owes its activity to liberating carbenicillin in vivo. Another journal has carried a similar advertisement which divulges this information. Does this mean that the *B.M.J.* is less demanding that the advertiser gives the information which allows the reader to relate a "new substance" to an existing agent with which he is already conversant?—We are etc.,

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¹ Butler, K., in *Indanyl Carbenicillin. Proceedings of a Symposium held at the Royal Society of Medicine on 12 April 1973*, ed. H. Swarz and F. E. Storari. Amsterdam, Excerpta Medica, 1973.

Status of Ward Sisters

SIR,—The Halsbury Report¹ was produced in record time and inevitably some of its recommendations are open to question and are currently receiving comment. Contrary to Mr. R. V. Clark's statement (12 October, p. 105), district nurses are not included in the salary grade I, though it is true that health visitors and triple workers are classed grade I.

In proposing the introduction of a new higher grade for some ward sisters and charge nurses (and, among the community nursing staff, triple workers and health visitors), the intention stated in the report was to reward nursing skills at patient level, regardless of managerial or other responsibilities. Many in the nursing profession have been pressing for recognition of the clinical nurse specialist. Clearly, though the committee may have intended to encourage nurses to stay with the patient, their immediate proposals do not do this.

In the long-term proposals hope was expressed that both sides of the Whitley Council would agree without delay the other posts that should be included in grade I category. In paragraph 95 of the report a call is made for priority to be given to defining the duties of the nursing sister/charge nurse, grade I. District nursing sisters support this wholeheartedly. Closer reading of the report reveals that district nurses without district nurse training will receive grade II salary abated by £66. This is less than for grade II ward sister. The leads (for example, in the geriatric field) open to specialized fields in the hospital are not open to district nursing sisters because they are generalists. Their nursing care may be paediatric, geriatric, psychiatric, medical, surgical, supportive, preventive, or rehabilitative in nature. Their specialty is the environment in which they meet the patient and the family. It is nursing within a community setting.

As a result of its complexity, district nursing and district nurse training have been undervalued by the health professions. It will continue to be difficult to rectify the position until a higher qualification is mandatory for those nurses leading the clinical nursing team alongside general practice.

Salary grades are not the only answer to improved patient care. Maintenance of standards may be possible if demands on the service increase and at the same time a fall in recruitment of staff occurs. In the

meantime it seems that those who are demonstrably capable and worthy of the higher grade are categorized with the less capable and untrained.—I am, etc.,

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¹ *Report of the Committee of Inquiry into the Pay and Related Conditions of Service of Nurses and Midwives*. London, H.M.S.O., 1974.

Ethics and Halothane

SIR,—Professor J. P. Payne (12 October, p. 101) appears not to accept that many responsible and informed doctors believe in an association between repeated exposure to halothane and liver disease. If no one holds this belief, why the fuss? It is precisely because such an association is suspected that anaesthetists are anxious to conduct trials. It might be tempting to propose a trial in which one group of patients received repeated halothane anaesthetics and another group received non-halothane anaesthetics. The patients receiving repeated halothane would, however, be exposed for the purposes of experiment to something which has been suspected of causing illness and even death and the other group to something which has not been so suspected. An important duty of an ethics committee is to advise against experiments of this type.

Professor Payne states that "certain ethical committees behaved equally unwisely by interfering with the anaesthetists' right to decide what anaesthetic agent can or cannot be used in a specific clinical situation." This must be nonsense. Ethics committees are not concerned, and should not be consulted, about clinical situations as such, and it remains the duty of the anaesthetist to give the anaesthetic which he thinks most suitable for his patient. An ethics committee is, however, concerned with investigations on patients. If for the sake of the investigation one group of patients is exposed to a possible risk from which the other is spared they should not support the investigation.—I am, etc.,

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Drug Combinations for Anaesthesia

SIR,—An eminent anaesthetist is quoted in the press¹ as saying in a coroner's court, that "he would not have given Valium [diazepam] after Brietal [methohexitone] under any circumstances."

In case anyone feels he should no longer use this most valuable combination, let me assure him that for the past two years all my patients requiring endotracheal anaesthesia have been induced with intravenous methohexitone followed by intravenous diazepam (up to 10 mg) and then intubated without Scoline (suxamethonium). All patients are horizontal (unless unable to sleep flat at night) when induced and kept so for at least an hour after the diazepam injection. Rarely the blood pressure may be lowered markedly, and these precautions may be literally vital. Intubation is usually

straightforward, but the use of suxamethonium is not precluded.

The main advantages, from the patient's point of view, are the absence of "Scoline pains," the impossibility of apnoea due to lack of pseudocholinesterase, and that any discomfort or malaise, surgical and anaesthetic, are later "tranquillized."

Many of my colleagues in active practice are using this method and—so far—none of us has had an anxious moment. The same applies if the diazepam precedes the methohexitone.—I am, etc.,

M. W. P. HUDSON

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¹ *Sunday Times*, 6 October 1974, p. 10.

