

whether or not to consider them 'familial'. Had Drs Keshavan & Toone chosen to do so, inspection of their data suggests they would have found an even more impressive difference in VBR between their familial and sporadic groups. However, it is important to keep in mind an underlying hypothesis before deciding whether one's glass is really half-full or half-empty. If the dependent variable is VBR, then the critical independent variable is not so much the absence of a family history as the presence of earlier environmentally-mediated brain insults which tend to congregate in the sporadic group.

One last point: perhaps because it jars with current nosological conceptions, schizophrenia with a family history of affective disorder is under-researched. The notion that it represents a distinct biological subgroup is well worth exploring further.

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#### Deliberate Self-Harm and Out-patient Attendance

SIR: In their report concerning deliberate self-harm in Newcastle, O'Brien *et al* (*Journal*, February 1987, **150**, 246-247) demonstrated that the attendance rate of patients at out-patient appointments one week after the episode was 40%. A survey of deliberate self-harm (DSH) referrals carried out in the Bristol Royal Infirmary (BRI) over a 16-week period in 1986 produced similar findings.

All cases of DSH at the BRI are referred for psychiatric assessment and disposal by a Senior House Officer (SHO) in psychiatry. During the course of our study, each of 88 patients was seen by one of four SHOs. Half of the patients were offered an out-patient appointment at the time they were seen. The reasons for not being offered an appointment were either that the patient was being followed up by another psychiatric team (13 patients), or the patient refused the appointment offered (14 patients), or finally that follow-up by the psychiatric services was not thought appropriate. In the latter case, either the patient was already involved with other agencies or the act of self-harm had produced a

positive change in circumstances (15 patients). Two patients were admitted to the psychiatric ward.

Of the group given an appointment for the next available psychiatric clinic place, to be seen by the assessing SHO, only 50% (22 patients) subsequently attended.

This study broadly confirms the findings of O'Brien *et al* and others (Morgan, 1976; Kreitman, 1979) showing a very high drop-out rate from psychiatric care of DSH patients. This phenomenon poses considerable difficulties for research in gathering both adequate numbers and representative samples of patients. As a corollary, it emphasises the need for improvement in the psychiatric management of DSH. We need to clarify whether high default rates imply an inherent limit to what can be offered to DSH patients or reflect deficiencies in treatment styles, some of which may be remediable.

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#### The BITE: Indices of Agreement

SIR: In reply to the letter from King & Williams (*Journal*, May 1987, **150**, 714), we would like to make the following points regarding the Bulimic Investigatory Test, Edinburgh (BITE) (Henderson & Freeman, 1987). Firstly, Drs King & Williams state that it is unclear whether the BITE is a screening test or a diagnostic instrument. The BITE was designed as a screening test for use in a wide variety of settings to allow the detection of sufferers and potential sufferers of bulimia nervosa. Examination of the thirty items that comprise the symptom sub-scale will show that they provide information on a wide range of types of behaviour associated with binge-eating. By looking at an individual's responses to each item, the user will be able to extract the information they require to answer questions concerning diagnosis. We felt that it was pointless to attempt to produce a diagnostic instrument in an area where there is no agreement as to what constitutes a diagnosis of bulimia. Even the most recent DSM-III-R diagnostic category for bulimia is open to discussion.

The BITE covers all the current criteria for a DSM-III diagnosis of bulimia, as well as those proposed by Russell (1979). It is assumed that any

investigation concerned primarily with questions of diagnosis would include the use of interviews to supplement questionnaire findings. The criteria by which the BITE identifies cases will be determined by the demands of the investigator. It is designed to identify individuals who binge-eat, purge, and exhibit a behavioural pattern associated with the presence of a binge-eating disorder.

Drs King & Williams raise a number of methodological points. The problem of binge-eating occurs on a continuum, and the patient group in study 1 reflect this. All but one of the patients fulfilled DSM-III criteria at the time of completing the questionnaire. It is clearly stated in the paper that the DSM-III criteria were used for studies 2, 3 and 4.

The use of a mixed control group and an all-female patient group in study 1 reflects the fact that binge-eating is extremely rare in males. It was thought to be important to use a group of male subjects during the development of the BITE to ensure it had face validity for both sexes, as it may be used for the screening of a mixed population. In fact, in the accompanying paper (Dunkeld Turnbull *et al.*, 1987), it can be seen that the BITE was the only instrument that correctly identified male bulimics.

As regards the sub-scales and scoring of the BITE, the severity sub-scale is clearly explained in the paper as being a measure of severity as defined by the *frequency* bingeing and purging behaviours. The lower cut-off score of 10 for the symptom sub-scale is derived from the hypothesis that a subject who scores positively on ten items (representing a score > 2 standard deviations above the mean score of the control group in study 2) will be suffering from a mildly disordered eating pattern. Our survey of students at Edinburgh University (in press) supports this.

In the Edinburgh University study the BITE was administered to a cohort of undergraduates on three occasions: at the beginning of the first year, 20 months later at the end of the second year, and 32 months later at the end of the third year. An attempt was made to interview all those who achieved high scores according to the scoring criteria of the BITE (a symptom score > 20 and/or a severity score > 5). In addition, those who scored a symptom score in the medium range (14–19) were interviewed, as were a randomly-selected sample of those with low scores.

The indices of agreement between questionnaire scores and semi-structured interview for each survey and for the combined figures are given below. For these purposes, a 'case' means a DSM-III case and probably a DSM-III-R case as well.

