recently. The original ulcer had healed. He was transfused with a total of six units of blood and made an uneventful recovery. The patient's claim, the witness of his relatives, and a return tablet count support compliance with therapy. His claim to abstinence from alcohol is supported by his relatives and the fact that his liver function tests had returned to normal. We were satisfied that no further gastric irritants had been ingested.

This case history emphasises the point that duodenal erosions leading to severe bleeding can develop even during treatment with cimetidine. Some authorities have recommended cimetidine in the treatment of bleeding from gastric erosions arising alone or in association with liver disease.¹ It has not, however, been shown to heal erosions and their pathogenesis is still not understood.^{2,3,4} The dangers of gastrointestinal bleeding are considerable and complacency must be avoided. Cimetidine is not a panacea for gastrointestinal bleeding and its advent should not decrease our vigilance in dealing with such patients, especially when they have associated liver disease.

B D LINAKER
S HUGHES

Gastroenterology Unit,
Broadgreen Hospital,
Liverpool

¹ MacDougall, B R D, *et al*, in *Cimetidine*, ed W L Burland and M A Simkins, p 329. International Congress Series No 46. Amsterdam, Excerpta Medica, 1977.

² Silen, W, *et al*, *Advances in Internal Medicine*, **19**, 195.

³ Mann, N G, *American Journal of Digestive Diseases*, **1976**, **21**, 89.

⁴ Morley, F G, *et al*, *American Journal of Digestive Diseases*, **1976**, **21**, 146.

Antibacterial activity of cefuroxime

SIR,—With the recent introduction of the new cephalosporin cefuroxime, which is reported to exhibit marked stability to most of the bacterial β -lactamases,¹ we would like to recount the outcome of a recent survey of bacteriological sensitivities which we have carried out in our 450-bedded district general hospital.

During three months we isolated 2537 bacteria from clinical specimens and 2511 of these were tested against cefuroxime using 30- μ g discs. Isolation and identification were carried out by standard laboratory methods supplemented in some instances by the API 20E and 20A systems. Sensitivity tests were performed by the usual method.

Cefuroxime was found to be active against the vast majority of Gram-positive and Gram-negative aerobic and anaerobic bacteria from whatever source they had been isolated—for example, sputum, pus, or urine. In many instances over 90% of each genus were recorded as sensitive—for example, all strains of *Staphylococcus aureus*, *Streptococcus pneumoniae*, *Str mitis* (viridans groups), β -haemolytic streptococci (groups A, B, C, G), *Haemophilus influenzae*, *Neisseria gonorrhoeae*, and 97.2% of *Escherichia coli*, 96.7% of *Staph epidermidis*, 94.3% of *Proteus mirabilis*, and 93.8% of *Klebsiella* spp. Grouping all the enterobacteriaceae together, 93.5% were sensitive to cefuroxime, but none of the pseudomonade were sensitive. Most anaerobes were sensitive (91.1%), although if just *Bacillus fragilis* is considered only 80.9% were sensitive. Comparison of our data with those from a larger survey in the USA² shows close similarities.

Overall, 91.7% of the isolates in our study were sensitive to cefuroxime and this wide

antibacterial cover should make it a useful antibiotic for the treatment of infections requiring prompt parenteral therapy before the causative pathogen has been identified.

It appears that cefuroxime can be added to the treatment of various infections—for example, vaginal, ear, nose, and throat, eye, chest, etc.

L POTASCHMACHER
K A JEFFERSON

Microbiology Department,
Southend General Hospital,
Essex

¹ O'Callaghan, C H, *et al*, *Antimicrobial Agents and Chemotherapy*, **1976**, **9**, 511.

² Jones, R N, *et al*, *Antimicrobial Agents and Chemotherapy*, **1977**, **12**, 47.

Contracting in or contracting out?

