Verbal fluency and semantic memory in schizophrenia

SIR: Allen *et al* (*BJP*, December 1993, **163,** 769–775) reported that with a verbal fluency task repeated at different intervals, schizophrenic patients tended to produce fewer items than control subjects. The sets of items produced on different occasions by the same patient tended to be varied. By comparing items produced on different occasions, it was concluded that patients may have a mental lexicon similar to that of normal controls, and that the main deficit in the verbal fluency task lies in retrieval.

Studies of memory deficits could be divided into studies of recall and studies of recognition. While recall requires an active search, recognition reflects more directly the contents of the memory store. A verbal fluency test could be considered as a recall test of the long-term semantic store; another way to study this store is by a recognition test. Recognition for semantic categories could be tested with a paradigm where subjects are asked to decide whether a presented exemplar (e.g. 'chair') belongs to a particular category (e.g. 'furniture'). This paradigm has been used in a study of schizophrenic patients (Chen *et al*, 1994), and one of the findings was that patients responded normally most of the time to items *within the category* (i.e. making correct decisions, with faster response to more typical items). This concurs with the findings of Allen *et al* in suggesting that the mental lexicon in schizophrenic patients is probably not grossly degraded, even in the presence of severe poverty of speech or incoherence. This is an important negative finding.

A similar profile of impaired retrieval in the presence of intact semantic store has also been described in patients with Parkinson's disease, Huntington's chorea (Randolph *et al*, 1993), and frontal lobe lesions (Shimamura *et al*, 1991), suggesting that in schizophrenia a similar set of neural substrates (basal ganglia, prefrontal cortex, among others) is involved in the impairment of verbal fluency.

What is important to rule out, however, is the effect of medication. Unfortunately, the analysis of this appears not to have been presented by Allen *et al*. At least theoretically, antipsychotic medication may affect basal ganglia function and lead to a deficit of verbal fluency unrelated to the schizophrenic illness itself.

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Severity and the stressor criterion in post-traumatic stress disorder

SIR: Lillywhite & Neal (*BJP*, December 1993, **163,** 837) raise some questionable criticisms of the case report of Spector & Huthwaite (*BJP*, July 1993, **163,** 106–108).

They complain of insufficient evidence that the patient's experience of a road traffic accident met the requirements of criterion A "of being outside the range of normal human experience", and thus declare themselves "not convinced" by the diagnosis of post-traumatic stress disorder (PTSD).

It is unfair to criticise omissions from a brief clinical report, where editorial requirements do not allow the inclusion of many details. There are numerous unchallenged reports in the literature of PTSD following road traffic accidents – March (1993) lists them as a "characteristic" (PTSD stressor – though this common cause of severe and life-threatening stress (Epstein, 1993) has been grossly underinvestigated. Feinstein & Dolan (1991) and others found that the perceived severity of an accident does not necessarily relate to the onset of PTSD, but more than half of those injured in car accidents perceive the experience as life-threatening.

Criterion A, as worded in DSM–III and DSM–III–R, has been considered deeply unsatisfactory in many ways by many experts on PTSD (Simpson, 1993): the reference to the "range of normal human experience" is obscure and was never based on any adequate scientific evidence.

Among the absurd suggestions in DSM was that clinicians should assess the stress based on what an "average" person "in a similar situation and with similar sociocultural values" would experience – a highly fanciful exercise (Simpson, 1993) that ignores the patient's impression. Prevalence of a stressor has nothing to do with its potential to engender PTSD: rape, child abuse, and crime are far from outside the range of normal human experience. Where a patient meets every clinical criterion for the diagnosis, are we to reject it

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