the patient with clear-cut communicating hydrocephalus, the patient with epilepsy, the two patients intoxicated by drugs, the eight depressed patients, and the patient with mania. If we had wished to press the point we might have included 24 other patients in whom the results of investigation could have led to some attempt to treat the patients or their relatives; that is, treatment for the seven hypertensive patients with arteriosclerotic dementia, treatment for the six alcoholics, genetic counselling for the relatives of three patients with Huntington's chorea, symptomatic therapy for the five patients with malignant brain tumours, and even experimental antiviral treatment for the three patients with Creutzfeldt-Jacob's disease.—We are, etc.,

C. D. MARSDEN

Department of Neurology,
Institute of Psychiatry and
King's College Hospital Medical School,
London S.E.5

M. J. G. HARRISON

National Hospital for Nervous Diseases,
London W.C.1

Abortion and Miscarriage

SIR,—It is surely time that we abandoned the term "abortion" as a synonym for the lay term "miscarriage." And this for two reasons. First, while it is the function of language to impart information, I find I no longer know what it means when a general practitioner writes to me that his patient had an abortion last year. As a result I have the embarrassing task of having to ask the patient whether this was an accident that she bitterly regrets, or whether this was a procedure she requested. The second reason is that patients are objecting even more strongly than ever to the appearance of the word "abortion" in the obstetric history part of their antenatal notes. Years ago it was easy to explain that this was merely a medical term for what they called a miscarriage, but of course this explanation is no longer acceptable.

I suggest, therefore, that as a profession we employ the word "miscarriage" in cases where the pregnancy was lost without the known intervention of a helping hand, and "termination of pregnancy" for procedures carried out under the Abortion Act.—I am, etc.,

R. F. R. GARDNER

Thorpe Maternity Hospital,
Peterlee, Co. Durham

Epitaph for the M.C.H.C.

SIR,—The mean corpuscular haemoglobin concentration (M.C.H.C.) obtained from the Coulter "S" machine is not a good index of iron deficiency (16 October 1971, p. 169), but I have found it useful in evaluating the quality of results produced by the machine. A simple calculation based on the definitions of the indices shows that $M.C.H.C. \equiv \frac{M.C.H.}{M.C.V.}$

Thus, if either the M.C.H. (mean corpuscular haemoglobin) or the M.C.V. (mean corpuscular volume) is inaccurate the M.C.H.C. will tend to depart from the expected range.

Even highly reliable instruments do occasionally become inaccurate and in times of difficulty the Hb and R.B.C. (hence M.C.H.) results can be checked on other

types of instrument. There is no way of checking the M.C.V. because the microhaematocrit obtained manually is different from the Coulter "S" result.

When the M.C.V. standardization, measurement, or calculation is suspect, in spite of correct "4C" results, and a series of specimens shows good correlation for Hb and R.B.C. between the Coulter "S" and other methods, a glance at the M.C.H.C. allows one to judge whether an abnormal M.C.V. is genuine.

M.C.V.	False Low	True Low	True Normal	True High	False High
M.C.H.C.	High	Normal	Normal	Normal	Low

The M.C.H.C. is a useful addition to the other methods of quality control which are being used.—I am, etc.,

ROBERT J. CRAWFORD

Department of Haematology,
Southern General Hospital,
Glasgow

Pancreatin as a Source of Hospital-acquired Salmonellosis

SIR,—We noted with concern the report on the presence of salmonella in pancreatin made by vacuum drying and extraction with a fat solvent (13 May, p. 376). We were not particularly surprised, for these organisms are still far too common on animal carcasses, and vacuum drying provides a not unfavourable environment for multiplication. Surface sterilization is undoubtedly a step in the right direction, but we doubt whether it can be as effective as the alcohol sterilization technique we use routinely in the preparation of all our pancreatin. (Pat. Appn. 30600/69.)

The result of applying our standard manufacturing process to highly contaminated raw material in the laboratory was as follows:

Before Stage 2*		After Stage 2
Coliforms	7×10^4	None/g
Streptococci	$>3 \times 10^4$	
E. coli	$>1/g$	
Pseudomonas	$>2 \times 10^4$	

(*Stage 2 is treatment of the homogenized pancreas with alcohol).

We consider that pancreatin manufactured by this process could present no danger to health from the presence of salmonellae. Tests on 25 g samples of thousands of batches confirm our opinion, for we have never once detected salmonellae.—We are, etc.,

H. F. FROST
Director of Research

G. FARKAS
Chief Bacteriologist,
Weddell Pharmaceuticals Ltd.

London E.C.1

Controlled Drinking for Alcoholism

SIR,—Dr. S. Rachman (3 June, p. 591) misses the point. Relapse is not just a "bout of excessive drinking;" this is merely the overt expression of the relapse process. The actual relapse precedes the bout of drinking and is in fact the decision to start drinking. This has been confirmed experimentally¹

and confirmed clinically by the fact that patients taking disulfiram (Antabuse) who relapse stop taking their disulfiram two or three days before starting to drink. If behaviour therapy is to be considered, since it is apparently easier to abstain than to control drinking, then behaviour therapy should be directed to strengthen abstinence rather than to monitor controlled drinking. Abstinent alcoholics who have had many relapses will tell you that it is in fact easier not to take the first drink than to stop drinking after one or two drinks.

