SIR,—Your leading article (7 September, p. 590) is a most useful statement of the present situation and as such is important as a landmark in the history of women doctors in the U.K.

The climate of opinion and the social order determine not only the rate of change, as you so rightly say, but also, one might add, the nature of change itself. It was in order to monitor such change and to influence society that in 1879 all nine women doctors on the *Medical Register* formed a professional association which was then called the Association of Registered Medical Women. I will not dwell on the need for this organization at that time, other than to comment that the B.M.A. and all medical societies then felt unable to admit women colleagues. As more women qualified other groups were established and in 1917 these federated to form the Medical Women's Federation. The importance of this national body as a forum for discussion at regional levels and a rallying point where problems and policies about the particular career problems (so well set out in your leading article) can be debated is recognized by the B.M.A. Two of its major autonomous committees include representatives of the M.W.F.

Your leading article referred to the strident voices calling for equality of numbers. These voices come from outside the profession. Those within know that it is equality of opportunity along the lines you indicate which poses more urgent problems. You will be glad to know that in order to help women doctors to make use of the schemes to which you refer the M.W.F. has 30 liaison officers who have for some time been working with postgraduate deans and regional medical officers. These doctors offer their counselling services to women colleagues experiencing career and other problems. Their names and addresses can be obtained from M.W.F. headquarters.

I am glad to be able to report that all regions are now much more aware of the importance of enabling women doctors to remain in or to re-enter the profession. I hope that the funds which are necessary to implement such policies will be there, as we do not want to find in a few years' time that this country has to rely not only on doctors from overseas with many attendant cultural and language problems, but also on a corps of undertrained women doctors.

I welcome, particularly, the references in the article to the need for the women's decision about the time she wishes to spend in family life to be respected. This echoes the views of the M.W.F. expressed in a letter published in the *B.M.J.* in January 1972.[1]—I am, etc.,

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1 Lawrie, J., *British Medical Journal*, 1972, **1**, 251.

SIR,—Your leading article (7 September, p. 590) stresses the potential value of women in medicine and mentions some branches in which they might find congenial work. I would also mention dermatology as a specialty well suited to their aptitudes and their need to combine professional and family life. Though it is not entirely true that dermatologists are never called out at night, there is certainly enough flexibility in this branch of medicine to allow reasonably attractive hours for married women doctors. Moreover, there is (or should be) enough variety of work within the specialty to provide for them a particularly useful and interesting service in any one of a number of its different aspects—contact and industrial dermatitis, treatment and minor operating clinics, atopic and other allergic problems, and so forth. In my own department women medical and clinical assistants have provided invaluable help on a 4-6-session basis. They bring to dermatology an instinctive knowledge of the anxieties and environmental contacts of the mother and housewife and are particularly fitted to give constructive help to women with hand eczema or cosmetic problems.

Owing to the encouragement of Dr. Rosemary Rue, then Senior Administrative Medical Officer to the Oxford Regional Hospital Board, I have also been fortunate in having had a succession of women doctors employed under the married women doctors' retraining scheme, which Dr. Rue has done so much to foster in this region.[1] It may be of interest to readers to know the outcome. One is actively engaged as a dermatologist "somewhere East of the Suez," another has taken up an established post in venereology, and two others have obtained clinical assistant posts in our own department.

Such posts must, of course, be created with enough imagination to give the holder a sense of "job satisfaction" and yet allow her to run her home and look after her family. There is bound to be some anxiety about the future of these valuable "retained" doctors until sufficient suitable posts, supported by the necessary financial backing, are available for them throughout the country. I hope that this letter may act as further stimulus to this end.—I am, etc.,

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1 Rue, R., *Lancet*, 1967, **1**, 1267.

SIR,—In your leading article (7 September, p. 590) you state that the first woman to qualify in medicine in Britain was Elizabeth Garrett in 1865.

I draw your attention to a recently published work on the history of the army medical services[1] wherein is reported the "incredible" story of Inspector-General of Hospitals, James Barry, who, after serving for 46 years in the Army Medical Department, was reported to have been a woman. This officer qualified M.D. at Edinburgh University and joined the Army Medical Department in 1813.—I am, etc.,

E. E. VELLA

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1 Cantlie, N., *A History of the Army Medical Department*. Edinburgh, Churchill Iivingstone, 1974.

Treatment of Aspergillosis

SIR,—Your leading article (20 April, p. 133) draws attention to a report by Jesiotr[1] which claimed successful treatment of three cases of pulmonary aspergillosis and one of otomycosis with a 7-10-day course of emetine hydrochloride in a single daily intramuscular dose of 40-60 mg. In our opinion greater emphasis should have been placed on the need for this work to be "examined critically" and "in particular [for] the details of the sensitivity testing technique . . . to be assessed." Otherwise your article might be responsible for the generation of false hopes about the possible role of emetine in the treatment of aspergillosis.

