recovery without further treatment over two weeks, losing all delusional features and regaining normal emotional expression. No withdrawal symptoms were noted. She was discharged from hospital on 8 January 1976 and remained well when seen as an out-patient four weeks later.

Similar psychosis from abuse of 'Benzedrex' inhalers has previously been reported on three occasions in a total of four patients (1, 2, 3). Each had chewed the propylhexedrine strip for its stimulant effect. Three had continued the habit for several months, while the fourth consumed the contents of eleven inhalers in ten days. The clinical features in each case resemble those of amphetamine psychosis, with variable auditory and visual hallucination, paranoid delusions, loss of affect, difficulty in concentration, and sleep disturbance. In all previous reports there is a past history of psychiatric illness—two cases of amphetamine psychosis and one each of manic-depressive psychosis and schizophrenia. This and our patient's family history of schizophrenia suggest the possible uncovering of a latent schizophrenic tendency, as is sometimes thought to be the case in amphetamine psychosis. There was no evidence of schizophrenia following recovery in this case.

'Benzedrex' inhalers are readily available over the chemist's counter. Our patient was in the habit of attending several shops to obtain the necessary supply. Like previous addicts, she started the practice at the suggestion of others who had experience of it, rather than through its use as a decongestant. Abuse, although probably limited, clearly does occur. 'Anahist', a proprietary preparation containing the sympathomimetic phenylpropanolamine, has also been reported as causing a psychotic reaction (4). Non-scheduled preparations must still be considered in the differential diagnosis of psychotic states.

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MAINTENANCE THERAPY IN CHRONIC SCHIZOPHRENICS

Dear Sir,

Dr Johnson's account (*Journal*, March 1976, p 246) on the relatively high relapse rate of schizophrenic patients treated by long-acting injectable neuroleptic drugs leads me to remark that since we, in this area, started this type of treatment in 1966 it has been the universal practice for a community nurse to visit patients at home where they have their injection. This has produced a refusal rate which has averaged 4 per cent over the years and which is, I believe, rather lower than can be achieved by encouraging patients to come to clinics to have their injections. Although such a method may appear expensive, the money saved by keeping patients out of hospital more than pays for the extra nurses' salaries.

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THE POWER OF A TEST FOR SEASONALITY OF BIRTH WITH REFERENCE TO SCHIZOPHRENIA

Dear Sir,

It seems to be well established that the births of people who later develop schizophrenia occur seasonally (Dalén, 1975; Hare, 1975). The cause of this is unknown and more work will be needed to test

(a) how widespread this phenomenon is, and
(b) whether a similar phenomenon exists in regard to the sibs of schizophrenics.

In testing these points, researchers may wish to know the power of their procedures to detect, at statistically significant levels, seasonality of the same magnitude in further samples. Hare (1975) considers the size of the sample necessary to detect the effect at the 5 per cent and 1 per cent levels: these sample sizes vary according to the chance we wish to have of detecting the effects (the 'test power'). It is conventional to set test power at 0·8 (Cohen, 1969, p 51): in other words, we want our test to have 4 chances in 5 of detecting the effect at a preset level of significance. The four parameters (1) test power, (2) significance level, (3) 'effect size', and (4) sample size are interrelated: if three are set, the fourth can be evaluated. We may set test power at ·8, and the significance level at ·05. The effect size is defined (Cohen, 1969, p 210) as

$$e = \sum_{i=1}^{m} \frac{(P_{1i} - P_{oi})^2}{P_{oi}}$$

where

P_{oi} is the proportion in cell i posited by the null hypothesis, P_{1i} is the proportion in cell i posited by the alternative hypothesis and reflects the effect for that cell, and m is the number of cells (four for quarters of the year).

Now Hare (1975) suggests that the seasonality has a deviation of about 8 per cent. Let us accordingly

suppose that the four quarters of the year yield not ·25, ·25, ·25 and ·25 each of the schizophrenic births, but ·27, ·25, ·23 and ·25 of them. (The fact that control births also occur seasonally does not materially affect the argument.) Then

$$e = \frac{(\cdot 02)^2}{\cdot 25} + \frac{(\cdot 02)^2}{\cdot 25} = \cdot 0032.$$

Using Cohen's formula 7.4.1 (p 262) in conjunction with his Table 7.4.6, we find that the desired sample size is $\cdot 05 \times 218/\cdot 0032 = 3406$. Workers wishing to use other levels of significance, other levels of test power or other effect sizes may use Cohen's tables to derive the appropriate sample sizes. Table I gives illustrative values.

TABLE I

The sample sizes required to detect (at given levels of significance and at given levels of test power) an effect of the size described in the text

Test power	Significance level	
	·05	·01
·5	1,797	2,909
·7	2,562	3,875
·8	3,406	4,828
·9	4,423	6,016

If one were wishing to test seasonality, one might be unclear which null hypothesis to attack. Different sample sizes are needed to achieve the same test power against various closely similar hypotheses. Suppose, for instance, it is hypothesized that schizophrenic births occur disproportionately often in one half of the year; or suppose one wished to see whether there was a raised incidence of schizophrenic births in 4 months as contrasted with the remaining 8. Using Cohen's tables, one can estimate the sample size required in each case. Adjustments would have to be made if one were prepared to specify beforehand *which* months were to be associated with affected births.

In general the χ^2 test is a weak one for testing seasonality, especially when it is used with 11 degrees of freedom to test monthly values. However, as far as I know, the power of other tests of seasonality has not been investigated.

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THE DE CLÉRAMBAULT AND CAPGRAS SYNDROMES: A CASE HISTORY

DEAR SIR,

De Clérambault (1942) delineated a form of erotomania in which the patient holds a delusional belief that a man is in love with her. Capgras and Reboul-Lachaux (1923) described 'l'illusion des sosies', in which the patient believes that a person, usually closely related, has been replaced by an exact double. In 1973 Sims and White described a case in which these two syndromes coexisted and it was considered that they were descriptions of specific types of delusional content and not distinct diagnoses. A further case has now been observed in which these two conditions coexist.

Mrs J., aged 42, was admitted to the John Conolly Hospital, Birmingham, complaining of intermittent depression for the last two years, associated with marital disharmony, loss of libido and suicidal thoughts. She felt that people were watching her all the time, and she heard 'voices in my head', of people she knew. She would talk to these voices. She lived with her husband (a car assembly worker) and two teenage sons.

During treatment she was encouraged to attend a small psychotherapeutic group with a female doctor and a male charge nurse (B). The patient started to make amorous advances to B in the ward. She followed him about, declared that she loved him and that he loved her too, and asked him to have sexual intercourse with her. When she was asked about her behaviour she insisted that the man loved her, and that he was not a nurse but her husband, John Conolly. She referred to him sometimes as 'the man who is in love with me, John Conolly' and sometimes by his own first name (as was common in the hospital).

At this time she became distant and hostile in her attitude towards her husband during his visits, refusing to meet him. She believed that he was not her husband at all but merely posing as such, although she agreed that perceptually he was like her husband. Her evidence for this belief was obscure. 'He isn't my husband. Yes, he is like him, but he cannot be my husband as B is my husband.' Interestingly. Mr J. and B were not similar. Both the misidentification of