The Family Planning Association leaflets are excellent, giving accurate advice and a balanced picture of the health implications of taking hormonal contraceptives.

Smith and Whitfield's study perhaps confirms our fears that even if a patient has been given an information leaflet, she will probably still not take the correct measures if she were to miss the pill.

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Diphtheria

Sir,

I read with interest Martin's editorial on diphtheria (August *Journal,* p.394), which gave an excellent summary of its epidemiology, management and prevention. The current epidemic in the countries of the former Union of Soviet Socialist Republics (USSR), together with the increased travel to that part of the world, has certainly refocused attention on this potentially fatal infectious disease. I have a number of points to add to those stated in the editorial.

First, general practitioners will be interested to know that a single antigen diphtheria vaccine for adults is available. Although the combined adult diphtheria/tetanus vaccine is usually an acceptable alternative for adults requiring diphtheria immunization, it cannot be administered to patients who have had a previous severe reaction to tetanus immunization.

Martin stated that all close contacts of patients with diphtheria should be prescribed antibiotic prophylaxis, without waiting for their swab results and irrespective of their vaccine status. Although I tend to agree with the author, it is worth pointing out that others have argued that only those close contacts who are inadequately immunized or who have positive swab results should receive prophylaxis.[1,2] It is also useful to define who should be considered a close contact. The list includes: household members, friends/relatives/carers who regularly visit the home, kissing/sexual contacts, school classroom contacts, those who share the room at work and health care staff exposed to oropharyngeal secretions of the patient.[3] These close contacts should be kept under daily surveillance for at least seven days after the last contact with the patient. Surveillance should include inspection of the throat for the presence of a membrane and measurement of temperature.[3] Contacts should be considered clear when a minimum of two negative nose and throat swabs have been obtained, at least 24 hours apart, beginning at least seven days after the last contact with the case or carrier and at least five days after completion of any antibiotic prophylaxis.[1] Close contacts whose swabs are positive should be excluded from handling food and from work with schoolchildren until bacteriological clearance is obtained.

The World Health Organization has recommended that coverage levels should exceed 95% of infants receiving three diphtheria immunizations by the age of two years.[3] However, like many other historically important infections, there is a danger that the rarity of diphtheria in the United Kingdom could lead to complacency. Therefore, the importance of public education on the need for immunization (both routine and travel-related) cannot be over-emphasized.

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Practice nurse workload

Sir,

In their paper on practice nurses' workload and consultation patterns (August *Journal,* p.415) Jeffreys and colleagues raised some interesting issues, but I felt that the study was too focused on the tasks performed rather than considering all aspects of a patient's needs.

In my own research, as yet unpublished, I audiotape recorded practice nurse consultations and subsequently analysed them, attempting to replicate the work of Byrne and Long.[1] The 'task', for example the dressing of a wound or the taking of a blood sample, proved to be the pivot or focus of the consultation with nine other categories of intervention interwoven throughout. The most frequently occurring were: education and explanation; building the patient–nurse relationship; and health promotion.

The practice nurse, because of experience and extended training, is able to make assessments of a patient, understand the clinical significance of findings and when necessary seek appropriate medical advice for the patient or refer to other professionals. It is these elements which I believe contribute greatly to the quality of patient care and might be lacking if a health care assistant were to undertake some of these aspects of patient care, as proposed in the paper by Jeffreys and colleagues.

Delegation of form filling, patient recall systems, computer skills and routine clerical tasks would be more appropriately undertaken by non-medical staff. I envisage practice nurse teams comprising a mix of skills with different levels of training, interests and clinical skills, more integrated with community nurse colleagues, and also continuing to share with general practitioners the care of patients with diseases such as asthma, diabetes and hypertension.

I am sure that it is right to look at the practice nurse workload and delegate wherever possible to appropriately trained personnel, although I have reservations about the employment of health care assistants to perform tasks such as blood sampling and blood pressure measurement.

