Author's reply: Obsessive–compulsive disorder is classified as an anxiety disorder but our paper stated that our patients were free of other DSM–III–R axis I disorders. Increased brain 5-HT function may be associated with anxiety and our paper discussed this in the context of the hypothesis of Deakin *et al* (1991) that enhanced 5-HT neurotransmission may serve to restrain 'flight' and enable coping in the presence of aversive cues. There was no correlation between illness severity in our patients and prolactin response to d-fenfluramine but this, perhaps, is not surprising given the small numbers of subjects and the likely complexity of the mechanisms involved.

In some anxiety disorders, for example panic disorder, increased prolactin responses to fenfluramine can be associated with anxiety provocation during the challenge test (Targum & Marshall, 1989). However, as stated in our paper, these kind of subjective effects were not seen in our study. This makes a stress response in the patients an unlikely explanation for our findings (see Anderson *et al*, 1992).

Anderson, I. M., Ware, C. J., Da Roza Davis, J. M., et al (1992) Decreased 5-HT-mediated prolactin release in major depression. *British Journal of Psychiatry*, **160**, 372–378.

Deakin, J. F. W., Graeff, F. G., Rodgers, R. J., et al (1991) 5-HT and mechanisms of defence. *Journal of Psychopharmacology*, **5**, 305–315.

Targum, S. D. & Marshall, L. E. (1989) Fenfluramine provocation of anxiety in patients with panic disorder. *Psychiatry Research*, **28**, 295–306.

P. J. Cowen University Department of Psychiatry, Warneford Hospital, Oxford OX3 7JX

Obsessional personality and outcome of panic disorder

Sir: The letter of O'Rourke *et al* (1997) published in response to our letter earlier this year (Tyrer *et al*, 1997) has caused us considerable distress. More particularly, the penultimate paragraph suggesting that our observation that rural Irish patients may have greater symptom stability because of anancastic personalities is "a racist joke in poor taste" is something to which we take great exception.

This possible explanation of the findings was made in the spirit of scientific enquiry and contains no element of racism. The response of O'Rourke *et al* not only misrepresented our intentions but is also a slur on the reputation of another Irish colleague, Dr Kelleher, whose two publications on this subject were cited in our letter. In his 1972 paper (Kelleher, 1972) he showed that Irish general hospital patients chosen at random had significantly higher scores on the Leyton Obsessional Inventory than similar English equivalents, with an average score of 11 for the Irish subjects and 9.2 for the English ones. In the same paper he also showed that the rural Irish patients from the Cork area had scores which were 2.5 points higher than those who came from Cork city. In his 1982 paper (Scott *et al*, 1982) these findings were replicated, except that in addition a Scottish sample was compared and this was found to have lower obsessional scores than either the Irish or the English.

The reasons why we thought these findings may have significance in the study of O'Rourke *et al* (1996) is that in our own work we have found those who have anancastic personalities have fewer life events and show less diagnostic change than those who do not have such personalities. This is the background that led to our suggestion that rural Irish patients are more likely to have obsessional personality characteristics and that this could have clinical significance.

Kelleher, M. J. (1972) Cross-national (Anglo-Irish) differences in obsessional symptoms and traits of personality. *Psychological Medicine*, **2**, 33–41.

O'Rourke, D., Fahy, T. J., Bruphy, J., et al (1996) The Galway study of panic disorder: III: Outcome at 5 to 6 years. *British Journal of Psychiatry*, **168**, 462–469.

—, —, Prescott, P., et al (1997) Outcome of panic disorder (authors' reply). *British Journal of Psychiatry*, **170**, 89–90.

Scott, A., Kelleher, M. J., Smith, A., et al (1982) Regional differences in obsessionality and obsessional neurosis. *Psychological Medicine*, **12**, 131–134.

Tyrer, P., Seivewright, N., Ferguson, B., et al (1997) Outcome of panic disorder (letter). *British Journal of Psychiatry*, **170**, 89.

P. Tyrer, N. Seivewright, B. Ferguson, T. Johnson Imperial College School of Medicine, St Mary's Campus, Paterson Centre, 20 Wharf Road, London W2 1PD

Structural neuroimaging in learning disability

Sir: We read with interest the recent article reviewing structural neuroimaging in learning disability (Deb, 1997). For adults with Down's syndrome a strong association with dementia of Alzheimer's type is now well established. However, the review failed to discuss the role of structural neuroimaging in the detection of Alzheimer's disease in this population. Magnetic resonance imaging has demonstrated that subjects with Down's syndrome show signs associated with Alzheimer's disease; dilatation of ventricles, increased peripheral atrophy and increased deep white matter lesions (Pelz *et al*, 1986; Emerson *et al*, 1995). For subjects with Down's syndrome with clinical dementia, atrophic changes similar to those seen in the general population of those with Alzheimer's disease are found (Kesslak *et al*, 1994; Prasher *et al*, 1996) and non-specific basal ganglia changes are seen (Aylward *et al*, 1997). We agree with the author that structural neuroimaging holds great promise for future research, especially in the assessment of neurodegenerative disorders in those with learning disability.

Aylward, E. H., Li, Q., Habbak, R., et al (1997) Basal ganglia volume in adults with Down syndrome. *Psychiatric Research: Neuroimaging Section*, **74**, 73–82.

Deb, S. (1997) Structural neuroimaging in learning disability. *British Journal of Psychiatry*, **171**, 417–419.

Emerson, J. F., Kesslak, J. P., Chen, P. C., et al (1995) Magnetic resonance imaging of the aging brain in Down syndrome. *Progress in Clinical and Biological Research*, **393**, 123–138.

Kesslak, J. P., Nagata, S. F., Lott, I., et al (1994) Magnetic resonance imaging analysis of age-related changes in the brain of individuals with Down's syndrome. *Neurology*, **44**, 1039–1045.

Pelz, D. N., Karlik, S. J., Fox, A. J., et al (1986) Magnetic resonance imaging in Down's syndrome. *Canadian Journal of Neurological Science*, **13**, 566–569.

Prasher, V. P., Barber, P. C., West, R., et al (1996) The role of magnetic resonance imaging in the diagnosis of Alzheimer's disease in adults with Down syndrome: case report. *Archives of Neurology*, **53**, 1310–1313.

V. P. Prasher, E. Robertson Department of Psychiatry, University of Birmingham, Queen Elizabeth Psychiatric Hospital, Birmingham B15 2QZ

Variability in cognitive deterioration in schizophrenia

Sir: Harvey *et al* (1995) report the failure to find deterioration in the mean Mini-Mental State Examination (MMSE; Folstein *et al*, 1975) scores of geriatric in-patients with schizophrenia over one- and two-year periods. Recently, we (Laws & McKenna, 1996; Laws *et al*, 1998) have also found that people with chronic schizophrenia (as

https://doi.org/10.1192/S0007125000149621 Published online by Cambridge University Press