The abolition of pain probably involves the abolition of most other unpleasant mental processes as well, which presumably amounts to euphoria. And which of us doesn't like euphoria?—I am, etc.,

PETER MOFFITT.

Bristol.

Dangers of Barbiturates

SIR,—Drs. Elizabeth Tylden and Christine F. T. Saville (4 April, p. 49) advance further excellent reasons for restricting the distribution of barbiturates on the basis of their experience with the devastating effects of addictive barbiturate abuse. That serious consideration should be given to restricting barbiturates on the grounds of their notorious frequency in suicidal self-poisoning has already been discussed in your columns.^{1,2}

Now that satisfactory and safe alternative hypnotics such as nitrazepam are available it would seem high time that prescribing of barbiturates, at any rate to outpatients, be restricted or better still abandoned.—I am, etc.,

E. G. MCQUEEN.

National Poisons Information Centre,
University of Otago,
Dunedin, New Zealand.

REFERENCES

- 1 McQueen, E. G., *British Medical Journal*, 1969, 3, 177.
- 2 Wright, N., and Raeburn, J. A., *British Medical Journal*, 1969, 3, 656.

SIR,—It is salutary to read accounts in the press of an event about which one knows the facts, as so seldom did the event seem to occur in the way it was reported. We were disturbed to find that your leading article (28 March, p. 770) misrepresented us in fact and opinion. You state that "out of 994 cases admitted 66 denied the act of self-poisoning." In fact our paper¹ said that 66 patients *supposedly* denied the act of self-poisoning, but after scrutiny of case records to exclude miscodings, "the authors agreed that self-poisoning was denied despite evidence to the contrary on 31 admissions by 29 patients."

Automatism is "the performance of action not the consequence of conscious effort."² The question at issue is whether drugs can produce a mental state in which further self-poisoning can occur as an involuntary, mechanical act, or whether the self-poisoning act is deliberate, whatever the motive and despite unintentional consequences.

You suggest that discrepancy between the reported high incidence of automatism in Sweden and its rarity in Scotland is diagnostic fashion, when it is clearly attributable to definition of terms for identification of cases. Jansson³ defines automatism as "poisoning where the person involved gradually has consumed an overdose of hypnotics in order to get to sleep without any intention to commit suicide." This definition does not demand that the patient has amnesia for ingesting previous doses of the drug and has carried out motor acts without awareness. The fact that the person does not wish to commit suicide does not

make *self-poisoning* an accident nor a deliberate act an automatic one. The assumption quoted by you that the discrepancy in incidence between Sweden and Scotland might be due to a difference in liability to psychogenic amnesia cannot be attributed to us.

Our results were reported in order to make available facts on which opinions could be based, and to attempt to clarify confusing clinical events. Clearly we failed since your leading article maintains that "automatism seems to be a respectable version of *accidental* (our italics) self-poisoning." Accident can only be an explanation for poisoning that is unintentional. From our evidence we contend that "automatism" is a form of *deliberate* action, about which there is amnesia psychologically determined. To use the term automatism is then a paradox. It has been given a cloak of respectability by the medical profession on the basis of such meagre evidence that it has been described as "an appeal to credulity which ought not to be attempted in an intelligent society."⁴

Coroners and others have to rely on advice from medical authorities, a source of which should be your leading articles. On this occasion you have failed to give clear direction on either the usefulness or the dangers of the term for medical usage. We challenge you to produce evidence that barbiturate poisoning can occur as a result of an involuntary action due to amnesia while in a state of clouded consciousness. Only then can barbiturate automatism be retained as a malady and not discarded as a myth.—We are etc.,

R. C. P. AITKEN.

A. T. PROUDFOOT.

Royal Infirmary,
Edinburgh.

REFERENCES

- 1 Aitken, R. C. B., and Proudfoot, A. T., *Postgraduate Medical Journal*, 1969, 45, 612.
- 2 MacNalty, Sir A. S., *The British Medical Dictionary*. London, Caxton Publishing Co., 1961.
- 3 Jansson, B., *Acta Psychiatrica Scandinavica*, 1962, 38, 183.
- 4 Long, R. H., *Postgraduate Medicine*, 1960, 28, A56.

