal income. They assume that "labour force participation among mothers of children with Down's syndrome would be half that of average mothers with children of the same age." This assumption neglects the age of the mother and the birth order of the affected child as determinants of labour force participation. A 40-year-old woman giving birth to her first and only baby and a 22-year-old mother giving birth to her second (of three) may have affected children of the same age, but the effect on their participation in the labour force may be quite different. As is evident from table III, column 8 (maternal income cost), changes in these costs could significantly alter the cost-benefit ratios.

Thirdly, the authors consider only the *cost* to the community of caring for a handicapped person over his or her lifetime. No provision is made for life-time *earnings* of the person, whether or not handicapped. The authors' assumption on cost, that *all* births are a *net* cost to the community, is counterintuitive. It may indeed be the case, but it is removed from the authors' central premise.

Finally, in any cost-benefit calculation one can always take issue about data, particularly the magnitude of benefits and costs. One point is noteworthy with respect to the authors' amniocentesis programme, however. Would it not be possible to reduce the cost of the programme (without adversely effecting medical outcomes) by a greater reliance on paramedical personnel, for example? After all, a cost-benefit analysis has no inherent value. It is only a means of examining the costs and benefits of particular strategies in an attempt to optimise resource allocations.

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Doctors and administrators

SIR,—The stage for the discovery by Mr R J Luck and his colleagues (19 June, p 1534) that the salary scale of district administrators is more than that of a full-time consultant was set 20 years ago. At that time, as a registrar earning £750 a year, I could have bettered myself by £100 a year by becoming a *trainee* hospital secretary. It was apparently not relevant that I had five years' experience after achieving a medical degree which itself took twice as long as an honours degree; that I had a specialist diploma, the result of much careful postgraduate study; that my working week stretched through the nights and weekends. The trainee post referred to did not even demand a degree in any subject, though such would have assisted in selection for the course. I made my choice—and have been paying for it ever since.

A S GARDINER

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Medical manpower and the hospital service

SIR,—The problems of staffing the hospital service (leading article, 19 June, p 1492) and of medical manpower (Dr R B Hopkinson, p 1549) are enormous. On the one hand is the spectre of the direction of medical labour (possibly by specialty and by geography) and on the other the doleful prospect of the results of the Hospital Consultants and Specialists Association/Junior Hospital Doctors Association federation's proposals of doubling the number of hospital junior staff, which would greatly exacerbate the pyramidal problem.

The truly sad thing is that although this situation has been acknowledged to exist for many years, nobody has succeeded in doing anything about it. It may be said that our problems arise from Lord Moran's "All consultants are equal." It may also be true that the European-type specialist concept could resolve this problem, though the European specialist works in a very different milieu from that enjoyed by most practitioners in Britain at present. It is perfectly true that so far as the hospital junior staffing position is concerned we have been "protected" from feeling the reality of the situation by the flow of doctors born overseas ever since the early 1960s. However, this problem now affects all doctors of whatever "craft."

There are two things to be said about the problem. Firstly, if the present NHS staffing structure is allowed to continue there will inevitably be trouble because it contains inherent contradictions. Secondly, there is no forum in which these problems can be discussed. Unless such a forum is devised rapidly, and one capable of producing workable solutions, then I believe that profession, service, patients, departments, and administrators alike will soon get into an awful (traditional meaning) mess.

DAVID BELL

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SIR,—Your leading article (19 June, p 1492) coupled with Dr R B Hopkinson's article (1549) reminds us all yet again of the steadily approaching crisis that we are going to have to deal with in the hospitals. It has been perfectly obvious for many years that some form of permanent subconsultant career grade would have to be introduced and I think the sooner we all accept this and start considering how best to implement it the better it will be for all of us working in peripheral hospitals.

You yourself, however, are contradictory in your argument, for in your third paragraph you remind us of the "hazards of having more than one full-time career grade" while in your next paragraph you state that the possible solution to the staffing dilemma is "the introduction of a grade closer to the European specialist." What, apart from the terminology, is the difference between a senior hospital medical officer, a medical assistant, and a specialist? If you wish both to reduce our dependency on imported doctors and to provide a satisfactory career structure in permanent hospital work for local graduates, then I am afraid some form of subconsultant grade is the only way of achieving this aim unless we double or treble the total number of consultants, giving them very little in the way of supporting staff.

This latter solution might well be a possibility if general practitioners were prepared to look after their own patients in hospital, but since I am quite sure they will do nothing of the sort we cannot run a system which depends almost entirely on highly trained