

Centres (RPTCs) are expensive luxuries. The answer must surely be that they are. There is no convincing evidence that self-poisoned patients are more effectively treated in a special unit than in a general medical ward and we have shown that for psychiatrists to see every case is as unnecessary as it is impracticable.

We did not find in our trial at Addenbrooke's Hospital, as Kennedy and Oswald state, that house physicians could match psychiatrists in their assessment of self-poisoned patients. What we did find was that medical teams (consisting of house physicians, medical registrars and nurses under their respective consultant physicians) could match consultant psychiatrists and senior registrars in most instances, though they still needed a psychiatric opinion for about one in five of their self-poisoned patients. Kennedy and Oswald equate our study with the one at Charing Cross Hospital (*Journal*, April 1979, 134, 335-42). However, Newson-Smith and Hirsch not only used a rather small sample but also failed to show that social workers were as effective as psychiatrists. In their pilot study only the trainee psychiatrists offered patients help and made decisions about further care and it would require a larger randomized trial (similar to ours) to find how the social workers would have performed had they been given this responsibility.

Kennedy and Oswald criticize the use of medical teams or of social workers to assess self-poisoned patients and produce some figures to show that they offer further treatment to more patients than the RPTC does in Edinburgh. Their figures are misleading as far as the results of our study are concerned: only 40 per cent of our patients were recommended for psychiatric outpatient follow-up. In the study at Charing Cross Hospital social workers understandably diagnosed twice as many patients as being mentally ill as did the trainee psychiatrists and were also more cautious about discharging patients from hospital. But at Addenbrooke's the medical teams made the same diagnoses as the psychiatrists and identified a similar number of patients for psychiatric treatment and social work support.

Kennedy and Oswald believe that the difference between the hospitals is due to the trainee psychiatrists in Edinburgh being 'much more selective and sparing in the use of psychiatric after-care' than the consultants and senior registrars in Cambridge. There may be another explanation. At Edinburgh, all patients referred to the RPTC are admitted, whereas in Cambridge—as in the rest of the country—many patients are screened out in the Accident Department. With these patients (who are offered less psychiatric treatment) excluded, it is hardly

surprising that our figures should differ from theirs. If due allowance is made for this difference in the patient populations, the apparent disparity between the two hospitals largely disappears. In one respect, Edinburgh does differ from Cambridge, namely in the utilization of expensive psychiatric resources. At the RPTC in Edinburgh psychiatrists see all self-poisoned patients for the purpose of selecting less than half of them for treatment.

Compared to the Edinburgh model the liaison scheme at Addenbrooke's is not only cheaper but also teaches junior doctors and nurses how to evaluate suicidal risk and patients' psychosocial difficulties. It has helped to change adverse attitudes in the hospital. In addition, it may contribute towards the prevention of self-poisoning by training future general practitioners, as well as psychiatrists, to assess such patients.

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SIMPSON'S PARADOX

DEAR SIR,

The principle behind Simpson's paradox as described by D. J. Hand (*Journal*, July 1979, 135, 90-91) is of great significance and bears reiterating in terms not obfuscated by the use of unnecessary symbols. Simply, the paradox arises from the intuitive temptation to average rates.

When considering rates of two or more subgroups, the overall rate is obtained by adding together the rate, multiplied by the proportion of the total, for each subgroup. In the type of example quoted the paradox is most likely to arise when the rates in each subgroup are very different, and the proportion in each subgroup changes markedly over time, thereby weighting the overall rate towards that of a different subgroup.

A parallel and more easily perceived example, so familiar that it ceases even to be a paradox, would be the purchase of wine. A year ago two cases of claret at £50 a case and one case of Beaujolais Nouveau at £20 a case cost on average £40 a case. This year, with inflation at 20 per cent, restraint necessitates the purchase of one case of claret at £60 and two of Beaujolais Nouveau at £24; an average of £36 per case. Thus although the price (or rate) for each has gone up, the changes in proportions result in the overall price (or rate) going down.

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