

recommendation on just one unpublished modern study, these well-respected scientists appear to have gone beyond the available evidence. Transcranial direct current stimulation is not a new intervention for depression, with a number of studies published in the 1960s and '70s (Bindman *et al*, 1964; Lippold & Redfearn, 1964; Lolas, 1977). However, the results were not uniformly positive and certainly not persuasive enough for this intervention to have been adopted by clinicians. Although I acknowledge that our knowledge of the brain has improved, Fregni *et al* do not present evidence to show how modern tDCS is superior to that used four decades ago. We need to know a lot more about tDCS before it can be accepted as an effective treatment, and must await the results of many ongoing trials. In the meantime, those with depression in the developing world should be dissuaded from unplugging their car batteries and clamping the leads on to their foreheads.

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**Fregni, F., Boggio, P. S., Nitsche, M., et al (2005)** Transcranial direct current stimulation. *British Journal of Psychiatry*, **186**, 446–447.

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**Authors' reply:** We thank Professor Sachdev for his letter and we certainly agree that further studies on the antidepressant effects of tDCS are needed and that the standards of application of a given therapy in any part of the world should be matched. It is certainly not acceptable that inferior treatments are used in developing countries. However, although antidepressants are often available in developing countries,

problems with distribution and management of these medications often preclude regular and effective clinical treatment. For instance, in São Paulo, a relatively rich city in Brazil, shortage of antidepressants is common (Brazilian Ministry of Health website, <http://portal.saude.gov.br/saude/>). Those with depression are regularly faced with the choice between stopping antidepressant treatment or paying for it with their own money. Poor patients often have to interrupt their treatment, risking worsening or relapse of their depression. The situation is even worse in poorer countries. Furthermore, it is well established that higher prevalence rates of depression are found among poor, illiterate and urban migrants (Almeida-Filho *et al*, 2004). Therefore, those most in need are less able to afford regular antidepressant treatment.

We agree that medications should be the first line of treatment for those with newly diagnosed depression. However, we cannot ignore the fact that many in poor areas are not being treated for depression at all. Therefore, our intention is to simulate the search for new, inexpensive approaches for the treatment of depression. Our suggestion of tDCS is based on several well-conducted studies showing its modulatory effects on brain activity (Nitsche *et al*, 2003), past positive trials of this technique in depression (Lolas, 1977) and our preliminary data showing a significant antidepressant effect (Fregni *et al*, 2005). The main differences between the current tDCS protocols and those used in the 1960s and '70s derive from recent knowledge of stimulation to optimise cortical modulation and therefore clinical effects (Nitsche *et al*, 2003). Furthermore, substantial evidence from studies of transcranial magnetic stimulation and electroconvulsive therapy suggests that electrical stimulation is a powerful treatment for depression (George *et al*, 2002).

Our message is simple: a large number of those with depression are suffering because they cannot afford medicine, therefore new solutions should be offered. Transcranial direct current stimulation might represent such a solution and should be investigated further.

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**Fregni, F., Boggio, P., Nitsche, M., et al (2005)** Treatment of major depression with transcranial direct current stimulation. *Bipolar Disorders*, in press

**George, M. S., Nahas, Z., Li, X., et al (2002)** Novel treatments of mood disorders based on brain circuitry (ECT, MST, TMS, VNS, DBS). *Seminars in Clinical Neuropsychiatry*, **7**, 293–304.

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### Drug combinations for rapid tranquillisation

It is important to develop cost-effective and efficient methods of treatment in emergency psychiatry, especially where resources are poor. Alexander *et al* (2004) in their paper comparing two methods of rapid tranquillisation concluded that the injectable haloperidol–promethazine mix is as effective as lorazepam and suggested that in India the former is more cost-effective. We acknowledge the findings of their study but would like to make some observations regarding cost-effectiveness and methodology.

The preferred combination for rapid tranquillisation in India (the National Institute of Mental Health and Neurosciences, Bangalore, and the Central Institute of Psychiatry, Ranchi) (combined monthly out-patient attendance of >9000) is haloperidol with lorazepam rather than haloperidol with promethazine. This is guided by the literature as well as existing practice (McAllister-Williams & Nicol Ferrier, 2002; Hughes & Kleespies, 2003). This combination is about 25% cheaper than the haloperidol–promethazine mix (CIMS, 2004). Since promethazine has both alpha-1 and dopaminergic antagonism its combination with haloperidol is more likely to produce hypotension and neuroleptic malignant syndrome in agitated patients, who are often dehydrated and have electrolyte imbalance. On the other hand lorazepam decreases the required dose of haloperidol. Hence we feel that the