

our results are at least consistent with our interpretation. We think the writers overstate their point if they claim that at one hour non-specific factors are 'prevalent' in determining binding (Kuikka, 1995). Our β -CIT images clearly show activity patterns that parallel the known distribution of serotonin transporters, with relatively high activity in midbrain (Fig. 1 in Semple *et al.*, 1999).

An important experiment that has not yet been performed is the displacement of β -CIT binding by 'cold' serotonin transporter ligands (e.g. citalopram) in areas that are found to be abnormal. It needs to be emphasised, however, that the more specific investigations also tend to be more invasive (e.g. PET with arterial blood sampling) or more of a burden to the subject (e.g. dynamic SPECT scan 4–24 hours after tracer injection with citalopram, resulting in corresponding increases in radiation dose or scan time). This can potentially increase measurement error and aggravate the selection bias of the study, thereby reducing its validity. What is gained in theoretical experimental power may well be lost in spurious or biased sampling, if subjects have to be paid to participate (ours were not) or if subjects are self-selected on the basis of some perceived problem. It behoves the reader to be sceptical about any claims based on small samples, as well as non-specific methodologies, and to scan the medical literature for replicable results, keeping in mind

that there is publication bias in favour of positive findings. As far as MDMA-induced damage to human serotonin neurons is concerned, the jury is clearly still out.

Kuikka, J. T., Tjihonen, J., Bergström, K. A., et al (1995) Imaging of serotonin and dopamine transporters in the living human brain. *European Journal of Nuclear Medicine*, **22**, 346–350.

McCann, U. D., Szabo, Z., Scheffel, U., et al (1998) Positron emission tomographic evidence of the toxic effect of MDMA ('ecstasy') on brain serotonin neurons in human beings. *Lancet*, **352**, 1433–1437.

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Substance misuse in first-episode psychosis

We read the article by Cantwell *et al* (1999) with interest. The study relates to an important aspect on the changing pattern of substance misuse in patients with first-episode psychosis. The authors have found that substance users were more likely to be males and to have a younger age at onset of psychosis. However, it would be more informative if the authors gave the prevalence figures in either gender and in different age groups to enable identification

of high-risk groups for health promotion measures.

We would also like to highlight some discrepancies in the paper. The magnitudes of comorbid substance misuse among affective and delusional disorders have been miscalculated in Table 2. Considering the fact that affective disorders include manic psychosis and depressive psychosis in the study, the calculated prevalence of substance misuse among affective disorders is found to be 18.9% instead of 11.9%, and for delusional disorder it is 15.4% instead of 7.7% as reported by the authors. Similarly, the total number of stimulant misusers is four, instead of three given by the authors in Table 2. Based on this newly calculated substance misuse rate, there is no significant difference in the substance misuse between people with schizophrenia (23.5%) and those with affective disorders (18.9%) ($\chi^2=0.27$, $P=0.603$). Therefore, the authors' observation that subjects with affective disorder were less likely to be substance misusers needs to be modified.

Cantwell, R., Brewin, J., Glazebrook, C., et al (1999) Prevalence of substance misuse in first-episode psychosis. *British Journal of Psychiatry*, **174**, 150–153.

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One hundred years ago

Glasgow District Asylum, Gartloch (Report for the year ending May 5th 1899)

The average number of patients resident in the asylum during the year was 465 and comprised 236 males and 229 females. The total admissions during the year were 203 – viz., 111 males and 92 females. Of these 140 were first admissions. Dr. L. R. Oswald, the medical superintendent, states in his report that seven of those admitted were over 70 years of age, two being over 85 years. "The nursing of these old people demands the greatest care and tact, for they

are specially liable to accidents by reason of their frail condition and interfering ways. They must be kept apart from the acute and excited cases." Alcoholic intemperance is set down as having been the cause of the insanity in 50 of the persons admitted, but in many of these – as, indeed, in other cases – the illness was not due to one but to several causes, of which intemperance was the most prominent. "Intemperance, along with an enfeebled bodily condition, acting in conjunction with prolonged worry or mental strain, or following an influenzal attack, but with intemperance as the main factor," was the cause of insanity in the

50 cases referred to. General paralysis as a condition existed in 9 per cent. of the admissions, and in 16 per cent. a hereditary predisposition to insanity was established. The difficulty of obtaining reliable family histories was so great that it is considered probable that the proportion with hereditary taint was higher. During the year 98 patients were discharged as recovered, or 21 per cent. of the average population. Boarding-out, as a means of dealing with quiet and harmless cases, was largely practised during the year. 44 patients were thus sent out, but of that number seven were returned to the asylum for further