SIR,—I have held a kidney donor card almost since they first became available and indeed my card is almost indecipherable. Surely a sensible solution to the problems and doubts raised in your leading article (15 April, p 944) is tattooing.

In any fatal incident, notoriously those occasioned by motor accidents, singed or blood-soaked clothing becomes a barrier to the card and its information. A rapid inspection for a tattoo placed, for example, under the foot of the victim should become standard practice. A central computer could record the result of the tissue and the blood grouping determined at the time of the tattoo. I leave it to your more expert readers to judge whether more donors would be lost at the thought of a painful (?) tattoo than are lost through the current system.

D C BISHOP

Turnford,
Broxbourne,
Herts

The postcoital test: what is normal?

SIR,—Mr G T Kovacs and others (1 April, p 818) are to be congratulated on their research into what is normal in postcoital tests. However, they have not stated what the period of continence was for each couple before they performed on the night before the test. Men who have intercourse every night may produce few or no sperm, or even blood, when asked to produce a specimen. Therefore a period of continence should precede the test, and it should be of the same length as for a full sperm analysis. This period of continence may lead Dr J Slome (15 April, p 992) to change his mind about the finding of sperm in the test.

HAYDN DIDIER

Bedford

Who discovered the circulation of the blood?

SIR,—I strongly support the claim made by Dr S Al-Dabbagh (15 April, p 992) that Ibn al-Nafis, a 13th-century court physician to Sultan Baybars of Egypt, discovered the pulmonary circulation three centuries before the Portuguese Servetus¹ and the English Harvey. Not unlike Harvey, Ibn al-Nafis met with great opposition for criticising Galen and departing from traditional medicine—so much so that some historians declined to include him in their biographies. It would not therefore be amiss to rechristen the discovery

as "Nafiso-Harveian," for academic precision.

Luckily, I have access to five manuscripts by Ibn al-Nafis in the Bodleian Library, one of which is a holograph written by Ibn al-Nafis himself shortly before his death in 1288. I am quite willing to provide parallel texts from Ibn al-Nafis and Harvey to demonstrate the striking resemblance between the results arrived at by the two court physicians. Perhaps this will be the best present we can offer Harvey on his 400th birthday, as he was a great seeker of the truth.

S A KHULUSI

Clarendon Building,
Oxford

¹ Hitti, P K, *History of the Arabs*, p 685. London, Macmillan, 1964.

Hepatitis B in the school environment

SIR,—It is well established that viruses are readily transmitted in a school environment. A previous study¹ in two Glasgow schools showed that a significant number of children of African, Asian, or Chinese parents carry hepatitis B surface antigen (HBsAg) whereas native Scottish children carrying HBsAg are extremely rare. As carriers of HBsAg are potential sources of infection with hepatitis B virus we investigated whether the presence of carriers in these schools led to significant transmission of infection to their classmates.

Presence of antibody to HBsAg (anti-HBs) was used as an indicator of prior exposure to HBsAg. Sera from groups of children of African, Asian, Chinese, and Scottish parentage were examined for anti-HBs (Ausab, Abbott Laboratories). Anti-HBs was detected in some of the non-Scottish children but none of the native Scottish children (see table below).

Results of tests of schoolchildren's serum for HBsAg and anti-HBs

Group	No examined	No positive for antigen	No positive for antibody
African	88	3	4
Asian	142	2	3
Chinese	95	4	13
Scottish	78	0	0

It is unlikely that this higher prevalence of anti-HBs in African, Asian, and particularly Chinese children indicates that HBsAg is circulating in these schools preferentially among these children. What is more probable is that this higher prevalence merely reflects a much higher level of HBsAg carriage among their parentage than among the native Scottish population. In the previous study¹ sera were obtained from the parents of five carrier children—all parents' sera were positive for either HBsAg or anti-HBs.

