trials were the solution to our medical problems there would be no need for alternative medicine. As it is, practitioners of paramedical specialties such as osteopathy and homoeopathy are increasingly popular because they provide what patients are looking for in terms of human care and understanding. Even more important, the treatment they use subscribes to the old maxim *primum non nocere*.

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SIR,—Your leading article "The flight from science" (5 January, p 1) illustrates the entrenched and conservative ignorance of the medical profession. You pretend to be rational while ignoring the scientific information at your disposal.

Acupuncture, a subject that I am qualified to speak about, does seem to have a scientific basis. The work that is available at the moment shows that there is a neurological¹ and neuro-humoral² basis for the mechanism of action of acupuncture. It does stimulate the release of cerebrospinal fluid endorphins and this does help to control pain.³ These facts, however, are not mentioned—you refer only to the belief in "yin and yang." Furthermore, acupuncture has existed as a therapeutic method for about 3000 years so it has stood the test of time.

A proper scientific evaluation of the subject is mandatory, but please do not dismiss the work that has already been done on acupuncture. Some of this work does satisfy the standards of scientific excellence.

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² Pomeranz B. *Adv Biochem Psychopharmacol* 1978; 18:351-9.
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SIR,—Your leading article "The flight from science" (5 January, p 1) rightly states that "orthodox medicine has every right to be proud of its record of objective evaluation of claims. . ." Orthodox medicine may, however, have reason to be ashamed of its prejudice against any form of therapy which has developed outside its ranks.

I learned chiropractic at the Anglo-European College of Chiropractic, where the emphasis was on musculoskeletal conditions. The results were impressive enough for me to abandon my career in general practice and specialise in chiropractic. I am able to palpate fixation of intervertebral joints. I adjust (or manipulate) them and observe an immediate change in spinal mechanics. I know from experience that in most patients, after a number of adjustments, I will have successfully corrected the functional disturbance so that the spine becomes free of any major fixation. Since both my observations and my treatment are manual, to convince a sceptic I have first to train him in the examination of intersegmental movement—which takes time and patience. I believe that most chiropractors would be happy to take part in a controlled trial to prove the effectiveness of their treatment, but have not the facilities and would require the co-operation of hospital departments.

No doubt a number of effects of chiropractic on health have been claimed and remain unproved. One thing is certain. The reason

for the popularity of chiropractic is that it has been successful in treating common diseases for which orthodox medical treatment has proved a failure.¹ I refer particularly to the group of ailments popularly known as "rheumatism." Though it may be important to be able to recognise and treat uncommon yet potentially fatal or crippling disorders, is it not equally important to be able to rid patients of symptoms of lumbago, sciatica, neck and arm pains, headaches, "non-organic" chest and abdominal pains, etc? Chiropractors successfully and safely treat the ailments which interfere with the well-being of 90% of the human race.

Too much publicity, you assert, has been given to the adverse effects of oral contraceptives. It took years for the ill effects of the pill to be recognised. Yet common sense should tell us that deliberately to upset the hormone balance of a healthy young woman cannot but be detrimental to her health. Natural family planning by the ovulation method (Billings) has suffered from similar prejudice. Yet the scientific basis has been well demonstrated.² Statistical evidence of its effectiveness is at present being gathered from trials in a number of countries by the WHO.

Surely, more worrying than the public's "flight from science" is the refusal of our profession to consider anything which does not require the use of modern technology, operative surgery, or drugs.

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- ¹ Breen AC. *Rheumatol Rehabil* 1977;16:46-53.
² Billings EL, Billings JJ, Brown JB, Burger HG. *Lancet* 1972;i:282-4.

Hypertension and special clinics

SIR,—The US Hypertension Detection and Follow-up Program has recently reported¹ that mortality over five years was 17% lower among 5485 hypertensives who received care at special clinics than in a randomly chosen group of patients referred to their own doctors. This impressive result, which revealed most benefit within the mild hypertension range, led us to consider carefully the implications for doctors and patients participating in the Medical Research Council's mild-to-moderate hypertension trial. The issues raised will also interest other doctors who are reconsidering their policy in the light of these new results.

One may accept without reservation the authenticity of the results, as well as the study's conclusion—namely, that "these findings . . . indicate that the systematic effective management of hypertension has a great potential for reducing mortality." The difficulty is to know which components of care contributed to the success. There was no untreated control group, and the more actively managed group received many advantages, including free and closer all-round care and advice on diet and smoking. The possibility that better general care contributed to the result is supported by the fact that the net reduction in deaths from non-cardiovascular causes (14%) was almost as great as that from cardiovascular causes (19%). This is perhaps as much a trial of medical care as of antihypertensive drugs.

