because they are more likely to be diagnosed as suffering from a psychotic illness, particularly schizophrenia. The higher rate of sectioned admissions may reflect differential access to services among black groups or presumptions about willingness of black patients to receive treatment.

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Unmet needs for medical care

SIR: We are pleased that Daly (Journal, June 1990, 156, 909) finds our procedure for measuring unmet need potentially useful. We agree that it would be sensible, following our initial study (Journal, December 1989, 155, 777–781), to apply the procedure cautiously to other populations. As we have pointed out in other papers on the same project, we can draw no conclusions beyond those based on our sample (Brewin et al, 1987, 1988; Brugha et al, 1988; MacCarthy et al, 1989). Thus, for example, the particular value of thyroid and liver-function tests in our study cannot be taken yet as a specific recommendation for their general use in this kind of population. It is difficult to see why Dr Daly disagrees with this position.

The surprising conclusion that unmet need was as high in the social services day centres as in the day hospitals was based on findings set out at the end of the fourth paragraph of the results, a point that Dr Daly appears to have overlooked. So far as physical examination is concerned, we did look for the side-effects of medication, including tongue tremor, and thus were able to comment on the patient's need for dental care.

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Compliance with antidepressant medication

SIR: Depressed patients may comply poorly with drug treatment: non-compliance may range from 15-44% (Myers & Calvert, 1984; Willcox et al, 1965). Compliance with newer antidepressants such as mianserin and lofepramine has been little studied in an everyday National Health Service setting. We therefore examined drug compliance in all patients prescribed tricyclics or mianserin and over a threemonth period under the care of one consultant psychiatrist (n = 29: 16 out-patients, four day-patients, nine in-patients). Eight patients each received amitriptyline, imipramine and mianserin, and five received lofepramine. The dose of tricyclic varied from 25 mg to 210 mg daily and of mianserin from 30 mg to 90 mg daily. A blood sample was taken 8-12 hours after the previous dose, and the plasma antidepressant level measured by high-pressure liquid chromatography techniques. The plasma level was categorised as absent, low, therapeutic or high (Montgomery et al, 1977; Orsulak & Schildkraut. 1979). Depression and anxiety were assessed at the time of sampling by the Krawiecka scale for chronic psychotic patients, and a note made of current sideeffects (e.g. dry mouth, blurring of vision, weight gain).

No antidepressant was detected in the serum of only one patient, a day-patient prescribed imipramine. Thus only 3% of the population were clearly non-compliant with their drug therapy. A further seven patients, all receiving tricyclics, had 'low' plasma levels. Non-compliance may be suspected in these patients but pharmacokinetic factors must also be considered. Inspection of the data did not suggest these eight patients differed from the others with regard to sex, hospital status, dose of antidepressant, duration of treatment, current anxiety or depression, and prescriber.

A previous study which also used the 'no antidepressant detected' category assessed non-compliance at 35% (Voris et al, 1983). It is not clear why the rate was much lower in the present study. Side-effects can be an important factor in non-compliance, but only six patients had no such complaints. Other factors contributing to compliance may include psychiatric diagnosis, the number and frequency of drugs prescribed, and relief from symptoms causing premature discontinuation.

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Insight

SIR: David (Journal, June 1990, 156, 798-808) discusses three aspects of insight that are commonly recognised in the psychiatric mental state: treatment compliance, awareness of illness, and correct relabelling of psychotic experiences. David appropriately considers each of these to be dimensions, rather than 'all or none'. However, even this approach is an oversimplification. None of these three sorts of insight have been satisfactorily reduced to a quantitative scale, since each involves a number of different qualitative judgements. Furthermore, by carefully examining these judgements, we find that these three different aspects of insight are, in fact, crucially linked.

Consider what is necessary to 'relabel a psychotic experience correctly'. When a patient 'hears voices', he/she is not *imagining* that he hears voices: he is having the perceptual experience of hearing the sound of a voice – he is hearing a 'real' sound. To relabel the experience correctly, he has to recognise that for the experience to be 'normal', there must, in addition, be an identifiable source to the sound, and

he has to establish that there is no such source. However, even this is not enough: he must also recognise the correct explanation for his abnormal experience rather than invoking other explanations (of varying degrees of plausibility) to reconcile this experience with his knowledge and beliefs about reality.

To be compliant with treatment, or to admit to an awareness of illness, involves an equally complex chain of decisions concerning, among other things, the patient's attitude to the current practice of psychiatry. However, in common to all three aspects of insight is this issue whether the patient recognises that he is, in some way, functioning abnormally.

The interesting thing is that many patients do realise that their experiences (or that they themselves) are abnormal in some way - but they may not go so far as to 'correctly relabel' their psychotic experience, and so would not score on Dr David's schedule. We know that patients are often aware of this abnormality because it is common to see a patient invoking elaborate explanations for his psychotic phenomena. However, the explanations that are invoked may, themselves, be at odds with reality. Thus 'double awareness' or double orientation (i.e. simultaneously entertaining two beliefs that are irreconcilable, given the currently accepted limits of science) is actually very common, either because the patient accepts his psychotic experience as real, yet not in keeping with reality, or because the patient accepts a bizarre explanation for his experience.

This awareness by the patient of the 'oddness' of his experience is very important, because it probably results both in the patient's awareness that he is ill and (crucially) in the motivation for treatment compliance – whether or not the patient takes the step of 'relabelling' his psychotic experience. I would suggest, therefore, that measuring the patient's degree of insight is of great value in assessment and in therapy, both physical and psychological. However, there are many more detailed questions to be asked than have been covered in Dr David's schedule.

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Frontal metabolic deficits in Korsakoff syndrome

SIR: Lishman's review (*Journal*, May 1990, **156**, 635–644) emphasises importantly the spectrum of brain damage found in alcoholics and, in particular, the accumulating evidence that Korsakoff patients not only have subcortical lesions, but in most cases significant cortical damage also. In the review, Lishman