While I agree with the implication that total abstinence need not be the entire goal in the treatment of alcoholics, in our present state of knowledge abstinence should still be part of the advice we offer to our alcoholic patients.

The observations of Davies² that some alcoholics are capable of returning to a life of social drinking may be based on the explanation that this group of alcoholics are basically suffering from depression. At the alcoholic unit in this hospital we are investigating this possibility by studying the distribution of body potassium in alcoholics and also by a controlled trial of the effects of lithium carbonate on the relapse rate of alcoholics who have a definite history of depression. It may be that the Davies' cohort were alcoholic patients who have had depressive illnesses, but when in remission no longer need to drink alcohol as an attempt at self-medication, but can once again use alcohol socially.—I am, etc.,

JULIUS MERRY

West Park Hospital,
Epsom, Surrey

¹ Merry, J., *Lancet*, 1966, 1, 1257.

² Davies, D. L., *Quarterly Journal of Studies on Alcoholism*, 1962, 23, 94.

Donors for Organ Grafting

SIR,—Dr. E. Poole (6 May, p. 350) does not like our definition of "irreversible brain damage" (1 April, p. 48). The latter referred to a paper which has since appeared in the *Solicitors' Journal* (28 April), in which it is made quite clear that the brain damage combined with unconsciousness was both prolonged and widespread. Our full consideration would clearly preclude such conditions as cerebral thromboses and cerebral abscesses, from which improvement normally occurs. We think that this point is quite clear in our full length paper.—We are, etc.,

HAROLD HILLMAN

Unity Laboratory,
Department of Biological Sciences,
University of Surrey

T. M. ALDRIDGE

London E.C.4

Severe Toxaemia of Pregnancy

SIR,—Dr. J. E. F. Pohl and others are to be congratulated on their successful management of four cases of severe toxaemia (3 June, p. 568). However, their presentation is unduly flattering to the diazoxide used in management, and probably pays insufficient tribute to the quality of the monitoring of the fetal condition, which in all the cases appears to have been assessed mainly by the measurement of fetal growth.

In my experience when "hypertension complicates pregnancy and proves resistant

to therapy" the fetal prognosis is by no means as bad as they have been led to believe; that is, so long as sedation is kept to a minimum and "placental function" can be adequately measured.¹ Since the beginning of 1969 toxæmic inpatients at Sheppey General Hospital have been treated according to the maxim "a minimum of medication with a maximum of observation," and the only toxæmic patients treated as inpatients are those with persistent or increasing hypertension and albuminuria.² In three and a half years 18 such cases have been handled with the loss of only one baby, an early neonatal death following caesarean section at 28 weeks in a patient with increasing headache and visual disturbances, together with the usual signs of fulminating pre-eclampsia. The remaining patients were all delivered of healthy babies often after several weeks of severe hypertension and albuminuria.—I am, etc.,

D. D. MATHEWS

Sheppey General Hospital,
Isle of Sheppey, Kent

¹ Mathews, D. D., *British Medical Journal*, 1972, 1, 439.

² Mathews, D. D., Patel, I. R., and Sengupta, S. M., *Journal of Obstetrics and Gynaecology of the British Commonwealth*, 1971, 78, 610.

Research in Psychiatry

SIR,—Your leading article "Research in Psychiatry" (8 April, p. 61) suggests that hopes for the future of research in psychiatry demand more than an extension of epidemiological and psychopharmacological studies. Sir James MacKenzie would certainly have agreed with your view that "it is unlikely that these (mental disease) processes begin with anatomical lesions or the toxic effects of pathogens." Dr. E. J. M. Bowlby and others (29 April, p. 289) rightly stress the importance of the family interaction as a promising field for future research. A multidisciplinary approach has much to commend it, and we ought of course to add a specialist in families to the team.

But who is actually going to do the research? Surely there should be no need to stress the opportunities available to the family doctor in this regard. His defined list of patients, his working knowledge of the interactions of members of the household on one another, his accessibility, the continuity of his care, and his vantage point from which to observe the early deviations from the normal—affecting individuals and "psychophysiological systems"—make him a key member of the multidisciplinary team you advocate. How odd that you should have missed him out!—I am, etc.,

JAMES D. E. KNOX

Department of General Practice,
University of Dundee

Lead Poisoning

SIR,—Recent reports (27 May, pp. 488 and 491) on the possible toxic effects of lead and other heavy metal pollutants, and a paper by D. Bryce-Smith,¹ give rise to serious concern.

