foetal abnormality, is praiseworthy. But who can delude himself that these will be the main problems? The majority will consist of perfectly healthy women who are pregnant, in or out of wedlock, and who want to be rid of the baby. It is piously stated that "a doctor-patient relationship will be created and the doctor will then advise." What in fact will happen in these cases is that the woman will tell the doctor what she wants—an abortion, with the threat that if not she will go out of her mind and possibly kill herself. I have, indeed, already had a request on these lines from a woman who believed the Act was already in force. She did not get her request, but I was told that she knew of others in similar circumstances, but nearer London, whose doctors had been more obliging.

It must be admitted that without the word "grave" there is more strain and risk mentally and physically in bearing a child and caring for it, but I am sure the Act was not originated to relieve people of their responsibilities. If it was the idea that abortion is preferable to an unwanted child, then go ahead, abort, but do not be under any misconception that it is the doctor's decision. It is the woman's decision, and the doctor merely helps her carry it out. Abortion on demand? Certainly, and without payment.—I am, etc.,

H. A. ROBINSON.

South Shields,
County Durham.

Prescription Charges and Tuberculosis

SIR,—I am extremely disturbed to note that pulmonary tuberculosis is not included in the list of conditions for which drugs will be prescribed without a prescription charge.

I understand that it is, however, included in the list of conditions where an appropriate charge for a period of three months or a year might be made. I consider, however, that any charge to a patient on chemotherapy for pulmonary tuberculosis will discourage many patients from taking chemotherapy, which is in all conscience difficult enough to administer to patients at home as it is. The end result of this, of course, will be relapse, further admission of patients to hospital, recurrence of positive sputum, and the spread of the disease with increasing cost to the National Health Service.

I make a strong plea, therefore, for every chest physician to write to his Member of Parliament to protest about this before it is too late.—I am, etc.,

North Chest Clinic,
Aintree Hospital,
Liverpool 9.

WILLIAM D. GRAY.

SIR,—There is one very important aspect of the discussion about prescription charges to which I would like to draw attention.

Whether tuberculosis is a chronic disease or not, everyone would agree that chemotherapy benefits not only the patient but the community. It should therefore be made as easy as possible. We must try to persuade the Minister of Health that treatment of this disease should be free of prescription charges.—I am, etc.,

Chest Clinic,
Queen Elizabeth Hospital,
Gateshead.

L. FEINMANN.

Vocational Training for General Practice

SIR,—The Royal Commission on Medical Education¹ recommends that general practitioners and other doctors who will treat patients unsupervised should have six years' special training and experience after graduation leading to registration in their chosen specialty (see *B.M.J.*, 13 April, p. 109).

I trust that the British Medical Association will endorse this recommendation. I cannot see general practice ever rising from the low state to which it has sunk until doctors do a compulsory course of vocational training. At the moment any doctor, after completing his year of preregistration posts, can step into a practice as an equal partner. In fact overworked principals are only too thankful for anyone they can get, because applicants for general practice are so scarce.

In no other branch of the profession can a medical man become fully established with so little training. If he wants to become a surgeon, a dermatologist, or a medical officer of health he has to submit to a rigorous course of training; but any Tom, Dick, or Harry can enter general practice, and if the practice happens to be in a densely populated area supported by a good hospital service he can get by with very little effort on his part.

It has been argued that a compulsory vocational course will increase the shortage of general practitioners. This may well be, but at least the profession will know that once compulsory vocational training is accepted those doctors who then apply to become a partner or principal in general practice will be of the right calibre, and the standard of general practice in this country will inevitably rise.—I am, etc.,

BERNARD TAYLOR,

Hon. Secretary and Treasurer,
Tower Hamlets Division,
British Medical Association.

London E.3.

REFERENCE

- ¹ *Royal Commission on Medical Education*, Cmnd. 3569, 1968. H.M.S.O., London.

"Normal" Temperature

SIR,—In view of the national change from degrees Fahrenheit to degrees Centigrade it seems likely that the clinical thermometer will receive a new scale. Would not this be a good opportunity to get rid, once and for all, of that little red line which suggests that temperatures above or below it are abnormal?

There has long been good evidence that this arbitrary "normal" temperature is misleading.¹ Ivy in 1944 reported on 276 American medical students whose temperatures were taken in class between 8 and 9 a.m. The mean temperature was 98.1° F. (36.7° C.), and the range containing two standard deviations was 97.3–98.9° F. (36.3–37.2° C.). The total range for the 276 presumably normal students was 96.6–99.4° F. (35.9–37.4° C.).