We report here the results of aspergillus sensitivity tests performed (*a*) by using an agar diffusion method similar to that used by Jesiotr (in the absence of a "methods" section in the original report precise repetition is difficult) and (*b*) by determining the minimum inhibitory concentration (M.I.C.) of several clinical isolates. The latter method is widely accepted as a more scientific means of measuring the antimicrobial activity of a chemotherapeutic agent. The isolates tested were all obtained from the sputum of patients with aspergillosis with the exception of the strains of *Aspergillus niger*, one of which was isolated from a case of otomycosis and the remaining two were kindly supplied by Dr. Jesiotr, who isolated them from his reported case of otomycosis.

(*a*) *Agar Diffusion Method.* All the strains of *A. fumigatus*, *A. terreus*, and *A. niger* (including the two isolates from Dr. Jesiotr) produced, at most, minimal inhibition of growth in the Sabouraud medium surrounding the well containing 3,000 μg/ml. A large, clearly defined zone was observed when neat (60,000 μg/ml) emetine hydrochloride was added to the well. It appears that these findings are consistent with those published by Dr. Jesiotr (personal communication). A photograph in his text showed a small and a large zone of inhibition surrounding two wells cut into the agar medium which had been inoculated with *A. fumigatus*. The legend, however, did not indicate that the wells contained 3,000 and 60,000 μg of emetine hydrochloride/ml respectively. Thus the reader is unaware that a neat emetine solution was required to produce significant inhibition of fungal growth.

(*b*) *M.I.C. Determinations.* The results (see table) show that even the "sensitive" isolates of *A. niger* obtained from Dr. Jesiotr required high concentrations of emetine to inhibit growth. Thus there does not appear to be any geographical reason for the poor sensitivity of our Edinburgh isolates. Overall, emetine hydrochloride exhibits a toxicity to fungi similar to that of many antibacterial antibiotics which are of no value in the treatment of aspergillosis.

M.I.C. Values of Emetine Hydrochloride for Aspergillus Species in Sabouraud Broth

Species	No. of Isolates	M.I.C. (μg/ml)
A. fumigatus	17	3,000→6,000
A. terreus	2	3,000
A. niger	2	1,500
A. niger (Jesiotr I) ..	1	>6,000
A. niger (Jesiotr II) ..	1	750

Empirically it is impossible for the administration of 40-60 mg of emetine hydrochloride daily for 7-10 days to have produced tissue levels inhibitory to the causal organism in the four cases treated by Jesiotr. There is the unlikely possibility of a host-mediated response. However, on the basis of this hypothesis alone, we feel that we cannot justifiably progress to clinical evalua-

tion of emetine, especially in view of its known myocardial toxicity.

Having thus dismissed emetine as a potential treatment for bronchopulmonary aspergillosis, we would confirm the views expressed in your article that amphotericin B is currently the most effective treatment available. Similarly, 5-fluorocytosine is effective against sensitive yeasts (provided they remain so), but we would like to point out that while clotrimazole does cause gastrointestinal side effects, it has also been shown to have no detectable effect against bronchopulmonary aspergillosis using clinical and mycological criteria.[2]—We are, etc.,

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1 Jesiotr, M., *Scandinavian Journal of Respiratory Diseases*, 1973, **54**, 326.
2 Crompton, G. K., and Milne, L. J. R., *British Journal of Diseases of the Chest*, 1973, **67**, 301.

New Curriculum

SIR,—I was fascinated to read the letter from Dr. M. F. Green (31 August, p. 578) describing the new curriculum at the Royal Free Hospital. The preclinical course concerning "Man and his Environment" is of great interest. It is, however, surprising that he does not mention any contribution to this course from general practitioners—who are daily concerned with treating man in his environment. It is equally surprising that the teaching in sexual matters is to be covered by preclinical staff, obstetricians, and a specialist in community medicine, while the management of most of the sexual problems which present in the National Health Service is conducted by general practitioners.

It would seem that the Royal Free Hospital could only improve their course by obtaining assistance from those doing the bulk of the clinical work in these fields. Some of the London schools and all the medical schools in the provinces have found that using the resources provided by patients in general practice and their doctors for teaching about subjects rarely encountered in the teaching hospital is remarkably successful.—I am, etc.,

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Complications of Carbenoxolone Therapy

SIR,—The letter from Dr. A. N. Kingsnorth (31 August, p. 579) stimulated by the recent article by Dr. G. J. Davies and others (10 August, p. 400) tends to cloud the issue. The presentation of carbenoxolone side effects is not invariably congestive cardiac failure, and this is clearly demonstrated in the original paper. In the absence of ileus the oral administration of potassium supplements is equally effective as, and less hazardous than, their intravenous infusion: to overcome the cumulative deficit of hundreds of milliequivalents of potassium will in any case require days rather than hours. Most serious of all, there is no "good case" for the use of an "aldosterone-antagonist-like diuretic agent." Quite the reverse, since it has been shown[1] and is accepted in undergraduate textbooks[2] that spironolactone will actually prevent the effect of carbenoxolone in healing gastric ulcers. Thiazide diuretics[1] will prevent the fluid retention without altering the healing, but will certainly further exacerbate potassium loss. The only way to combat this is to administer large quantities of potassium-containing drugs.[3]

The best current policy is to use carbenoxolone only in patients with normal serum potassium and blood urea and without signs or history of heart failure or hypertension. The course of treatment should be carefully monitored to ensure prompt detection of weight gain or hypokalaemia. If it is desired to reverse or prevent the fluid retention or potassium loss, then thiazides plus substantial amounts of potassium chloride are indicated on present information. The aldosterone antagonist spironolactone is definitely contraindicated.

