

utilisation is not accompanied by a substantial decline in the suicide rate, it does not mean that better and more widespread treatment of depression is not helpful for preventing many suicides. While the overall suicide rate of Australia and Northern Ireland (two countries with traditionally low suicide rates) have not substantially decreased during the past 10 years, a significant association between increased antidepressant use and decreased suicide rates in different age cohorts has been reported (Hall *et al*, 2003; Kelly *et al*, 2003).

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Association between antidepressant prescribing and suicide in Australia, 1991–2000: trend analysis. *BMJ*, **326**, 1008–1012.

**Helgason, T., Tómasson, H. & Zoëga, T. (2004)**

Antidepressants and public health in Iceland: time series analysis of national data. *British Journal of Psychiatry*, **184**, 157–162.

**Isacsson, G. (2000)** Suicide prevention – a medical breakthrough? *Acta Psychiatrica Scandinavica*, **102**,

113–117.

**Kelly, C. B., Ansari, T., Rafferty, T., et al (2003)**

Antidepressant prescribing and suicide rate in Northern Ireland. *European Psychiatry*, **18**, 325–328.

**Levi, F., La Vecchia, C., Lucchini, F., et al (2003)**

Trends in mortality from suicide, 1965–99. *Acta Psychiatrica Scandinavica*, **108**, 341–349.

**Rihmer, Z. (2004)** Decreasing national suicide rates –

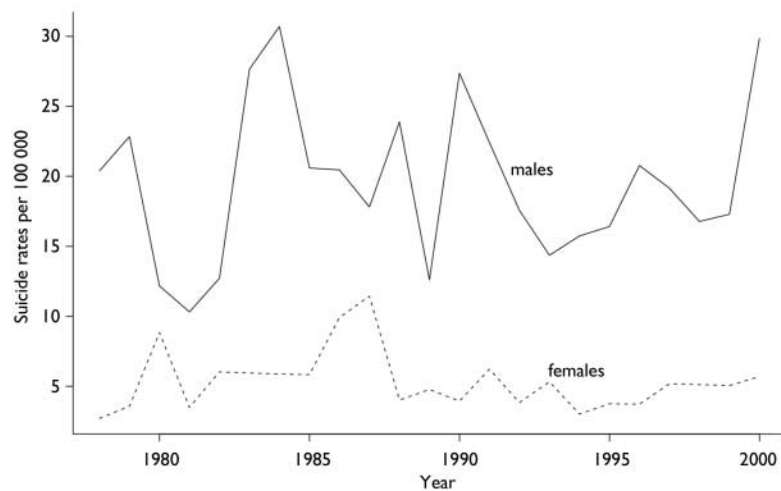
fact or fiction? *World Journal of Biological Psychiatry*, **5**, 55–56.

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**Authors' reply:** We have data on the suicide rates by gender from 1978 to 2000. The average rate for that period is about 19 per 100 000 for men and about 5 for women. The yearly data series for women is a sequence of numbers varying from 3 to 14. Because of the small number of female suicides they can vary considerably. Even 5-year averages would have large standard deviations. If an over-dispersion coefficient of 2 is assumed, the size of the standard deviation in 5-year averages should be around 1.4 for women and 2.6 for men. Therefore, observed 5-year averages of 4–7 for women and 17–22 for



**Fig. 1** Observed suicide rates in Iceland per 100 000 by gender.

men could be expected. Average rates may vary according to choice of 5-year periods (Fig. 1). The rates during 1995–1999 were 18.1 for men and 4.6 for women, but 21 for men and 5 for women during 1996–2000. The rates quoted in Isacsson's letter for 1995–1999 are actually for 1995–1996 (Levi *et al*, 2003) and too low. Taking 5-year averages is a waste of information because it ignores the time series structure in the data. With such limited data as the number of suicides in Iceland it is vital to use statistical techniques that use data as efficiently as possible. In this case the dynamics of suicide rates seemed to be similar for both genders, so data on them was pooled. In our opinion time series methods should be used for these data as they take advantage of the time series structure of the data. Furthermore, a time series approach leads to improved *P* values and decreases the possibility of spurious regression (Granger & Newbold, 1974).

In our paper (Helgason *et al*, 2004a) we mentioned that suicide rates had not decreased in Norway since 1995 in spite of increasing antidepressant sales.

In 1989 the amount of antidepressants prescribed was 13.9 defined daily doses per 1000 per day for men and 27.6 for women aged  $\geq 15$  years (Helgason *et al*, 1997). The amount prescribed in 2001 had increased to 66.8 and 119.1 defined daily doses per 1000 per day for men and women, respectively (Helgason *et al*, 2004b), i.e. a slightly greater increase for men without affecting suicide rates for either gender.

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## Transcranial direct current stimulation

Kurupparachchi & Wijeratne (2004) support the use of innovative and cheaper treatments for depression in developing countries. In Brazil, for instance, antidepressants are scarcely available in the public sector and the delivery of these drugs is irregular, hence hindering long-term treatment. A recent study showed that only 17% of primary care patients with current depressive disorder in Brazil received any treatment for their depression. In comparison, 49% and 34% of patients with similar conditions in Australia and the USA, respectively, received treatment for

depression (Simon *et al*, 2004). The main reason for this disparity is the lack of resources in poor countries. We therefore propose that a type of brain stimulation – transcranial direct current stimulation (tDCS) – may be a satisfactory alternative to increase access to adequate antidepressant treatment.