I have analysed the temperatures of 50 Belfast medical students taken in class between 2 and 3 p.m. Results were slightly higher than those of Ivy, as might be expected at this time of day. The mean temperature was 98.4° F. (36.9° C.), and the range containing two standard deviations was 97.6–99.2° F. (36.4–37.3° C.). The absolute range was 97.5–99.4° F. (36.4–37.4° C.).

DuBois,² in a review of the literature on normal temperature, suggested a normal range of 35.8–37.4° C. oral and 36.2–37.8° C. rectal. For simplicity I would suggest a normal range of 36.0–37.5° C. (96.8–99.5° F.), marked perhaps by green colouring, which would include most normal temperatures and exclude most abnormal temperatures, whether taken orally or rectally or in the axilla. Finally, a clinical thermometer which reads as low as about 30° C. (86° F.) might be useful to general practitioners in detecting accidental hypothermia.—I am, etc.,

WILLIAM F. M. WALLACE.

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- ¹ Ivy, A. C., *Quart. Bull. Northw. Univ. med. School*, 1944, 18, 22.
² DuBois, E. F., *Fever and the Regulation of Body Temperature*, Illinois, 1948.

Price of Blood

SIR,—A document by Cooper and Culyer,¹ of the University of Exeter, setting out the arguments for the purchase of blood for transfusion, has recently been published (see also leading article, p. 129). The simple economic law of supply and demand cannot, of course, be denied (although the same argument can be extended to the supply of kidneys for transplantation). However, the authors of this lengthy paper have completely ignored the outstanding hazard of commercially supplied blood—namely, the risk of post-transfusion hepatitis. Thus while it is easy to dismiss emotional and altruistic motives for blood donation by healthy adults, it would be a mistake to accept that purchased blood would achieve the same criteria of probable low infectivity so far as the virus of hepatitis is concerned. Experience elsewhere indicates that the risk of post-transfusion hepatitis is very much greater when commercial sources are used, the reason being that complete reliance must be placed on the verbal history of past infections and current health of the donor. No satisfactory laboratory tests are available at present for the detection of asymptomatic and chronic carriers of the hepatitis virus. The integrity of the potential purveyor of blood must therefore be assumed. Payment for blood has been known to attract sometimes an undesirable section of the population, notably narcotic addicts (whose risk of serum hepatitis is notoriously high), chronic alcoholics, and others. Furthermore, experience has shown that when potential donors were turned down by some blood banks on health grounds they soon managed to sell their blood elsewhere. Consequently as long as the blood bank must rely upon accurate medical history and the truthfulness of the potential donor this risk must be taken into consideration.

The figures for post-transfusion hepatitis, both in the icteric and anicteric form, published from some centres in the United States, Germany, and Japan, are remarkably high. In a recent study the overall attack rate of post-transfusion hepatitis was found to be 14%,² but a very much higher incidence has also been reported.³ The overall mortality rate can be as high as 28%.⁴ In 1963, in the United States, about 1.8 million patients were transfused, and it has been estimated that the incidence of clinical transfusion

hepatitis was 30,000 cases with nearly 3,600 deaths. No account was taken of the incidence of anicteric hepatitis, and, in general, the accepted ratio is 1 overt case for at least 10 actual infections, although in 1965 it was estimated that the ratio of anicteric to icteric hepatitis after blood transfusion could be greater than 100:1 (based on a small number of patients).⁵ Casting aside for the moment the economics in terms of mortality and morbidity, it would have been quite a useful exercise in economics to calculate the cost of treatment of patients with hepatitis. This indeed has been done in one reported series from the United States.⁶ The "average" patient suffering from post-transfusion hepatitis required hospital treatment for 35 days, incurring hospital costs of £300 to £670.

There are no completely reliable tests available at present for the detection of carriers of the virus of hepatitis, but no matter what method of case finding was used the lowest incidence of post-transfusion hepatitis was seen when commercially supplied blood was avoided.⁷ Mosley⁸ recently wrote that virus hepatitis is now the most important complication of the transfusion of blood and blood products, and it is as well to remember this.

Hepatitis is not generally notifiable in this country, but there is no reason to suppose that we are in any way unique as far as the incidence of hepatitis is concerned, and it would be unwise to ignore the facts collected in other countries. The case for the notification of hepatitis in the United Kingdom and the organization of the follow-up of all patients who receive blood transfusion⁹ can only be made stronger in the light of our ignorance as to the real incidence of the disease. This information should be available well before the economists guide us into the purchase of blood.—I am, etc.,

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Railwaymen and Drug Side-effects

SIR,—The number and variety of therapeutic agents prescribed for the general population continue to increase. Railwaymen, like everyone else in the community, may at times be treated with these preparations, and my railway colleagues and I are concerned at the unwanted effects resulting from the use of some of them. In addition people can and do buy proprietary preparations for various minor ailments which may have similar undesirable side-effects.

