diagnosing mania. We also looked at the old case notes to see if there had been any evidence of mania or periodic behaviour disturbance. We only found one case, a male aged 40, who displays cyclical mood change. He becomes boisterous, argumentative, and slightly euphoric every 15 days or so. This lasts for a couple of days to one week, and then he is more manageable. He has not needed any neuroleptic medication to control his symptoms. The rest of the cases did not show any evidence of hypomania or mania. Our study seems to confirm the Sovner *et al* hypothesis that Down's syndrome precludes the expression of mania.

In a study of six cases of Down's syndrome, brains were studied at autopsy (Mann *et al*, 1985). Nerve cell loss and reduction in nucleolar volume were found in the noradrenergic system of the locus caeruleus and dorsal motor vagus, the cholinergic system of the nucleus basilis and the serotonin system of raphe nuclei, whereas only slight change occurred in the dopaminergic system of the substantia nigra. Yates *et al* (1983) studied the brain of a 27 year old patient with Down's syndrome (in whom plaques and tangles were absent) and showed choline acetyl-transferase and acetylcholine esterase activities to be normal, dopamine content to be normal, but noradrenaline content to be reduced. Although the biochemical studies on mania are conflicting, if mania is due to abnormal noradrenergic metabolism, then the evidence of damaged noradrenergic system in Down's syndrome can explain the lack of manic cases.

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References

MANN, D. M. A., YATES, P. O., MARCYNIUK, B. & RAVINDRA, C. R. (1985) Pathological evidence for neurotransmitter deficits in Down's Syndrome of middle age. *Journal of Mental Deficiency Research*, **29**, 125–135.

YATES, C. M., SIMPSON, J., GORDON, A., MALONEY, A. F. J., ALLISON, Y., RITCHIE, I. M. & URQUHART, A. (1983) Catecholamine and cholininergic enzymes in presenile and senile Alzheimer type dementia and Down's Syndrome. *Brain Research*, **280**, 119.

Thirty Month Follow-Up of Cognitive-Behavioural Group Therapy for Bulimia

SIR: Both controlled and uncontrolled studies suggest that cognitive-behavioural treatment, administered either individually, or in group format, is useful in the treatment of bulimia (Fairburn, 1981; Lacey, 1983; Kirkley *et al*, 1985). We report a thirty month follow up of 10 bulimic women who received group cognitive-behavioural therapy for 16 weeks (Schneider & Agras, 1985). These women (10 of the original 13 participants) had induced vomiting about 16 times each week before treatment, a rate that was reduced to about once a week post-treatment, with six of the ten women being abstinent. These women were interviewed by one of us and various standardised psychological tests were administered.

We found that the mean rate of self-induced vomiting had increased to 4.1 episodes per week at thirty months post-treatment. The scores on the Beck Depression Inventory (BDI) (10.1 post-treatment and 10.2 at 30 month follow-up) as well as clinical observation, suggest that the improvement in depressive symptoms was well maintained. Those who had stopped vomiting had a mean BDI of 5.2, while those who continued to vomit had a BDI of 15.2. Pre-treatment BDI scores for these two groups were similar: 29 for those who stopped vomiting, and 25.2 for those who continued. Attitudes toward eating improved from post-treatment to 30 month follow-up (Eating Attitudes Test (EAT) mean scores 25.6 versus 16.3). This finding is confirmed by a slight rise in the mean ideal weight reported by these patients from before therapy to 30 month follow-up. Those who stopped vomiting had a mean EAT of 11.75 and showed a mean rise in ideal weight of 4.8 lbs, while those who continued to vomit had a mean EAT of 20.75 and showed a decrease in ideal weight of 2.6 lbs.

These results suggest that there is reasonable long term maintenance of improvement for bulimic women treated with group cognitive-behavioural therapy. An examination of the post-treatment and six month follow-up data suggest that the major tendency for relapse occurs during the first six months following treatment, and that thereafter there is reasonable maintenance. There are, however, differences between those who continued to induce vomiting and those who stopped. In particular, those who stopped vomiting report less depression, have a lower EAT score, and report an increase in ideal weight. On the other hand, neither the BDI or the EAT scores were different for these two groups pre-treatment.

These results are in accord with those of Lacey (1983), who followed his patients for two years post-treatment and reported stability of outcome over that time. These long-term results must be confirmed with a controlled outcome study; nonetheless they suggest that cognitive-behavioural treatment produces lasting benefits for bulimic women. From

a clinical viewpoint, it appears that relapse prevention strategies need to be pursued actively for the first few months following the completion of treatment.