Electroconvulsive therapy (ECT) and transcranial magnetic stimulation (TMS) are examples of brain stimulation therapy that are effective in treating depression. However, these treatments are expensive and might be associated with adverse effects (Hasey, 2001). In recent years, a simple technique of brain stimulation that seemed long forgotten has received renewed attention – tDCS. This treatment is inexpensive, easy to administer, non-invasive and painless (Nitsche *et al*, 2003). There are few past reports of tDCS in treating depression (Lolas, 1977). However, at the time of those trials much less was known about the methodological aspects and physiological effects of tDCS and the results were quite variable.

Preliminary, unpublished data from a randomised, sham-stimulation controlled and double-blind trial evaluating the effects of anodal stimulation of the left dorsolateral prefrontal cortex in people with depression suggest that tDCS is an effective treatment for major depression (further details available from the authors on request).

Thus, we have come to believe that tDCS might be a reasonable alternative treatment for depression in low- and middle-income countries. The device to deliver tDCS is simple, can cost less than US\$1000 and can be manufactured locally. The equipment is fully reusable and utilises one standard battery that can last several weeks. Furthermore, this treatment is easy to administer, and can be applied by technicians following appropriate instruction and training. Although further studies evaluating this method are warranted, tDCS might help to improve mental health in areas with poor resources.

**Hasey, G. (2001)** Transcranial magnetic stimulation in the treatment of mood disorder: a review and comparison with electroconvulsive therapy. *Canadian Journal of Psychiatry*, **46**, 720–727.

**Kurupparachchi, K. A. L. A. & Wijeratne, L. T. (2004)** Depression intervention in resource-poor regions (letter). *British Journal of Psychiatry*, **185**, 438–439.

**Lolas, F. (1977)** Brain polarization: behavioral and therapeutic effects. *Biological Psychiatry*, **12**, 37–47.

**Nitsche, M. A., Liebetanz, D., Antal, A., et al (2003)** Modulation of cortical excitability by weak direct current stimulation – technical, safety and functional aspects. *Supplements to Clinical Neurophysiology*, **56**, 255–276.

**Simon, G. E., Fleck, M., Lucas, R., et al (2004)** Prevalence and predictors of depression treatment in an international primary care study. *American Journal of Psychiatry*, **161**, 1626–1634.

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### NICE recommendations for valproate treatment are unhelpful

The National Institute for Clinical Excellence (NICE) guidelines for treatment of mania recommend that consideration be given to olanzapine and semisodium valproate as first-line treatments (NICE, 2003). They state that valproate can rarely cause severe liver damage and assert that liver function should be assessed before and during therapy, saying ‘tests that reflect protein synthesis, particularly prothrombin time are most relevant’. They continue: ‘Blood tests (blood cell count, including platelet count, bleeding time and coagulation tests) are therefore recommended’. Most readers will be familiar with the concept of the bleeding time only through the immortal lines delivered by James Robertson Justice in the film *Doctor in the House* (1954). It is a rarely indicated test of platelet function which requires making a 3 cm cut on a patient’s forearm and timing how long it takes for the bleeding to stop. Clearly such a test would not be acceptable to a substantial proportion of patients with mania.

The recommendation seems a *non sequitur*. Saying that valproate can cause liver damage and that ‘therefore’ these investigations should be performed does not make sense because, with the exception of the coagulation tests, they are not indicators of hepatic function. In fact, the investigations are not recommended by the *British National Formulary* (BNF) but in the

summary product characteristics for semisodium valproate (available at <http://emc.medicines.org.uk>). It is here that it is stated that valproate can cause the frequent occurrence of thrombocytopenia, and it is here that the investigations listed are recommended.

It would strain credulity to believe that British doctors routinely measure bleeding time prior to initiating valproate therapy. Yet if a patient were to suffer ill effects, then having ignored recommendations found both in the summary product characteristics and in NICE guidelines could make an action for negligence difficult to defend.

Even setting aside the bleeding time, the advice to perform more straightforward investigations remains problematic. Faced with a manic patient, one is unlikely to feel enthusiastic about holding off treatment until a prothrombin time has been obtained. Instead, one will be tempted to choose an alternative treatment which can be started immediately, such as haloperidol. The BNF does not recommend that these blood tests be performed before starting valproate and there is no evidence base to show that carrying them out pre-treatment will produce a better outcome. The advice seems to have been included in the NICE guidelines in a thoughtless way, without regard to the possibility that unnecessary investigations will make a particular treatment option less acceptable to both doctors and patients. If recommendations about treatment are to be evidence-based, then so must be the recommendations about accompanying investigations.

**National Institute for Clinical Excellence (2003)** *Olanzapine and Valproate Semisodium in the Treatment of Acute Mania Associated with Bipolar I Disorder*. Technology Appraisal 66. London: NICE.

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### Combating editorial racism

Peter Tyrer (2005) has set out a number of ways by which the *British Journal of Psychiatry* will attempt to minimise editorial racism and he acknowledges that this is only the beginning of a long journey. Nevertheless, he ought to be congratulated for his vision. His proposal to increase the number of corresponding editors from low- and middle-income countries is commendable, although I would like to see an