Locomotive drivers and other railwaymen have always been aware of their responsibility

for public safety. It is clearly most important, both in the interests of public and personal safety, that they should be made aware of any side-effects likely to arise from preparations prescribed for them and particularly of the danger which could arise if these are taken in combination with even moderate amounts of alcohol. I would therefore be grateful to my colleagues in general practice and in hospitals if they would warn such patients of possible side-effects. I may say that discussions have taken place with the Railway trade unions and they are equally anxious that every step be taken to keep railwaymen informed on this subject.—I am, etc.,

J. SHARP GRANT,
Chief Medical Officer,
British Railways Board.

London N.W.1.

Factor IX Levels and Oestrogens

SIR,—When reading the disturbing paper by Dr. D. G. Daniel and others (30 March, p. 801) I wondered why they used such large doses of stilboestrol to suppress lactation. I re-read their previous paper¹ and found that even larger doses were used then. In the recent paper a total dose of 180 mg. is given in nine days. The order of dosage discussed by Barnes² has always seemed to me satisfactory. We have used a total dose of 54 mg. over six days (that is, 5 mg. t.i.d. for two days, 3 mg. t.i.d. for two days, and 1 mg. t.i.d. for two days).

Before considering whether we should abandon the use of oestrogens altogether in the inhibition of lactation can the authors tell us whether the same effect on factor IX is found with smaller doses?—I am, etc.,

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Slimming and Sleep

SIR,—I read with interest the report of Dr. Ian Oswald and others (30 March, p. 796) on the effects of diethylpropion and fenfluramine on sleep. While in no way attempting to minimize the theoretical value of these observations, I would question their clinical applicability. We have recently studied in a more clinical setting the effect of an evening dose of diethylpropion (Tenuate) on sleep.¹

I consider that our findings are of greater relevance to the clinical situation than those of Dr. Oswald and colleagues for the following reasons.

We administered 25 mg. diethylpropion, which is the recommended and usual dose, rather than the 50 mg. given by Dr. Oswald and colleagues.

In our trial the tablets were taken at 6 p.m., a time chosen to produce the maximum anorectic effect during the evening when it was most needed, whereas they gave their subjects medication "one to one and a half hours before lights-out."

We examined the effects of diethylpropion on sleep in a group of overweight patients of the type for whom the drug is generally prescribed in practice, not "paid healthy young adult volunteers" as used by Oswald *et al.* In such a clinical setting, under strict, double-blind, controlled conditions, we found that diethylpropion

did not significantly or materially affect the quality of sleep reported by the patients. Whatever the E.E.G. effects might have been, there was no clinical evidence to indicate that our patients' sleep was in any way disturbed by diethylpropion taken at 6 p.m.

I would like to discuss a further point raised by Dr. Oswald and his colleagues in their article. They state that "... it [diethylpropion] has become recognized as a drug which can lead to tolerance, dependence, abuse, and psychotic manifestations..." and quote four references to support their statement. All but one reference refers to a single case, while the remaining reference describes two cases. Thus in the 10 years during which diethylpropion has been widely available only five cases of dependence have been reported; all of these cases had previously abused amphetamine. This, I would suggest, hardly indicates that diethylpropion is particularly likely to produce serious psychological dependence in the very great majority of overweight patients for whom it is prescribed.—I am, etc.,

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REFERENCE

- Silverstone, J. T., and Cleary, T., *Clin. Trials*, 1967, 4, 837.

Brand Names

SIR,—I write in support of your leading article on brand names (30 March, p. 781). If it had ever been shown that the administration of halothane was associated in some patients with jaundice and more than one firm had been producing halothane, it would have been very important to know whether the incidence of jaundice was related to a particular method of manufacture. To specify a brand name in a patient's notes gives more information than using a B.P. name.—I am, etc.,

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St. Thomas's Hospital,
London S.E.1.

Long-term Corticosteroid Treatment of Asthma

SIR,—Dr. K. Maunsell and her colleagues (16 March, p. 661) have emphasized some of the dangers of long-term steroid therapy in asthma and the importance of keeping a maintenance dose as low as possible. As your leading article (10 February, p. 329) pointed out, this can only be done if patients are followed up regularly with objective measurement of their ventilatory function. The experience of this general practice confirms Dr. G. F. B. Birdwood's belief (9 March, p. 640) that regular measurements of P.E.F. with the Wright peak-flow meter may reveal trends, which indicate deterioration, long before the patient himself is aware of it. Dr. J. L. Struthers (9 March, p. 639) doubts whether this is "relevant to the treatment of asthma as it really affects the asthmatics in the community." However, seeing patients with severe asthma daily, weekly, or monthly, according to their progress, is not as time-consuming as he supposes. In any case, this is amply compen-