Other factors too make it difficult to apply the results of this trial to the UK. A quarter of the patients entering the American trial were already being treated for hypertension; hence

the average blood pressure at entry (159/101 mm Hg) would correspond to some higher but unknown level in untreated patients. Seventy seven per cent of the difference in deaths between the special clinic and referred care groups occurred in black participants, although blacks comprised only 44% of the study population. The benefit for white men was less and not statistically significant, and for white women there was no benefit at all.

We conclude that these results fall far short of proving whether or not we in the UK ought to be giving drug treatment to all middle-aged people with mild hypertension. The MRC trial, which seeks to resolve this issue, now assumes added importance.

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¹ Hypertension Detection and Follow-up Program Cooperative Group. *JAMA* 1979;242:2562-77.

Hypertension in general practice

SIR,—Dr Hamish Nicol's concern (24 November, p 1368) about heavy work load and shortage of doctors in general practice may be justified, but that does not alter the fact that diagnosis and treatment of hypertension in Great Britain and elsewhere is patchy and in general leaves much to be desired.

Fejfar estimated several years ago that half of the world's hypertensives were undiagnosed, a quarter were being treated, and only an eighth were being treated efficaciously.¹ In our studies in Paisley² we screened 12 446 men and women aged 45-64 years (an 80% response from eligible residents), and detected 257 (4.5%) males and 318 (4.7%) females with diastolic blood pressures over 109 mm Hg (mean of four observations taken seated at two examinations separated by four weeks using London School of Hygiene and Tropical Medicine sphygmomanometers and recording phase 5). Two-thirds of these patients were undiagnosed, a sixth were known, and the remainder were on treatment. There were 680 males and 679 females in the range 97-109 mm Hg; 80% and 70% respectively were undiagnosed.

Internationally there is great interest in the 8% decline in coronary heart disease rates from 1969 to 1973 in the United States white population compared with an increase in England and Wales, Northern Ireland, and Scotland of 12%.^{3,4} The US decline in death rates over all age groups from 1970 to 1975 were 35%, 18%, and 14% for hypertensive disease, stroke, and coronary heart disease respectively.⁵ Responsibility for these changes is variously attributed, according to personal commitment, to exercise, diet, less smoking, or control of hypertension; but the combined findings of six independent studies involving review of the current status of diagnosis and treatment of blood pressure after 1972 in the United States supports hypertension control as an important factor. In 1 235 281 males and females across a range of ages and including some non-whites, 64 459 (5.2%)

were hypertensive (>96 mm Hg). Of these, 447 981 (74.4%) had previously been detected, 36 626 (56.6%) were on therapy, and 25 857 (40.1%) were on therapy and controlled. Even if we set aside the possibility of natural attrition (levels of blood pressure and cholesterol are lower in the Tecumseh population study) and the contribution of North American enthusiasms for jogging, dieting, and stopping smoking, it is difficult to escape the conclusion that programmes of detection and control of high blood pressure are having a considerable effect here which is not yet apparent in the UK, and that the sooner more is done about it the better.

Our studies in general practice in Scotland⁶ have confirmed the fact that 85% of patients on NHS lists consult their family doctor over a three-year period. A nurse or trained medical secretary can take blood pressure and even repeat the observations after four weeks before troubling the busy doctor, and in so doing achieve as nearly 100% cover in five years as would not matter. As to time and effort, our doctor colleagues told us that it took only a minute or so to take blood pressure and it was not worth troubling the nurse or receptionist.

The Hypertension Detection and Follow-up Program⁷ has just reported that the systematic effective management of hypertension has great potential for reducing mortality for the large number of people with high blood pressure in the population, including those with "mild" hypertension. The North Karelia Study⁸ has reported similarly. The outcome of the continuing UK trial of mild-to-moderate hypertension⁹ is awaited with special interest as being based on a population among whom the incidence of coronary heart disease is rising—as opposed to declining in the other two studies. What is needed now is a clarion call to more action and a deaf ear to doubt.

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Surgery in outpatients

SIR,—The authors of your review article on day-stay surgery (8 December, p 1459) advocate studies of patients' reaction to this type of care. This work has already been undertaken, independently, by several groups of anaesthetists in this country.^{1,2} The results should temper excessive enthusiasm for short-stay care of patients having general anaesthesia. Roughly a quarter of my patients undergoing termination of pregnancy had either headache, drowsiness, or uterine colic the next day and half did not feel like returning to normal activities at that time. Similar results have been

found by other workers, using different anaesthetic combinations, in dental patients and in minor gynaecological surgery.² It is now my practice to offer patients overnight stay where the home circumstances are not suitable for early postoperative discharge.

