schizophrenics are more a function of a selective mating of the schizophrenic parent(s) than a biological variant of schizophrenia'.

We would not dissent from this point of view, except for a reservation about terms. For instance, analysis of our data led us away from the monogenic hypothesis of schizophrenia and its spectrum, which might have justified calling all the cases, whether overtly psychotic or not, 'schizophrenic'. Instead, there was a complex situation in which transmission of schizophrenia and its related conditions appeared more likely to be polygenic. In addition, environmental factors, and, as we pointed out in our second paper (*Journal*, August 1975, **127**, pp 109–18), assortative mating on a phenotypic basis, that is between disturbed, unstable or disadvantaged individuals not necessarily of the same genotype, seem to play an important part in determining the types of abnormality manifested by the sibs of probands.

The low rate of schizophrenia among our parents —1 in 146—is not exceptional, and similar rates have been reported by Hallgren and Sjögren (1959) and by Kay and Lindelius (1970). However, differences in diagnostic criteria obviously enter the picture here. Should 'schizophrenia' be reserved only for those individuals who show certain defined psychotic symptoms, as proposed, for example, by Wing *et al* (1974); or should the conditions which Rosenthal and Kety (1968), for instance, considered to be part of the spectrum, such as suspected chronic schizophrenia and markedly inadequate personalities be included?

Our view is that in the present state of knowledge about aetiology, the former procedure is to be preferred. This would leave the question of the definition and nature of the less well-defined conditions open to further investigation and avoid closing the issue prematurely.

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SULTHIAME IN THE MANAGEMENT OF PSYCHIATRIC PATIENTS

DEAR SIR,

Until recently, sulthiame has been primarily investigated as an anticonvulsant. However, in certain of the earlier studies improvement in behavioural patterns was noted. Haran (1) reported that sulthiame reduced irritability and violent behaviour and improved the sociability of epileptic patients, and Ingram and Radcliffe (2) found that hyperkinetic behaviour of 16 out of 18 patients in their study was either 'abolished or improved'. Liu (3) noted an overall improvement in the behaviour of 32 out of 50 patients. In 12 of 18 hyperkinetic children, Kneebone (4) stated that there had been 'significantly improved behaviour'. Two double blind trials (5, 6) have confirmed that sulthiame is significantly effective in reducing the incidence of disturbed behaviour in mentally handicapped patients.

Yarden (7) claimed that a combination of sulthiame and trifluperazine reduced the incidence of psychotic outbursts in 24 chronic schizophrenics, and in view of these findings he decided to examine the possible benefit of sulthiame in patients in an adult psychiatric hospital setting who presented with disturbed behaviour as a symptom of either functional or organic psychiatric illness. Accordingly 30 patients at Leverndale Hospital, Glasgow, manifesting disorganized hyperactivity, general restlessness and inappropriate aggression, regardless of diagnosis, were started on sulthiame, administered in a dose of up to 250 mg three times daily in conjunction with the previous medication.

Continued administration of sulthiame to 13 schizophrenic patients for periods from 6 to 12 months resulted in no improvement. Two hypomanic patients were given sulthiame in addition to phenothiazines without improvement; and of 4 patients, a confused geriatric and 3 non-geriatric brain-damaged adults, 3 failed to show any benefit from the sulthiame medication.

However, the abnormal behaviour of patients with epilepsy appeared to respond, with improvement in 12 of 17 patients. There was diminution in hostility and destructive attitudes. Patients were quietened, and management became less of a problem. Fit frequency did not alter.

Sulthiame was introduced to the patients' drug

regime in a dose of 150 to 300 mg daily, and this was gradually increased to a maximum of 250 mg three times daily. In the case of the epileptic patients other anticonvulsants were withdrawn gradually as the sulthiame was introduced.

Sulthiame has been shown to reduce the rate of metabolism of other anticonvulsants, notably phenytoin sodium, and drug-induced encephalopathy has been described (8). One of the epileptic patients in the present series developed features consistent with the description of encephalopathy: the patient suddenly became confused with incoherent speech and markedly ataxic gait, all of which remitted on the cessation of sulthiame medication. Four other patients developed minor side effects from sulthiame in the form of paraesthesia in the lower limbs and mouth, and subjective weakness of the thigh muscles.

The results of this study do not support the previous findings that, in conjunction with phenothiazines, sulthiame can be of value in the control of schizophrenic excitement states. The drug was found to be without therapeutic value in chronic and acute organic states unassociated with epilepsy, but severe behavioural disorders associated with epilepsy did respond. A summary of the findings is given in the Table. Our experience with sulthiame in a psychiatric hospital has defined more clearly, we believe, the clinical area in which this drug is likely to be of value.

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TABLE

Response to sulthiame

Diagnosis	Epilepsy with behaviour disorder	Schizophrenia	Organic states without epilepsy	Hypomania	Total
Number of patients	17	13	4	2	36
Improved	12	0	1	0	13
No change	5	13	3	2	23
Adverse reaction:					
Mild	3	0	1	0	4
Severe	1	0	0	0	1

A CORRECTION

PROFESSOR F. A. JENNER and J. DAMAS MORA write:

In our letter to the *British Journal of Psychiatry* (February 1976, p 207) in response to Professor Kendell's paper (*Journal*, October 1975, **127**, pp 305–15) we asserted that psychiatric categories *occur* in different societies, the printed version however said that they *differ*. We were anxious to point out that they may require a society to exist, but by the nature of man most, if not all, societies he will produce may be 'pathogenic'. This assertion is obscured by the mistake in the printed version.

ERRATUM

In the article by G. J. Naylor *et al* entitled 'A Biochemical Study of Short-Cycle Manic-Depressive Psychosis in Mental Defectives', published in the February issue (p 170), the standard error of measurement of the erythrocyte Na-K ATPase activity should have read 0·0900 mmol PO4/l RBC, h, and not 0·900.