British vaccines should be subjected to a similar investigation without delay, to avoid terminations as a legally defensive measure on the part of the gynaecologist.

Furthermore, no women of childbearing age should ever be vaccinated without clear laboratory evidence that they are non-immune. Only a very small proportion (possibly 15%) of the population requires vaccination and in these cases a long-acting, injectable contraceptive might be indicated.

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Coal-mining and mortality

SIR,—Your well-balanced review of coal-mining mortality (10 November, p 1168) encourages me to complete the picture with some unpublished data.

The 20-year follow-up of a random sample of the male population of Staveley has been successfully completed. The mortality of the 149 "pure" miners (categories 0, 1, 2, and 3) was 66%, as compared with a mortality of 71% amongst the 80 "non-dusty" workers. It is therefore becoming likely that the standardised mortality ratio of working miners in general is about 80 and that of miners and ex-miners about 100. This would make the Rhondda Fach the odd man out.

The only hypothesis put forward to explain the difference between Staveley and the Rhondda Fach was that of differential migration,¹ but recent work at the MRC Epidemiological Unit has rendered this very unlikely. We are now working on an alternative hypothesis.

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¹ Cochrane, A L, and Higgins, I T T, *British Journal of Preventive and Social Medicine*, 1961, 15, 1.

Audiological consultantship—a sinecure?

SIR,—It is very sad that the only way doctors can apparently be attracted into the specialty of audiological medicine is by cynically suggesting that it is a quick way to a consultantship (10 November, p 1231). The welfare and rehabilitation of the deaf in this country have long been neglected, mainly because those who should have given the lead—the ENT surgeons—have generally not been interested. This is hardly surprising since someone who is interested in surgery or in medically treatable problems is unlikely to be also interested in social work with the deaf or in hearing aids. Once hearing therapists are appointed in the NHS they will not be happy working with an audiological physician who is primarily interested in an easy way to a consultantship.

Dealing with the geriatric deaf requires a lot of commitment and is very demanding. Schemes where voluntary workers visit the housebound deaf and service their hearing aids are badly needed; who is going to organise these and refer patients to these schemes? The team leader has to create new work and break new ground, and not be looking for the easy way out and simply discharging patients with intractable deafness or prescribing hearing aids without follow-up, as tends to happen at present. In any hierarchical set-up enthusiasm

has to percolate from the top downwards: it is here that the basic standard of care is necessarily set.

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Inhalation of formaldehyde vapour

SIR,—You state in a reply to a question (29 September, p 778) regarding inhalation of formaldehyde vapour, "Assisted exhaust ventilation may be needed if susceptible individuals must work in a formaldehyde-contaminated atmosphere."

I would hope that no individual works in an atmosphere containing formaldehyde. The threshold limit value (ceiling) of formaldehyde in air is 2 ppm (3 mg m⁻³) at 25°C, 760 mm Hg.¹ This is a concentration that should not be exceeded even for an instant. It is not a time-weighted average or the short-term exposure limit. I am quite sure that Health and Safety Executive officials would take a very dim view of staff working in conditions where they inhale formaldehyde.

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¹ Health and Safety Executive, *Threshold Limit Values for 1977*, EH-15-77. London, HMSO, 1978.

*Our expert writes: "The question was about the harmful effects of formaldehyde (and xylene) and was answered on that basis. It was not a question about the views of the Health and Safety Executive officials, whose interpretation of health does not necessarily accord with demonstration of a pathological process. In a perfect world there would be no formaldehyde in the atmosphere, but in practice intermittent contamination is likely during certain manoeuvres. No harm will come except to susceptible individuals, who would be wiser to seek alternative employment. A balance must be kept between proper caring for staff and wasteful expenditure on measures to protect staff against non-existent or negligible risks. The money would be better spent on the sick, whose needs are established and not yet fully met."

Guar crispbread in the diabetic diet

SIR,—Drs M Cohen and F I R Martin (3 March, p 616) reported failure to confirm the utility of guar as an adjunct to diabetic treatment. While they indicated that this could be explicable on the basis of a difference in type of patient from those in which Dr D J A Jenkins and associates (23-30 December 1978, p 1744) had demonstrated a beneficial effect, Drs Cohen and Martin suggested the need for confirmation by careful long-term studies. The Jenkins group (Dr T D R Hockaday and others, 19 May, p 1353) replied by suggesting that if guar was not added properly to the diet it would not be fully effective—the gel-forming fibre had to be in the food, not just on it.

Yet I found some disturbing aspects about the original reports by the Jenkins group. There were several numerical discrepancies in the data. In large part the reduction in mean urinary glucose output, from 583 ± 150 mmol (105 ± 27 g)/24 h to 322 ± 61 mmol (58 ± 11 g)/24 h, was due to a single patient, who showed a decrease from an unusually

high value of 1681 mmol (303 g)/24 h to 477 mmol (86 g)/24 h. Further, that patient had been below average in terms of urinary glucose concentration before taking guar, with a concentration of 27.7 mmol (0.49 g/100 ml) compared with the average of 61.0 mmol/l (1.10 g/100 ml) for six patients. In fact, at a concentration of 27.7 mmol/l the patient would have had to void 61 litres of urine in 24 hours to achieve a total urinary glucose output of 1681 mmol.

If it is the long-term effects of guar administration which are of principal value, the results of Dr Jenkins and his colleagues were unsatisfactory, being based only on final determinations. The six patients on long-term administration had durations ranging from five to 11 weeks. No report was made of their progress during the course of guar administration or at comparable times during that course. No objective rule was stated about when treatment was to cease and final measurements were to be taken. One could readily bias the results of a study of this nature simply by declaring treatment to cease for a patient whenever that patient showed a desirable response, even if only by chance. To guard against such a doubt, we should be told the entire course of the results for each patient and also the rule for saying when the study was ended for each patient.

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If I was forced to cut

SIR,—During the past few months the *BMJ* has published several articles by a special correspondent called "If I was forced to cut," which have all more or less been themes on the same melody. In my opinion this basic melody is written in a false key and, although I am not qualified in national economics, may I be allowed to express a few reflections?

Shortening the length of hospital admission will certainly result in a higher turnover, which may reduce and perhaps even eliminate the departmental waiting list. As empty beds cost approximately the same as full beds, an economic saving can result only if departments are closed down or restructured and staff dismissed or transferred. I find it hard to imagine how consultants can be encouraged to carry out such reforms, especially as any financial saving may be more apparent than real when other departments are obliged to take staff they neither need nor want or the ranks of the unemployed are increased.

Although early discharge may be imagined to reduce hospital costs, it ought not to be forgotten that at the same time it may increase costs outside the hospital service. District nurses, home helps, and general practitioners all cost money, as do the few days' absence from work which the patient's husband, wife, relative, or friend might consider advisable.

Reduction in administrative personnel both at a local and at a central level seems to be a commonly played theme but the consequence of reduction has hardly been discussed. Redundant staff can be transferred, in which case other departments will become over-staffed and exceed their budget. They can be slowly reduced by not replacing staff who retire. This will mean fewer jobs in the service, which in turn will increase un-