An increased frequency of hypermodal cells as well as chromosome fragments and breaks is, however, likely to be due to treatment with psychotropic drugs and not causally related to the mental illness. We found a significantly higher frequency of hypermodal cells, breaks and chromosome fragments in psychiatric patients treated with psychotropic drugs compared with a control group of patients not treated with such drugs.

J. Nielsen,
U. Friedrich,
T. Tsuboi.

The Cytogenetic Laboratory,
Århus State Hospital,
Risskov, Denmark.

References

Anders, J. M., Jagiello, G., Polani, P. E., Giannelli, F., Hamerton, J. L., and Leiberman, D. M. (1968). 'Chromosome findings in chronic psychotic patients.' *Brit. J. Psychiat.*, **114**, 1167–74.

Nielsen, J., Friedrich, U., and Tsuboi, T. (1968). 'Chromosome abnormalities and psychotropic drugs.' *Nature*, **218**, 488.

—— —— —— 'Chromosome abnormalities in patients treated with chlorpromazine, perphenazine and LSD.' Unpublished.

Dear Sir,

In reply to the letter by Nielsen *et al.*, we agree with their suggestion that some of our observations might be related to the psychotropic drugs being taken by these patients.

However, these patients were not taking LSD and in any case the evidence regarding LSD and chromosome breakage is controversial, and with regard to the other psychotropic drugs not-proven.

We believe that our explanation of an ageing effect is the more likely one.

John L. Hamerton,
Georgiana Jagiello.

Paediatric Research Unit,
Cameron House,
Guy's Hospital Medical School,
London, S.E.1.

BIRTH ORDER AND DEPRESSION

Dear Sir,

In his analysis of data relating birth order to depression. Professor Grosz (*Journal*, December 1968, p. 1555) notes that there seems to be a deficit of youngest-born among sibships of size three. But this deficit is based on the expectation of equal numbers in each birth rank. There are two reasons why, on the null hypothesis, one would expect fewer representatives in the higher birth ranks from sibships of a given size:

1. The population in this country has been increasing for many years. Hence, if at a given time f_1 is the number of first-born of a given age, drawn from sibhips of size n, and if f_2 is the number of second-born *of the same age* and also drawn from sibships of size n, then $f_1 > f_2 > \ldots > f_n$.

2. Grosz explicitly states that he excluded sibships in which deaths had occurred. But the sibs of a youngest-born are more likely than those of an oldest-born *of the same age* to have suffered death—more years have been at risk. So in excluding sibships containing deaths, Grosz would be expected to have discarded disproportionately many youngest-born depressives.

William H. James.

Department of Biometry,
University College London,
Gower Street,
London, W.C.1.

Dear Sir,

Dr. James's argument is inappropriate and irrelevant to my study, as significant deficits of youngest-born among sibships of size three were found only among depressive patients. They were not found among the control samples of patients suffering from schizophrenia and anxiety.

Now, granted that it is possible, even though improbable, that the two considerations mentioned by Dr. James account for the findings only among the depressives and that for some reason they do not apply to the other two groups, they would still leave unexplained why among the depressives themselves the youngest-born were significantly under-represented only among patients with two differently-sexed sibs but not among patients with two same-sexed sibs.

Hanus J. Grosz.

Indiana University Medical Center,
1100 West Michigan Street,
Indianapolis, Indiana 46207, U.S.A.

THE NEUROSYPHILITIC PSYCHOSIS TODAY

Dear Sir,

Dr. Dewhurst's article (*Journal*, January 1969, p. 31) re-emphasizes that the improved treatment of