genetically. This contrasts with the view propounded by Dr. Price.

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MENTAL SUBNORMALITY IN SCOTLAND

DEAR SIR,

Drs. Innes, Kidd and Ross have found in the North-East Region of Scotland a case rate for mental subnormality of 6.02 per 1,000 (*Journal*, January, 1968, p. 35).

Perhaps this low figure can be explained by their assumption that a great majority of the subnormal patients are known to the hospital services or Local Authorities.

This is true, but there is a considerable difference between a "great majority" and "all" cases when undertaking epidemiological inquiries.

The unusually high predominance of male patients is suggestive that perhaps special social factors may have to be taken into consideration.

It would, therefore, be of considerable interest if they could continue their useful study by contacting all the family doctors in their Region and inquiring from them how many subnormals they know of or look after.

Furthermore, as the accurate diagnosis in borderline cases during the first few years of life is notoriously difficult, it would be interesting to know what proportion of the "normal" children in the North-East Region of Scotland have been adequately screened by chromatographic and cytogenetic investigations.

Last, but not least, in this study the criteria of mental subnormality was "where it was registered by the appropriate care authority that the intelligence quotient of a patient has been ascertained to have been less than 70 on full intellectual development". I will not go into the implications of this definition because this subject is now a hardy perennial in the Journal, rather like the first cuckoo used to be in the correspondence columns of The Times. . . .

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INFANTILE PSYCHOSIS

DEAR SIR,

Professor Jacobides, in his letter (Journal, February, 1968, p. 244) concerning the study of infantile psychosis reported in this Journal (November, 1967, p. 1169) by Miss Lockyer and myself, has raised some important points which require an answer.

He suggested that there may have been nonmeasurable qualitative differences between the psychotic children and the control children which did not show up in the symptom comparisons we reported. Certainly, it is essential to search for qualitative as well as quantitative differences, although we would not agree that these are non-measurable. They may be difficult to measure, but if the qualitative elements can be communicated from one psychiatrist to another they should be susceptible to definition and to measurement. The inclusion of the characteristic of "autism" in addition to "abnormal relationships" as more generally defined was an attempt to get at possible qualitative differences, and indeed only 8 control children showed this characteristic. In 4 of the 8 children the "autism" was rated as "slight", and in only one child was autism present at the time of first attendance. Our failure to obtain a more complete differentiation of the groups on this item may have been due, at least in part, to unreliability in the psychiatric judgments. It should also be said that qualitative differences might have been apparent if we had chosen other items on which to compare the groups. Nevertheless it is difficult not to be impressed by the extent of the overlap between the groups when it is remembered that all children reported to have "psychotic traits" or "some psychotic features" had been excluded from the control group.

In this context, the role of brain damage in the control group may be important. We noted in our original paper that brain damage was a feature of many of the control cases (as would be expected from their low IQ), and in response to his request further details are now provided in Table I. Compared with the psychotic group, about the same proportion of the controls (25/63) showed no evidence of brain damage, but in a higher proportion of the controls (24/63 compared with 12/63 psychotics) there was a "strong likelihood" of brain damage.

As Professor Jacobides suggested, nearly all the control children with "autism" had evidence of brain damage ("strong likelihood" in 6 out of the 8 cases and "possible" in 1 case). Two of these 8 children were thought at follow-up to be probably psychotic although not so diagnosed when first seen. None of the 8 children had been thought to be "psychotic-defectives" (a diagnosis suggested by Professor

Jacobides), when they attended the Maudsley Hospital (they would have been excluded from the control group if this diagnosis had been made), and it should be remembered that only one of the 8 children was rated as "autistic" on his behaviour at that time. The diagnosis of an organic brain disorder on the basis of behaviour alone is generally an unreliable and unsatisfactory procedure, but it does appear that "autism" is frequently associated with organic brain dysfunction. "Autism" was also associated with language deficits. All but one of the 8 children had been impaired in their language development before they became autistic. Only one remained without speech at follow-up, but two others had speech so limited as to be of little or no communicative value.

Professor Jacobides is correct in his assumption that many of the cases were seen by him during the time he worked at the Maudsley Hospital, and our behavioural ratings were based in part on his careful records, for which we are grateful.

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Table I
Presence of "Brain Damage" in Control Children

Strong likelihood 24:

- 1 Cerebral lipoidosis
- 2 Tuberculous meningitis followed by transient hemiparesis (and, in one case, the onset of epilepsy)
- 1 Hemiparesis from birth
- 1 Mongol
- 7 Epilepsy + Focal abnormality on EEG
- 2 Epilepsy + abnormalities on neurological examination
- 9 Uncomplicated epilepsy
- I Spike focus on EEG, marked clumsiness, change in development following meningitis in infancy

Probable 5:

- 2 Gross generalized EEG abnormality
- 1 Spike focus on EEG
- 1 Gross motor incoordination
- I Facial asymmetry, left extensor plantar response

Possible 9:

- 4 Marked clumsiness
- 3 Uncertain abnormalities on neurological examination
- 1 Generalized abnormality EEG
- Premature birth, convulsion in infancy

No evidence of brain damage: 25

PSYCHIATRIC SERVICES FOR THE DEAF

DEAR SIR,

In his review of the book Comprehensive Mental Health Services for the Deaf by John D. Rainer, M.D. and Kenneth Z. Altshuler, M.D., Dr. Minski rightly stresses the need for the development of psychiatric services for the deaf in this country.

However, his statement that "an important aspect of psychiatric treatment is lacking not only in this country but probably throughout the world" gives the impression that there are no provisions here for the deaf with mental illness whatsoever.

Psychiatric services for the deaf have been developing within the Manchester Regional Hospital Board since 1964 when we undertook a survey of the deaf population of two mental hospitals (1). For the past two years out-patient clinics for deaf patients have been held in the Department of Audiology and Education of the Deaf at Manchester University, and requests for assessment of deaf patients have been received from all over the country. At this hospital deaf patients have been admitted for assessment and treatment and a Unit for deaf patients is to be opened in the immediate future, with nursing and other ancillary personnel trained in manual communication methods and conversant with the psychological and psychiatric implications of deafness.

I fully endorse his view that this book should be read not only by all psychiatrists but also by the Ministry of Health and Regional Hospital Boards.

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THE BODY IMAGE OF THE AVIATOR DEAR SIR,

We were very interested to see the paper by Tucker, Reinhardt and Clarke (Journal, February, 1968, p. 233). One of us (A.S.) is currently using the same conceptual approach in the study of motor vehicle drivers. We agree with the authors that the question of the degree of control the operator achieves over his vehicle is vital in determining the changes which take place in his body image. It follows from this that once the operator has left the vehicle his body image will return to its previous boundary, although some time may elapse before it is fully restored. It seems to us essential, therefore, that any tests which are