Red Skin and Dorbanex

SIR,—The erythema after intake of danthron (1,8-dihydroxyanthraquinone) as reported by Drs. Mary H. Bunney and Isabel M. Noble (29 June, p. 731) is, according to my findings,¹ a simple irritation of the skin caused by a metabolite of this laxative. In the bowel danthron is in fact reduced to its effective form, an anthron, which irritates not only the mucosa of the intestinal tract but also the skin if it is in contact with faeces for any length of time.

Chemically the metabolite is identical with 1,8-dihydroxyanthron which, as dithranol, is used in the therapy of psoriasis by irritation of the skin. After such treatment the same erythema and discolouration are seen in the treated skin area as in the perianal region after excretion of faeces containing dithranol after the intake of danthron. However, a sufficiently long contact with the faeces is necessary to produce this erythema. The condition is most frequently observed in the bedridden and paralysed and in babies.—I am, etc.,

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¹ Ippen, H., *Dermatologica*, 1959, 119, 211.

Inappropriate ADH Secretion in Chest Disease

SIR,—I note the point made by Drs. A. Spathos and C. H. Spry (28 September, p. 785) that treatment of inflammatory chest disease by fluid restriction and antibiotics may well correct the hyponatraemia. I prefer not to restrict fluids in such cases because of the thickening of bronchial mucus, as reported by Bryant,¹ unless the effects of the hyponatraemia warrant this. A warning about the use of tetracycline should once again be made because by acting as a diuretic² it can cause appropriate stimulation of antidiuretic hormone (ADH) owing to volume depletion.³ The use of another drug might have prevented the hyponatraemia in the case reported. The complicating factor of smoking and nicotine intake warrants further study in relationship to chest disease and the syndrome of inappropriate ADH secretion.

Finally, the frequency of lung cavitation in the patients in whom this syndrome is described during an active bacterial, mycobacterial,⁴ or fungal⁵ infection suggests that some added pressure effect of the inflammatory process may stimulate para-

sympathetic afferent fibres or B1 receptor sites in the lung which are known to stimulate ADH secretion.³ The involvement of the vagus nerve by a bronchogenic carcinoma and associated inappropriate ADH secretion is described by Bower *et al.*⁶ However, they were also able to substantiate the antidiuretic activity of the tumour and postulated this and the possibility of distortion of vagal afferent impulses as a cause of inappropriate ADH secretion in their patient. The stress of the acute disease may also play a part, though the ADH response to stress has not been shown to be sustained.³—I am, etc.,

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- 1 Bryant, D. H., *Medical Journal of Australia*, 1972, 1, 1285.
- 2 Phillips, M. E., *et al.*, *British Medical Journal*, 1974, 2, 149.
- 3 Schrier, R. W., and Berl, T., *Kidney*, 1974, 7, 1.
- 4 Weiss, H., and Katz, S., *American Review of Respiratory Diseases*, 1965, 92, 609.
- 5 Utz, J. P., *et al.*, *New England Journal of Medicine*, 1969, 280, 264.
- 6 Bower, B. F., Mason, O. N., and Forsham, P. H., *New England Journal of Medicine*, 1964, 271, 934.

Hypertension and Myocardial Infarction

SIR,—I was interested to read your recent leading article (5 January, p. 1) and the views of Dr. F. T. B. Lovegrove (4 May, p. 279), Dr. I. McD. G. Stewart (27 July, p. 251), and Dr. D. M. D. Lambert (14 September, p. 685).

Ex Africa semper aliquid novi; this statement, traditionally ascribed to the Greeks by Pliny the Elder, is applicable to hypertension and myocardial infarction in the African. While hypertension in the African is common, myocardial infarction is rare. In the urban African in Johannesburg hypertension and its complications is believed to be the second most common cause of death in the adult after violence.¹ Yet myocardial infarction is rare.

In my study² of 1,000 hypertensive patients (500 Africans and 500 Indians) who were followed up over a period of 13 years the incidence of cardiac changes is shown in the table. It will be noted that while

Cardiac Change	Africans (%)	Indians (%)
E.C.G. Left ventricular hypertrophy	23	22
Clinical cardiomegaly	29	26
Ischaemia heart disease	—	12
Chest radiograph: left ventricular hypertrophy	30	35
Normal chest radiograph	70	65
Congestive heart failure	16	8

congestive cardiac failure due to hypertension occurred in 16% of the Africans, ischaemic heart disease did not occur. This is in contrast to the Indian population, in whom myocardial infarction or angina pectoris occurred in 12% of cases. Our hospital has 2,000 beds and serves a population of 2 million; there are approximately 800,000 patients attending the outpatient department and about 99,000 are admitted to the hospital per year (African 83%, Indian 17%). While myocardial infarction is common in Indians, the number of cases of myocardial infarction or angina pectoris in Africans does not exceed 10 per year. The incidence of coronary atheroma in Africans