SIR,—I feel that it is important to alert general practitioners to the fact that young people who are coming to them asking for sleeping tablets may be addicts. We have had cases where in-patients in the Drug Addiction Treatment Unit at Bexley Hospital, who were being withdrawn from heroin or phsyptone, attended general practitioners' surgeries representing themselves as outpatients and obtained quite large quantities of barbiturates or Mandrax (methaqualone and diphenylhydramine), on the basis of fabricated histories. There is a need for doctors to be particularly cautious in prescribing hypnotics to people in the age group 16 to 25 years, which corresponds to that of most addicts.

Barbiturates are far from being the "soft" drug they are called, when grossly misused. They may be injected persistently, in spite of the misery of the abscesses this produces and the risk of resulting septicaemia. Chronic misuse of large doses also results in epileptic fits and other severe withdrawal symptoms in the intervals when the supply has run out. There is also danger of overdose, orally or by injection.

This is a problem among heroin users who run out of their daily maintenance supply, and also of other young people who are addicts to soft drugs only.—I am, etc.,

PAMELA AYLETT.

Guy's Hospital,
London S.E.1.

Purification of Ampicillin

SIR,—May we congratulate Dr. E. T. Knudsen and others on their success in reducing the incidence of rashes by "purifying" ampicillin (21 February, p. 469). Ampicillin causes other, more serious reactions as well as rashes, and it is to be expected that these will also be diminished by "purification."

The responsible "impurity," according to them, is a penicilloyl protein similar to that found in 6-APA, as reported by Batchelor *et al.*¹ and by one of us.² In subsequent investigations of ampicillin, we have not always been able to detect a protein impurity, meaning by that an impurity with unexpected amino acids, but we have detected and described³⁻⁵ peptide polymers composed mainly of subunits of intact or degraded ampicillin molecules which yield, after acid hydrolysis, phenyl glycine, valine, alanine, and dimethyl-cysteine; that is, those amino acids which could be liberated by internal reaction or breakdown of the intact or decyclized ampicillin molecule. Various polymers can therefore be formed, but one such, with a molecular weight of about 5,000, has immunogenic and allergic potency in experimental animals, and we are wondering if this is part of the "protein impurity" reported by Dr. Knudsen and colleagues.—We are, etc.,

G. T. STEWART.

B. T. BUTCHER.

R. ZEMELMAN.

Tulane University Medical Center,
New Orleans,
Louisiana, U.S.A.

REFERENCES

- 1 Batchelor, F. R., Dewdney, Janet M., Feinberg, J. G., and Weston, R. D. *Lancet*, 1967, 1, 1175.
- 2 Stewart, G. T., *Lancet*, 1967, 1, 1177.
- 3 Stewart, G. T., *Antimicrobial Agents and Chemotherapy*, 1967, p. 543.
- 4 *Penicillin Allergy—Clinical and Immunologic Aspects*, ed. G. T. Stewart and J. P. McGovern. Springfield, Ill., Thomas, 1970.
- 5 Stewart, G. T., Butcher, B. T., Wagle, S. S., and Stanfield M. K. in *Liquid Crystals and Ordered Fluids*, ed. J. F. Johnson, R. S. Porter, p. 33, New York, Plenum Press, 1970.

Epileptics on Phenytoin

SIR,—Dr. F. B. Gibberd and others commented (17 January, p. 147) on the wide variation in serum levels of phenytoin between epileptics prescribed the same dose. They presented evidence that irregular taking of tablets is one important source of this variation. We are studying patients who have had a myocardial infarction and in whom the possible usefulness of phenytoin as a long-term anti-arrhythmic is being evaluated. Using Wallace's method,¹ which measures a specific benzophenone derivative of phenytoin, and using whole blood, we have observed similar wide variations. So far our findings differ from those