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References

FAIRBURN, C. (1981) A cognitive behavioural approach to the treatment of bulimia. *Psychological Medicine*, **11**, 707–711.

KIRKLEY, B. G., SCHNEIDER, J. A., AGRAS, W. S. & BACHMAN, J. A. (1985) Comparison of two group treatments for bulimia. *Journal of Consulting and Clinical Psychology*, **53**, 43–48.

LACEY, J. H. (1983) Bulimia nervosa, binge eating, and psychogenic vomiting. A controlled treatment study and long term outcome. *British Journal of Psychiatry*, **286**, 1609–1612.

SCHNEIDER, J. A. & AGRAS, W. S. (1985) A cognitive behavioural group treatment of bulimia. *British Journal of Psychiatry*, **146**, 66–69.

Blood Alcohol Survey in Patients with Self-Poisoning

SIR: One hundred and fifty-eight consecutive admissions for self-poisoning were studied for alcohol use in an Accident and Emergency Department. Forty-one per cent of the case population had blood alcohol present and 29 per cent had levels exceeding 17.4 mmol/l (80 mgm/100 ml) These findings are similar to those from a study by Holt *et al* (1980) of casualty attenders at a teaching district general hospital. Our results also showed that blood alcohol levels were higher in older patients (40+) ($r=0.25$, $P<0.01$) for both sexes. The association of sex with a weekday/weekend variable was significant ($\chi^2=5.72$, $df=1$, $P<0.05$): higher blood alcohol levels were associated with female self-poisoners on weekdays and with male self-poisoners at weekends. Blood alcohol levels of women arriving during "risk" times (2200–0659 hours) were significantly higher than those of women arriving at the other times ($t=3.45$, $df=92$, $P<0.001$). These variations between the sexes deserve further study.

The intoxicated patient presents a diagnostic challenge to the casualty officer since the contribution of alcohol to the clinical state may make the assessment critical, especially in self-poisoning cases. This also becomes important in the early evaluation and management of psychological distress. Although the association of alcohol intoxication and suicidal risk has been well documented (e.g., Barraclough *et al*, 1974), the extent of this association becomes ambiguous if information on the level of intoxication is obtained through self-report.

Our results alert us to the need for providing better psychiatric back-up services in the assessment and management of these patients. We may have to place greater emphasis on the subject of alcohol abuse and comprehensive assessment of self-poisoning cases in the training of junior physicians. Brief alcoholism questionnaires (Wanberg *et al*, 1979) may be used in selected cases where there is a suspicion of dependency. Immediate counselling or therapy, especially for self-poisoners with higher levels of neurotic symptomatology, should be arranged to tackle the alcohol abuse problem (Newsom-Smith & Hirsch, 1979). There is a strong case for integrating alcoholism treatment services with accident and emergency department services

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References

BARRACLOUGH, B., BUNCH, J., NELSON, B. & SAINSBURY, P. (1974) A hundred cases of attempted suicide. *British Journal of Psychiatry*, **25**, 355–373.

HOLT, S., STEWART, I. C., DIXON, J. M. J., ELTON, R. A., TAYLOR, T. V. & LITTLE, K. (1980) Alcohol and the emergency service patient. *British Medical Journal*, **281**, 638–640.

NEWSON-SMITH, J. G. B. & HIRSCH, S. R. (1979) Psychiatric symptoms in self-poisoning patients. *Psychological Medicine*, **9**, 493–500.

WANBERG, K. W., HORN, J. L. & FOSTER, F. M. Differential assessment model for alcoholism: the scales of the Alcohol Use Inventory. *Journal of Studies on Alcohol*, **38**, 512–543.

Schizophrenia and the Media

SIR: I write, as a retired psychiatrist, to suggest that psychiatrists could use and add to the present publicity on schizophrenia.

"The most disabling illness known to mankind" is how *The Times* referred to schizophrenia after months of informed articles and correspondence. "The most heart-rending assignment I have ever had. I could not believe that people in Britain lived like that today" said the producer of the recent Central Television programmes. "Top level neglect is a thriving concern" and "community care may be on the tip of every fashionable tongue, but prison care is a likelier fate" according to a *BMJ* review. Daily papers and popular journals carried tragic case-histories. Dr Thomas Bewley, our President, had a supporting letter in *The Times*, and he and Professor Wing and other distinguished psychiatrists were at