- RUTTER, D. R., WISHNER, J., KOPYTYNSKA, H. & BUTTON, M. (1978) The predictability of speech in schizophrenic patients. *British Journal of Psychiatry*, 132, 228-32.
- SALZINGER, K. (1973) Schizophrenia: Behavioural Aspects. New York: Wiley.
- —— PISONI, S., FELDMAN, R. S. & BACON, P. M. (1961) The effect of drugs on verbal behaviour. Presented at the American Association for the Advancement of Science Symposium, Denver, Colorado.
- PORTNOY, S. & FELDMAN, R. S. (1964) Verbal behaviour of schizophrenic and normal subjects. Annals of the New York Academy of Sciences, 105, 845-60.

- —— PISONI, D. B. & FELDMAN, R. S. (1970) The immediacy hypothesis and response-produced stimuli in schizophrenic speech. *Journal of Abnormal Psychology*, 76, 258-64.

SCHIZOPHRENIA AND EARPLUGS

DEAR SIR,

As hinted at by McGuffin (Journal, June 1979, 134, 651), the wearing of earplugs by schizophrenics may not be as eccentric as first appears. Intolerance to noise is a common symptom in an ENT clinic as well as among psychiatric patients. The classic feature is that the patient has to turn down the volume if he enters a room where others are watching TV. Regardless of who exhibits this symptom (autistic children, children recovering from otitis media, early otosclerotics, patients with Menière's disease, etc), there is the same correlate on testing with an acoustic impedance meter—a reversal of middle ear stapedial reflexes. Instead of the normal decrease of middle ear compliance on acoustic stimulation, there is an increase. This has the effect of amplifying instead of attenuating loud noises.

Over the last few years I can recall seeing 3 West Indian patients in an ENT clinic with a psychiatric diagnosis of schizophrenia. All had audiological features of Menière's syndrome and positive blood tests for syphilis. In such patients the symptoms often start after minor head injury or pressure changes, as during plane flights. A very common symptom of Menière's disease is an annoying feeling of pressure or blockage in the ears, which may have been the basis

for the patient's delusion that "Half of my brain is linked to the Moon".

A. G. GORDON

Hearing Aid Department, King's College Hospital, London

DEAR SIR,

Dr McGuffin's letter (Journal, June 1979, 134, 651) includes incidental observations of the effects of wearing earplugs upon the condition of schizophrenic patients. In particular, he quotes the patient who found that wearing earplugs helped him to 'hear more clear' (sic).

Our own research provides a rationale for improvements in speech comprehension as a result of wearing an earplug in one ear or the other but not in both (Green, 1978a; 1978b; 1978c; Green et al, 1979). This research shows that schizophrenics suffer from defective information transfer between the cerebral hemispheres and that the transfer deficit interferes with speech comprehension. Acute schizophrenics with left hemisphere speech representation are significantly better at understanding speech presented to the right ear than to the left. More important, however, is that they are normally able to comprehend speech presented to the right ear only at least twice as well as under normal conditions of binaural speech reception. The wearing of an earplug in the left ear, therefore, leads to significantly increased levels of speech comprehension compared with everyday binaural listening. In cases of right hemisphere speech, the effect is similar but in the reverse direction and a right earplug would be expected to increase speech comprehension.

An additional effect of a single earplug which we are investigating is a decreased frequency of auditory hallucinations which re-appear if the patient removes the earplug. For further information about the experimental work leading to the discovery of these effects, reference may be made to the following articles which are available from the author on request.

W. P. GREEN

Senior Clinical Psychologist, All Saints Hospital, Lodge Road, Birmingham B18 5SD

References

- Green, P. (1978a) Interhemispheric transfer in schizophrenia: recent developments. *Behavioural Psycho*therapp, 6 (4), 105-10.
- —— (1978b) Defective interhemispheric transfer in schizophrenia. Journal of Abnormal Psychology, 87 (5), 472-80.

—— (1978c) Defective interhemispheric transfer in schizophrenia: evidence and relationships with symptoms. Paper presented to the International Conference on Hemisphere Asymmetries of Function and Psychopathology at Charing Cross Hospital.

— GLASS, A. & O'CALLAGHAN, M. A. J. (In press)
Abnormal hemisphere interaction in schizophrenia.
In Hemisphere Asymmetries and Psychopathology (eds.
J. H. Gruzelier and P. Flor-Henry. Elsevier.

TERMINAL CARE

DEAR SIR,

Avril Stedeford's account of her work as liaison psychiatrist during the first 3 years of operation of the terminal care unit at Michael Sobell House in Oxford shows how much can be achieved in such a setting and should encourage other psychiatrists to offer liaison help to units of this kind (*Journal*, July 1979, 135, 1-14).

At least 22 terminal care units have been opened in recent years and many more are planned. Unfortunately very few of them have regular support from a psychiatrist with the benefits which this brings to patients, families and to staff. Is this the organizers' fault or ours? I suspect that some of the blame must lie with the psychiatrists themselves who are apprehensive at the thought of carrying the burden of responsibility for the distress of large numbers of dying people and are reluctant to enter a field which seems remote from their own. These were certainly my own feelings when I first agreed to act as consultant psychiatrist to St Christopher's Hospice 13 years ago and it may reassure readers to learn that my fears were not realized.

I agree with Stedeford's finding that about ‡ of patients referred to the psychiatrist benefit from the help they receive. Like her my referral rate was usually about 14 per cent but the proportion has dropped considerably in recent years at the same time as the number of referrals of family members has risen. This, I believe, results from a consistent policy

of education and support for the staff. All members of staff are trained to regard psychological aspects of care as their responsibility. Detailed information about patients referred for consultation is fed back to the ward team and management discussed with them at regular ward meetings.

With the development of active home care teams and bereavement services the family (which includes the patient) have come to be seen as the unit of care. As a result I now spend as much time supporting families and liaising with staff and volunteers as I do in providing direct service to patients.

The Hospice movement has generated idealistic fervour on a par with the 'Moral Treatment' of lunatics which took place in the 19th century and much of its undoubted success results from the enthusiasm and dedication of its pioneers. But the lesson of history must make us dread the kind of hell hole which a Hospice could become if staffing levels are permitted to drop and staff morale declines. Psychiatrists are one component in a system of staff and family support which should ensure that morale is maintained. This system also includes the hospice chaplain and other senior staff members. It is a measure of the success of this network at St Christopher's Hospice that 78 per cent of a sample of spouses of patients who died in the Hospice agreed with the statement "The hospital is like a family", compared with only 11 per cent of a matched group of spouses of patients who had died in other hospitals (p < 0.001, Parkes, in press).

C. MURRAY PARKES

Senior Lecturer in Psychiatry, The London Hospital Medical College, Turner Street, London E1 2AD

Reference

PARKES, C. M. (1979) Terminal care: evaluation of in-patient service at St. Christopher's Hospice. Postgraduate Medical Journal. (In press).