The finding of no antibody among the native Scottish children was particularly interesting. To substantiate this finding we have obtained blood specimens from a further 146 native Scottish children through the co-operation of parents, school staff, and health visitors. Drops of blood were taken by finger puncture on to absorbent card and the extracts tested for anti-HBs. Tests on known positives showed this method to be less sensitive than testing whole serum but still capable of detecting all but very low titres of antibody. All 146 specimens were negative for anti-HBs.

Blood has long been known to transmit hepatitis B infection and recently saliva has been

implicated in transmission.² Both blood and saliva would be likely agents of transmission in schools where skinned knees, hands, etc, sucked pencils and pens, and shared sweets are normal occurrences. That we find no evidence of any infection among 224 Scottish children in two schools with at least nine known carriers is encouraging (not all were tested in this voluntary study). We cannot conclude that hepatitis B is not transmitted in a school environment, as we have no measure of the true infectivity of the carriers (four had anti-HBe, five neither HBe nor anti-HBe). But we can conclude that the presence of a much larger number of carriers than would be present in a school composed entirely of native Scottish children has produced no evidence of any transmission of infection to the Scottish children. This is reassuring.

E A C FOLLETT
S McMICHAEL

Regional Virus Laboratory,
Ruchill Hospital,
Glasgow

K M GOEL
RUTH THOMSON

Royal Hospital for Sick Children,
Glasgow

¹ Goel, K M, *et al*, *British Medical Journal*, 1977, **1**, 676.

² Bancroft, W H, *et al*, *Journal of Infectious Diseases*, 1977, **135**, 79.

"Fighting Spirit"

SIR,—I was flattered that Minerva (8 April, p 929) should have noticed my book *Fighting Spirit* (not, by the way "The" *Fighting Spirit*) but feel I must answer her question: "Why . . . does he omit any mention of women?" I wrote: "We must not forget the growing number of women in the Services"; and named, as my supreme example of good modern leadership, Her Majesty the Queen Mother, giving good reasons for this choice. When I went so far as to caution that we cannot nowadays assume that God is a man, I was thinking of the ardent feminist who counselled a troubled friend: "Pray to God, my dear, and She will help you."

Soldiering may be a little outside Minerva's proper sphere, but many readers of the *BMJ* know a great deal about it, so I must point out that I claim no personal credit for the "theory that good morale and esprit de corps . . . are the most important attributes of a soldier." Napoleon, Montgomery, and Slim are among those who said this long before I did.

FRANK RICHARDSON

Edinburgh

Nutrition education

SIR,—We agree with Professor A S Truswell (25 March, p 782) that nutrition education for the whole public is difficult. The advice about food in the current phase of the "Look After Yourself" campaign is not intended to be comprehensive. In this opening phase of a long campaign we hoped to put across the ideas that what people eat has some bearing on their health; that everyday fitness could be improved or maintained by choosing some foods which could be regarded as healthier than others; and that people who think about what they eat are not food faddists or cranks, but simply being sensible about looking after themselves. We have not created the nutritional

principles; most of these—for example, reduction of obesity and reduction in the proportion of energy derived from fats and sugar—have come from the report of the Committee on Medical Aspects of Food Policy.¹ We have tried to translate these into mass media messages for the public.

Later in the campaign we intend to give more specific advice and will, of course, be consulting nutritionists on these messages. We are in process of joining with the British Nutrition Foundation in a nutrition education committee. In addition, we are pleased to hear from anybody with constructive advice or ideas.

As regards evaluation, all aspects of the campaign are being evaluated by means of a market survey of a national sample, and an academic study of a population in the Midlands.

GEORGE CUST
Chief Medical Officer

Health Education Council,
London WC1

¹ Committee on Medical Aspects of Food Policy (Nutrition). *Diet and Coronary Heart Disease* (report of Advisory Panel on Diet in Relation to Cardiovascular and Cerebrovascular Disease). London, HMSO, 1974.