In the situation where the patient is committed to three different drugs totalling maybe more than a dozen tablets daily a single potassium-retaining diuretic tablet might well be preferable. Criteria for the ideal diuretic are adequate prevention of sodium and water retention, prevention of potassium loss, and freedom from antagonism of the healing action of carbenoxolone. The possibly useful agents available are triamterene and amiloride, which have both been proposed.[4] Our search of the literature has not found any work establishing the value of either of these agents with carbenoxolone therapy and we are at present engaged in a trial to evaluate amiloride.—We are, etc.,

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1 Doll, R., Langman, M. J. S., and Shawdon, H. H., *Gut*, 1968, **9**, 42.
2 Laurence, D. R., *Clinical Pharmacology*, 4th edn., p. 215. Edinburgh, Churchill-Livingstone, 1973.
3 Bateson, M. C., *American Heart Journal*, 1974, **88**, 124.
4 Cranston, W. I., in *Modern Diuretic Therapy*, ed. A. F. Lant and G. M. Wilson, p. 175. Amsterdam, Excerpta Medica, 1973.

SIR,—The article by Dr. G. J. Davies and others (10 August, p. 400) raises certain questions and requires clarification.

Carbenoxolone has been in clinical use for over a decade and over 400 papers relating to it have now been published. Thus the incidence and nature of any side effects have been carefully and widely documented in the world literature, as have all those cited by the authors. That some of these complications can be quite severe has long been recognized and this information widely disseminated to the medical profession by the pharmaceutical firm marketing it. The data sheets on Biogastrone[1] (used in the treatment of gastric ulcer) and Duogastrone[2] (duodenal ulcer), which have been sent to every practising doctor in the United Kingdom, carry very clear warnings regarding their use, including any contraindications, and the message is quite clear. Carbenoxolone sodium treatment has to be regularly and medically supervised. However, this in no way compromises either the efficacy of or the indications for such treatment, as has also been borne out by a recent critical review of carbenoxolone in the treatment of peptic ulcer.[3]

An analysis of the case histories cited by Dr. Davies and his colleagues would indicate that the severity of the complications was avoidable in cases 1, 3, 4, 6, and 8; case 2 was treated with the inappropriate preparation of carbenoxolone in too large a dose and for too long, while the remaining two patients should not have been treated with it at all. As Dr. Davies and his colleagues themselves admit, a proper awareness of the usage of carbenoxolone would have avoided most of the complications which they describe.

It would also be of great interest to know over what period of time these cases were assembled and the actual incidence of complications they represent. Finally, until further properly controlled clinical trials have clearly disproved the value of carbenoxolone in other gastrointestinal conditions then it is misleading to conclude that the only indication for its use is in proven benign gastric ulcer.—I am, etc.,

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1 *A.B.P.I. Data Sheet Compendium 1974*, p. 88. London, A.B.P.I., 1974.
2 *A.B.P.I. Data Sheet Compendium 1974*, p. 91. London, A.B.P.I., 1974.
3 Lewis, J. R., *Journal of the American Medical Association*, 1974, **229**, 460.

Channel Tunnel

SIR,—Dr. J. B. Kelynack (7 September, p. 631) makes a good point about noise and the channel tunnel rail link, but might I draw attention to another and potentially far more serious hazard associated with the tunnel itself?

The tunnel will be the first land link between Britain and the Continent and we will thus lose our physical isolation. Wild animals must inevitably get through to make a mockery of our quarantine regulations. With rabies spreading steadily westwards across Europe and with the fox an increasingly important carrier, I trust someone can give us reliable assurance of our continued protection from this disease.—I am, etc.,

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Prazosin and Hydrallazine in the Treatment of Hypertension

SIR,—We noted with interest the preliminary report by Drs. G. S. Stokes and M. A. Weber (11 May, p. 298) on the antihypertensive effects of prazosin. We have conducted a double-blind crossover trial comparing the antihypertensive effects of prazosin and hydrallazine in combination with a beta-blocking agent and a thiazide diuretic, the results of which will shortly be published.

The double-blind addition of capsules containing either 1 mg of prazosin or 25 mg of hydrallazine produced a significant fall in the blood pressure in this study. We had assumed from open studies that 25 mg of hydrallazine was equivalent to approximately 1 mg of prazosin, but the results of the controlled trial suggest that the hypotensive effects of 25 mg of hydrallazine may be rather greater than those of 1 mg of prazosin.