In the first survey, 1333 students were surveyed

(624 males and 709 females). One male high scorer and 25 female high scorers were identified. This gave a total prevalence of male plus female of 1.9%. Nineteen (73%) of these were interviewed. Of the 19 high scorers, 17 were cases at interview and 2 were not. Of 38 medium and low scorers none were cases. These figures give the following indices of agreement: sensitivity = 1; specificity = 0.95; false negative rate = 0; false positive rate = 0.05; positive predictive value = 0.89; and negative predictive value = 1.

In the second survey, twenty months later, 441 females were surveyed; 25 scored above threshold and 21 (84%) were interviewed. This gave a prevalence in the female population of 5.7%. Of the 21 who scored above threshold, 20 were cases at interview. Of 32 medium and low scorers, none were cases at interview. These figures give the following indices of agreement: sensitivity = 1; specificity = 0.97; false negative rate = 0; false positive rate = 0.03; positive predictive value = 0.95; and negative predictive value = 1.

In the third survey, one year later, 692 females were surveyed; 30 were high scorers, and 17 of these (57%) were interviewed. The prevalence rate was 4.3%. Of the 17 who scored above threshold, all but one were cases. Of 37 subjects who were below the threshold, none were cases. This gives the following indices of agreement: sensitivity = 1; specificity = 0.97; false negative rate = 0; false positive rate = 0.03; positive predictive value = 0.94; and negative predictive value = 1.0.

The combined results of all three surveys show that of the 57 subjects interviewed who scored above threshold, 53 were cases and 4 were not. Of the 107 subjects interviewed who scored below threshold, all 107 were non-cases. This gives the following indices of agreement: sensitivity = 1; specificity = 0.96; false negative value = 0; false positive value = 0.04; positive predictive value = 0.93; and negative predictive value = 1.00. Although the prevalence value was consistent at 4–5% over the three surveys, subjects moved in and out of caseness. We therefore feel justified in combining the results of the three surveys.

It can be seen that the BITE has high indices of agreement. Furthermore, the use of a population with a low incidence rate (4% approximately) as a basis for the calculation of the indices of agreement adds weight to our previous claim that the BITE is "a tested and valid questionnaire".

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## Standardised Assessment of Personality Disorder in Mental Handicap

SIR: We previously reported on the reliability of Mann's standardised assessment of personality disorder in mental handicap (Mann *et al*, 1981; Ballinger & Reid, 1987), and we subsequently described a survey of 100 patients in a mental handicap hospital, using this scale (Reid & Ballinger, 1987). We were interested to see if the presence of personality disorder had a predictive value, and we reviewed the placement of the patients one year later. In the year after assessment, 25 of the 100 patients had been discharged, mainly to hostels. Of the 44 patients with no personality problems, 11 (25%) had been discharged; of the 34 with mild traits only (Grade I), 13 (38%) had been discharged; and of the 22 patients with definite personality disorder (Grade 2), only 1 (4.6%) had left hospital. Thus, patients with personality disorder were less likely to be discharged ( $\chi^2=8.08$ , d.f.=2,  $P<0.05$ ), suggesting that personality disorder detected by this method of assessment was of value in predicting likely discharge.

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## Behaviourally Disturbed HIV Patients

SIR: Much has been written about the deleterious effects on patients of the rundown and closure of our large psychiatric hospitals. It is ironic that this process is accelerating at a time when we are facing a new and worrying group of disorders consequent on the Human Immunodeficiency Virus (HIV). The nosology of HIV-related psychiatric disorder is still

poorly understood, and in planning services for such patients we are still highly dependent on educated guesses as to the scale and nature of the problem. Perhaps the main cause for concern is that group of patients who show disturbed behaviour requiring in-patient management.

A number of patterns of psychopathology may be discerned which result in disturbed behaviour: (a) disinhibition in early HIV encephalopathy leading to amplification of premorbid sociopathic traits; (b) more profound dementia resulting in the release of primitive behaviours as seen in other types of dementia; (c) functional psychosis in which the delusions and hallucinations produce fear and aggression; and (d) anger and resentment in patients who perceive themselves as having nothing to lose. This, in particular, may produce an urge to transmit the virus to others. In all of these cases there is a definite and significant risk of infection to those in contact with them.

Such patients will clearly require management in conditions of greater security than is available on most acute admission wards, and this will almost certainly mean detention under the Mental Health Act.

It would, in my opinion, be improper to expose other, HIV-free, detained patients to the risk of infection with this lethal agent, and hence we must be thinking in terms of specialised units. In the 'old days' it would have been a relatively simple matter to refurbish a ward in a psychiatric hospital to cater for the security needs, and with the large pool of nursing staff available, great flexibility and rapid response to ward requirements would be possible. In the new district general hospital units, the problems are much greater. If specialised units are to be available for disturbed HIV carriers, new buildings and staff will be required which means new money, and in considerable quantities. We simply do not know enough about the scale of the problem and its likely development to estimate the number of beds and staffing levels required and, to a considerable extent, one gets the impression that this problem is being tacitly ignored by planners.

In Plymouth, we are attempting to address the problem of HIV-positive behaviourally disturbed patients. We know of three definite cases of HIV encephalopathy, and the 'guesstimate' is that this will rise to 40 or more in a couple of years. We have no idea what proportion of these will require secure provision (one of the three known to us might well have benefited from this had it been available) and for how long they will need it. I would be most interested and grateful to hear from anyone who is involved in planning services for HIV patients in their district or