

## Correspondence

**Contents:** 'Number needed to treat'/SSRIs versus tricyclics/Pathogenesis of white matter lesions in Alzheimer's disease and depression/Drug induced psychosis/Ultra-rapid mood cycling/No right to a Mental Health Review Tribunal.

### 'Number needed to treat'

**SIR:** We agree with the conclusions of Hotopf *et al* (1996) in their review of the cost effectiveness of SSRIs – that there is, as yet, insufficient evidence to justify their first line prescription on either clinical or economic grounds. Systematic review and meta-analysis of total dropout rates in the limited and small scale studies comparing SSRIs with tricyclic antidepressants suggests either no difference or one that is small, statistically significant, but clinically unimportant. If there is a true difference, the largest reported absolute difference in total dropouts of 2.6% (Anderson & Tomerson, 1995), presented with its risk ratio of 0.90, is difficult to translate into clinical practice. In common with many research findings, the reader is left wondering about the clinical meaning of a statistically significant result.

One increasingly popular way of translating research evidence into terms that can be readily appreciated by clinicians is through the presentation of the 'Number Needed to Treat'. This value is readily calculated as the reciprocal of the absolute difference in risk of an adverse outcome (such as discontinuation of treatment) between two interventions (Cook & Sackett, 1995). In this case an absolute difference in risk of discontinuation of 2.6% would translate into a NNT of 38 (1/0.026). The meaning to the individual clinician of this finding and its statistic is as follows: 'I would need to treat at least 38 patients with more expensive SSRIs instead of tricyclics in order to prevent one patient discontinuing the anti-depressant medication which I prescribe'.

This statistic presents an intuitive and relevant addition to the routinely presented measures of effect, such as absolute risk reduction, and odds and rate ratios. It is increasingly being used to present research evidence in clinically relevant terms,

particularly within systematic reviews (Sackett, 1996). We would recommend that, where applicable, authors calculate and include this statistic in their presentation of research evidence within the Journal.

ANDERSON, I. M. & TOMERSON, B. M. (1995) Treatment discontinuation with selective serotonin reuptake inhibitors compared with tricyclic antidepressants: a meta-analysis. *British Medical Journal*, 301, 1433–1438.

COOK, R. J. & SACKETT, D. L. (1995) The number needed to treat: a clinically useful measure of treatment effect. *British Medical Journal*, 310, 452–454.

HOTOPF, S., LEWIS, G. & NORMAN, C. (1996) Are SSRIs a cost effective alternative to tricyclics? *British Journal of Psychiatry*, 168, 404–409.

SACKETT, D. L. (1996) EBM Notebook – On some clinically useful measures of the effects of treatment. *Evidence-Based Medicine*, 2, 37–38.

S. GILBODY

St James University Hospital  
Leeds LS9 7TF

D. OWENS

University of Leeds LS2 9LT

### SSRIs versus tricyclics

**SIR:** We are not convinced that the economic considerations for using tricyclic antidepressants (TCAs) as opposed to SSRIs proposed by Hotopf *et al* (1996) would satisfy either the coroner or the relatives of a patient who dies following a TCA overdose. In addition, the authors have not taken into consideration the cost of intensive care treatment following TCA overdoses. They do point out that the SSRIs have a better safety record. However, there has been insufficient evidence to show that the SSRIs are either as effective or have a lower overall dropout rate than the TCAs. Balancing these complex issues is difficult. We believe that an emphatic statement recommending the TCAs above the SSRIs as the first line antidepressant drug is not justified at this stage. It may be prudent to admit that we do not yet have an ideal antidepressant and that suicide prevention is still an enigma.