Two groups of patients have been recommended for day-stay surgery who particularly warrant overnight care. They are children undergoing tonsillectomy and patients having laparoscopy.³ The rapidity with which haemorrhage can kill a child after tonsillectomy means that expert postoperative care is essential for at least the first 24 hours after operation. I have found that pelvic laparoscopy can give rise to referred diaphragmatic pain lasting for up to three days after operation, and frequently this is distressing to the patient. Occasional patients request day-stay laparoscopy and I have never refused, on anaesthetic grounds, to allow them to go home. However, the likely pattern of recovery is always explained to the patient as part of my technique to minimise postoperative morbidity,⁴ and I have found that half of these patients requesting day stay actually remain in hospital overnight.

I believe that we should use our knowledge of patients' recovery patterns to provide the best care for them and their sojourn in hospital should be decided on this basis.

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² Towey RM, Stanford J, Ballard RM, Gilbert JR. *Br J Anaesth* 1979;51:453-5.

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Indomethacin treatment of postural hypotension in autonomic failure

SIR,—We would like to confirm and extend the interesting and important findings of Professor G Abate and others (8 December, p 1466) on the increased systemic vascular resistance produced by indomethacin in autonomic failure.

Indomethacin is not always successful in the treatment of postural hypotension¹ and in an earlier paper that the authors refer to (reference 6) the diagnosis was not proved.¹ They stated that their patients had idiopathic Parkinsonism; but all seven males (though admittedly elderly) were impotent, three patients had defective sweating, and eight had bladder dysfunction. The fall in mean blood pressure of 34.8 mm Hg is greater than the blood pressure fall in patients with uncomplicated idiopathic Parkinsonism.² All these findings suggest that some of their patients had autonomic failure and multiple system atrophy (Shy-Drager syndrome). Although classification may be difficult, it is important to observe³ the clinical, physiological, and biochemical criteria for differentiating between idiopathic Parkinsonism, idiopathic Parkinsonism with autonomic failure, and autonomic failure with multiple system atrophy. Professor Abate and his colleagues did not state the frequency, time, or duration of standing for blood pressure measurement. Patients with autonomic failure have such labile blood pressures that the precise conditions of measurement are important.

We are able to extend these observations (paper submitted for publication). In four

patients with autonomic failure and multiple system atrophy, blood pressure was measured at 0600 and 1800 hours (times at which postural hypotension was greatest and least respectively) for seven days on no drugs and for seven days on indomethacin (25 mg thrice daily for four days and 50 mg subsequently). For the seven days before indomethacin, the average mean blood pressure in mm Hg ($\pm$ SD) was: at 0600 hours—supine 92 ± 11 , standing (5 minutes) 69 ± 15 ; and at 1800 hours—supine 102 ± 16 , standing 76 ± 17 . Indomethacin increased only the average mean supine pressure at 1800 hours (139 ± 23 , $p=0.05$, paired t test); other values did not change. The pressor sensitivity of our patients to intravenous noradrenaline and angiotensin II was increased by indomethacin. There were no detectable changes in blood volume.

Increased vasoconstriction caused by endogenous angiotensin II and noradrenaline from remaining nerve endings is probably one cause of the increase in systemic vascular resistance. Inhibition of prostaglandin synthesis may also be important for, in our patients, urinary prostaglandin excretion was greater than in normal subjects and was decreased by indomethacin. In cases of autonomic failure indomethacin may augment the beneficial effects of fludrocortisone,⁴ since both drugs can increase blood volume and vascular smooth muscle sensitivity to noradrenaline.⁵

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Dietary fibre and blood pressure

SIR,—The paper "Dietary fibre and blood pressure" by Angela Wright and others (15 December, p 1541) fails to consider a more important dietary control of blood pressure—namely, salt intake.

It is possible to question the role of sodium (and other cations) as was done in an editorial¹ which confused the issue by discussing severe renal failure as well as essential hypertension and by not considering the normal person. There was already evidence^{2,3} showing the importance of sodium intake in animal blood pressure control, and a well-controlled clinical study⁴ had clearly shown a mean decrease in blood pressure of 7.7/4.4 mm Hg with very modest salt restriction. This fall, of the same order as that now reported by the Southampton group, was similar to that found⁵ with an even less stringent sodium restriction (to a mean of 157 mmol(mEq)/day in 24-hour urine samples).⁵ A larger fall (mean 13/11 mm Hg) was found in another series⁶ when dietary sodium was reduced to 51 mmol/day without urinary control. Freis⁷ reviewed the epidemiological evidence with some physiological and clinical studies and concluded that reduction of dietary salt to below 34 mmol/day would result in the disappearance of essential hypertension. We believe he is more nearly correct than the Southampton workers, who pay no