Fall in admission rate of old people to psychiatric units

SIR,—Following our paper (21 January, p 156) on possible interpretations of recent changes in admission rates of old people to psychiatric units, we have read with interest the letters in which colleagues have suggested points from their own experience which bear on these changes.

Dr Judith Jenkins (11 March, p 648) took us to task on a variety of counts, and in particular we seemed to her to be drawing conclusions from differences across a time of change in definitions. But if she looks carefully she will see that all our percentage falls in first admissions are calculated not across the fall of 1969-70 (when there was a change in definition) but for the continuing downward trend from 1970 onwards. Moreover, our paper was concerned also with the total admission rate, and the actual numbers of old people admitted with the diagnosis of dementia, rather than merely with the first admission rate. Total admission rates began to drop in 1970 and dementia admissions had their most dramatic drop in that year (our table II), and this makes us feel that in all probability a real change occurred at that time. Dr Jenkins suggests that a possible explanation for the maintenance of total admission rates before 1970 may have been due to "a policy of planning regular readmissions for short periods of time." Even if this were true she would have to explain why this policy should suddenly change in 1970 and continue to do so for the next four years.

Dr Jenkins then goes on to describe a surprising manipulation. She takes two figures, one greater than the other, adds to the lesser the difference between the two, and then finds they come to "largely" the same level; but even so she would still be left with a steady downward trend in first admission rates for both the relevant age groups from 1970 onwards, by contrast with the erratic but generally upward trend of previous years. And she would still have to explain the even more telling fall in "all admission" rates.

There is no mystery about first admission

rates for dementia in the years previous to 1970; Dr Jenkins can, of course, get a fair approximation from our table II, but the exact figures for the two age groups in our figure 2 are not, the DHSS tells us, available before 1970. Since during the time in question numbers of old people were increasing fast, Dr Jenkins conceded that what we suggest "may well be true," but at the same time dismisses our attempt to make sense of what she calls the "inevitably crude national statistics." National statistics may be crude, but they are not to be dismissed. If they had shown a steady upward trend, then Dr Jenkins, or any of us, would not have been surprised. When they show a downward trend we have to take notice and try to think what it can mean, which is what our paper was about. In order to unravel these matters properly, we concluded that "operational studies of referrals and clinical studies of the patients referred" are now needed. It is not entirely clear whether Dr Jenkins is doing more than reaching the same conclusion when she enjoins us, but perhaps a little tentatively, to find out "what is happening to elderly people categorised as demented and their families" by looking at them "in real life." It is precisely because of what we find as working clinicians in "real life" that we warn against the possible conclusion that need for psychiatric beds for the elderly is diminishing and urge more detailed and intensive studies that take into account local needs and facilities.

The figures for 1975 have now been published¹ and they show a sharp upward surge in both all and first admissions, including admissions for dementia in old people. It may well be that we have seen a trough in admissions deriving its origins from the phenomena which we suggested in our paper but now being obliterated by the rapid continuing increase in the very elderly.

K SHULMAN

Maudsley Hospital,
London SE1

TOM ARIE

Medical School,
Nottingham

¹ Department of Health and Social Security, *In-Patient Statistics from the Mental Health Enquiry for England 1975*. London, HMSO, 1978.

The abuse of slides

SIR,—Dr F W A Turnbull (29 April, p 1147) hasn't got it right either. Nelson's famous signal can be seen at the Nelson Museum at Lloyds and reads: "England expects that every man this day will do his duty."

JILL WILKINSON

Edenbridge, Kent

Duodenal ulcer in Johannesburg

SIR,—The careful analysis by Dr Isidor Segal and his colleagues (25 February, p 469) of patients presenting with duodenal ulcer in Johannesburg provides further evidence linking the development of this disease with urbanisation of the African population. With regard to the apparent increase in incidence, statistics are notoriously unreliable, since many patients with uncomplicated duodenal ulcer may remain undiagnosed in such a population. This is less likely to be the case when perforation occurs. An analysis of perforated duodenal