Professor Bryce-Smith discusses the effects on human behaviour of various chemicals, in particular organolead and inorganic lead derived from petrol additives and other

sources such as food and water supplies. These include possible genetic effects and abnormalities in the seminal fluid as well as disturbances of the psyche. Furthermore, it was reported by A. J. Lawther, of the M.R.C. Air Pollution Unit, at the Conference "Lead in the Environment" in London January 1972 that of the airborne lead in Fleet Street some 10% or more was in organic form, which is an extremely powerful lung irritant. Swiss medical workers have recently reported² that the mortality from cancer among all people living in houses situated along a main road in a village was 9 times higher than that found in the inhabitants of a part of the same village relatively free from traffic.

The purpose of my letter is to suggest that in view of all the facts now coming to light and the potential dangers of cumulation, it is high time that the evidence was reviewed by an objective body with respect to chemical pollution of the atmosphere, food supplies, and drinking water, so that some guidance can be offered to those of us who are not expert in this field but are becoming increasingly worried about the whole problem.

Is this perhaps a suitable task for the B.M.A.'s Board of Science and Education?—I am, etc.,

MYER GOLDMAN

Liverpool

¹ Bryce-Smith, D., *Chemistry in Britain*, 1972, 8, 240.

² Blumer, W., Jaumann, R., and Reich, Th., *Schweizerische Rundschau für Medizin (Praxis)*, 1972, 16, 514.

Index of Bed Occupancy

SIR,—I know that I am not alone in my dissatisfaction with the use of bed occupancy percentages in judging a hospital's performance.

I suggest as an alternative and much more pertinent index a figure derived from the division of the number of beds in the hospital into the number of patients discharged each month. For example, 500 patients through a 200 bed hospital would give an excellent index of 2.5. This naturally only applies to acute hospitals; the old bed occupancy figure is fairly applicable to long stay institutions.—I am, etc.,

DAVID SOUTHCOOT

Croydon General Hospital,
Croydon, Surrey

New Consultant Contract

SIR,—I write to support Dr. M. K. Strelling (17 June, p. 716) and Dr. P. N. Coleman (27 May, p. 532). The right to choose *not* to engage in private practice is a valuable one; the exercise of it leaves a consultant free to be fully available to his hospital and to the N.H.S. Great advantage accrues to the Service from there being a proportion of consultants who do so choose, and they should not be penalized.

The present arrangements are equitable and should not be disturbed.—I am, etc.,

A. H. JAMES

Hillingdon Hospital,
Uxbridge

Sir Paul Chambers's Inquiry

SIR,—Sir Paul Chambers (*Supplement*, 6 May, p. 45) is to be congratulated on a thorough and intelligent review of the organization of the B.M.A., and his excellent suggestions for re-organization of the committee structure. Indeed, I think his report might better have been termed either "The Revelations of Sir Paul" or "The Resurrection of the B.M.A."

However, I fear that he has made one basic and, in my opinion, false assumption—namely, that the B.M.A. is the *only* medical organization which the National Health Service authorities might wish to consult on medical matters. In my opinion, if the National Health Service wishes to have medical opinion, it is entitled to the opinion of *all* doctors working within the National Health Service, whether or not they are members of the B.M.A. It could be argued that doctors should form themselves into some organization which could transmit their opinions to the Department of Health and Social Security, and the B.M.A. might take over this role. However, this implies that many of these doctors might not wish to avail themselves of the other aspects of membership of the B.M.A.

One possible solution would be that the B.M.A. should have two different types of membership—one for purely "medico-political" activities and the other for scientific and semisocial activities.—I am, etc.,

M. C. T. MORRISON

Princess Margaret Hospital,
Swindon, Wilts

Points from Letters

Unprocessed Bran and Diverticular Disease

Mr. PETER JONES, M.P.S. (Norgine Ltd., London W.C.1) writes: As the manufacturers of Normacol, we were very interested in the letter from Sir Francis Avery Jones and Mr. E. W. Godding (10 June, p. 651). The writers have done a service in drawing attention to the difference between Normacol (Standard) and Normacol Special, and in pointing out that when the prescription is for Normacol without more specific identification, it is the former product, containing frangula, which will be dispensed. . . . The bowel evacuation of many patients can be restored to normal simply by increasing bulk whether by bran or Normacol Special. However, there are some, including those who have been taking senna or cascara for prolonged periods, who will need some additional peristaltic stimulation—hence the inclusion of a small amount of frangula in Normacol (Standard).

Professional Responsibilities

Dr. G. G. GARLECK (Cambridge) writes: There must be few who qualified during the last 15 years or so who will not have noticed a striking deterioration in the attitude of doctors to members of their own profession and their families. That a diminishing sense of responsibility is common among young doctors need cause no satisfaction in their elders; it is they who should have taught or enlightened them. Why has this change occurred? Can we do anything to put it right? . . . My only excuse for writing must be to let a younger generation of doctors know that many of their predecessors had a totally different conception of their responsibilities and duties.