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Re-education via Darwinian medicine

Sir,

Medical teaching would be revolutionized if greater attention were paid to Darwinian

medicine and the evolutionary causes of diseases rather than to the proximate antecedents made fashionable by Pasteur. The biological closeness of humans to chimpanzees (the only other animal to have blood group O) and man's long adaptation to living on the savannah lands of east Africa eating roots, berries, nuts and fruits explain why vitamin C is the only vitamin we do not store or manufacture and why people of African origin are protected by the sickle cell allele against malaria.[1]

How well do we understand the role of fever, evolved as a defence against pathogens, when prescribing antipyretics? Some organisms such as the rabies virus and cholera bacillus have even adapted human behaviour to enhance their spread, while mutation of micro-organisms is eroding the power of antibiotics.

Why are so many of us allergic to such a natural substance as pollen? Why can we replace our gastric mucosa in 15 minutes, and the skin more slowly, but never a cerebral neurone or a damaged heart valve? Do automatic reflex withdrawal responses represent fears of stimuli from dangers encountered by our ancestors while we lack similar detectors for modern hazards such as polychlorinated biphenyls (PCBs)? Why if stress responses make the organism function more effectively, has natural selection not shaped continuous expression of these responses?

The wider perspective thrown on medical practice by Darwinian medicine enables us to understand the problems we face in modern environments, including nutritional excesses, substance dependencies, the need for orthodontia resulting from deficient demand for jaw exercise in childhood, and even child abuse. I asked eight general practitioners and one consultant obstetrician why women vomit during pregnancy and they could only give the proximate cause — high hormone levels. But why then do those who do not vomit have more miscarriages? We have to look to Profet for an explanation for this primitive and distressing affliction of pregnant women.[2] According to Profet's theory, plants contain toxins that protect the plants against herbivores. In some cases, these toxins make up 10% of the dry weight of a plant. A pregnant woman vomits from the 14th day to the 14th week of pregnancy in order to protect the fetus from such toxins.

We should remember that our haemoglobin is identical, in all 287 units, to that of the chimpanzee, and any special status that we may claim over chimpanzees is not a result of an enlarged genome, for we only have a modified ape genome.[3]

Finally, when a tennis player comes in clutching a painful calf, you can tell him he has ruptured his plantaris, and that he is one of the 15% of people who have retained this vestigial muscle, evolved originally for climbing trees but not now evolved for extending the ankle joint to deliver a 120 mph service.

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Thrombolytics in acute myocardial infarction

Sir,
In his editorial on the use of thrombolytics in the early management of myocardial infarction,[1] Rawles appears to imply that urokinase may be used in place of streptokinase or anistreplase. As far as I am aware, urokinase does not currently have a licence in the United Kingdom for use as a thrombolytic in the treatment of myocardial infarction.

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Reference

1. Rawles J. What should be the general practitioner's role in the early management of acute myocardial infarction? [editorial]. *Br J Gen Pract* 1995; **45:** 171-173.

Reaccreditation

Sir,
Why all the fuss about reaccreditation? My original certification was based on holding bachelor of medicine and bachelor of surgery qualifications and this in turn was based on knowing the chemical formula for soap and that exhibit 24a was a uterine fibroid. Later I could have spent six months in an approved post learning and practising little more than phlebotomy.

The testing of actual performance in general practice is a quantum step forward from my certification experience and, as a measure of the delivery of health care, is something we as general practitioners should welcome now; it is certainly what the justification of our professional future will soon hinge on.

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Family stress following a GP's death

Sir,
For a number of years, stress among members of the medical profession and their families has been a key issue and it is an area of research in which I have been actively involved since 1987.[1] When this research was started, stress was often a hidden concept in relation to the doctor's life and work, and only recently has its existence been openly acknowledged. The recent death of my husband, a retired general practitioner who worked in an inner London practice, has heightened my awareness of the problems experienced by the families of doctors after their death, including financial and social concerns. Because of its sensitivity, this issue is rarely discussed or researched among medical professionals. My own experience of this situation has therefore motivated me to set up a research study into this area.

I would be interested to hear from other spouses of doctors whose husband or wife has died, who would be willing to share their experiences and participate in this research study. I can be contacted at the address given below. All information provided would, of course, be totally confidential and would be reported anonymously.

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