at necropsy is far less than in the European or Indian population in Durban.³ The Framingham study⁴ found that increased serum lipids, hypertension, cigarette smoking, overweight, and diabetes mellitus were predisposing factors for myocardial infarction. The African has all the above predisposing factors with the exception of increased serum lipids. The rarity of myocardial infarction in the African could be because the mean serum lipids level are lower than in other races. Walker⁵ found that in the 30-39-year age group a serum cholesterol level above 220 mg/100 ml was present in 55% of whites, 45% of Indians, 25% of urban Bantu, and 10% of rural Bantu in South Africa; the proportion for whites was much the same as that reported in the Framingham study—namely 58%. However, hypertension is not uncommonly associated with cerebral atheroma and atheroma in the aorta. In our study of 1,000 patients² cerebrovascular episodes occurred in 5% of African and 10% of the Indian patients. We feel that a high incidence of ischaemic heart disease is related to underlying diabetes mellitus and associated hypercholesterolaemia.

Our work suggests that hypertension alone is not an important predisposing factor in the aetiology of myocardial infarction. It may be an important correlate with other factors that predispose to myocardial infarction rather than a causal factor. Similar work in Zaïre⁶ has shown that while hypertension is common and not uncommonly produces congestive cardiac failure, myocardial infarction does not occur.—I am, etc.,

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- 1 Seftel, H. C., *Medicine and Society in South Africa—Some Plain Thinking*, p. 14. Johannesburg, Witwatersrand University Press, 1973.
- 2 Seedat, Y. K., and Reddy, J., *South African Medical Journal*, 1974, 48, 816.
- 3 Wainwright, J., *Lancet*, 1961, 1, 366.
- 4 Kannel, W. B., *et al.*, *Annals of Internal Medicine*, 1961, 55, 33.
- 5 Walker, A. R. P., *South African Medical Journal*, 1973, 47, 85.
- 6 Marcovayannopoulou-Fojas, H., *Abstracts of Proceedings of World Congress of Cardiology*, 1974. In press.

Variability in Response to Drugs

SIR,—I find it remarkable that in his survey of "Variability in Response to Drugs" (12 October, p. 91) Professor M. D. Rawlins contrived to avoid any clear acknowledgment that psyche influences soma. Is it not general experience that "rational drug therapy"—like many another logical, technical process—often fails for "irrational" reasons?

Just as important as the patient's acetylase status is his psychological status. No doubt they interact. So let us by all means estimate plasma concentrations and gain a better understanding of tissue sensitivity and dosage control. But let us also acknowledge that a man is more than a biochemical system. Many human "diseases," like epilepsy and depression, are relieved by treatment methods which may incorporate the use of drugs but also take account of a person's inner needs and outer relationships.—I am, etc.,

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Medical Management of Heartburn

SIR,—Your leading article on this subject (12 October, p. 64) begins by stating that acid reflux causes heartburn; but alkaline reflux can cause severe heartburn also. The article goes on to mention the variable and largely unpredictable response to alkalis and other remedies and discusses a number of more scientific forms of treatment based on recent research. A very curious statement is that "attempts to improve general muscle tone should strengthen the oesophageal sphincter." There is surely no evidence for this whatever, and it is a matter of common observation that many with otherwise excellent health and good muscle tone suffer from heartburn.

My main criticism is, however, that no mention is made of the fundamental reasons for the prevalence of heartburn—an incompetent sphincter and its associated condition, sliding hiatus hernia. These conditions are a feature of western civilization with its tendency to overeat. It may be that the character of the diet, with a high proportion of refined carbohydrate, leads to disorders of gastric secretion and gastro-oesophageal motility; but a simple remedy for heartburn and reflux (in the absence of gross anatomical disorders at the oesophago-gastric junction such as hiatus hernia) is to avoid eating unless appetite is present, as has been emphasized by Cleave.¹ The eating of meals as a matter of social habit rather than necessity is the cause of much heartburn, and it is not necessary to invoke complex pharmacology for its diagnosis or treatment.—I am, etc.,

KENNETH S. MULLARD

Diss, Norfolk

- 1 Cleave, T. L., *The Saccharine Disease*, p. 176. Bristol, Wright, 1974.

Anonymous Appointments

SIR,—The expansion of hospital bureaucracy is nowhere better illustrated than in the much-read appointments pages of your journal. It is frequently necessary to read the whole of a box of small print to discover at which hospital a post will be held. Occasionally this is only hinted at by the address of the personnel officer. In no such case is the name of the group hospital management committee left in doubt. This is less important information to a doctor than the name of the place where he will live and work. It could be appended or even omitted.—I am, etc.,

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Economies in the N.H.S.

SIR,—The joint letter from certain doctors at the Royal United Hospital, Bath (12 October, p. 109), while showing a commendable concern for economy in the National Health Service, unfortunately does not show the same concern for accuracy in terminology or convey a correct interpretation of Department of Health requirements regarding the provision of sterile water for operating theatre use.

The Department of Health has not specified that sterile topical water for use in operating theatres should be particle-free but has indicated that it should be freshly