from Cartesian dualism fail to advance clinical neuroscience or the practice of psychiatry. Dr Persaud will, of course, be aware of the compelling evidence for changes in brain function and structure in both depression and obsessive—compulsive disorder, the main indications for NMD (Drevets, 1998; Szeszko *et al*, 1999).

The argument that there is a lack of randomised controlled trial (RCT) data to support NMD applies equally to a range of 'cutting edge' medical and surgical procedures. The proportions of medical and surgical treatments based on RCT data are 53% and 24%, respectively (Ellis et al, 1995; Howes et al, 1997). In such situations, prospective clinical audit becomes the tool of choice. If Dr Persaud demands that NMD cease because of the absence of robust RCT support, then he must surely demand the same rigour from other interventions such as heart transplantation or dynamic psychotherapy.

With respect to the issue of consent, in Scotland NMD does not take place unless the patient provides informed consent and the Mental Welfare Commission for Scotland agrees both that it is an appropriate treatment and that consent is valid. Regrettably, Dr Persaud continues to trade on the outdated image of patients receiving NMD against their wishes. Indeed, he implies that chronic intractable mental illness robs patients of their capacity to provide informed consent. It is demeaning to assert that individuals are incapable of evaluating the risks and benefits of a treatment simply because they have a mental illness. Perhaps it is the failure to appreciate this perspective that leads to excessive concern for the 'stigmatised profession of psychiatry'? Believing ourselves to be persecuted perpetuates outdated views of psychiatry, and does nothing to reduce the stigma of mental illness.

Declaration of interest

K.M. has received payment for lectures on the management of depression from various pharmaceutical companies. K.M. and M.S.E. run the Dundee Neurosurgery for Mental Disorders Service.

Drevets, W. C. (1998) Functional neuroimaging studies of depression: the anatomy of melancholia. *Annual Review of Medicine*, **49**, 341–361.

Ellis, J., Mulligan, I., Rowe, J., et al (1995) Inpatient general medicine is evidence based. *Lancet*, **346**, 407–410.

Howes, N., Chagla, L., Thorpe, M., et al (1997) Surgical practice is evidence based. *British Journal of Surgery*, **84**, 1220–1223.

Persaud, R./Crossley, D. & Freeman, C. (2003) In debate: Should neurosurgery for mental disorder be allowed to die out? *British Journal of Psychiatry*, **183**, 195–196.

Szeszko, P. R., Robinson, D., Alvir, J. M., et al (1999) Orbital frontal and amygdala volume reductions in obsessive—compulsive disorder. Archives of General Psychiatry, **56**, 913–919.

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Author's reply: My necessarily abbreviated arguments against the continued practice of NMD are intended to be within the spirit of the debate section of the Journal. A debate necessarily requires two sides. Given that the title of the debate I was given included the term 'mental disorder' I am confused that an objection should be raised to my nod towards the well-recognised controversy over the modern phrenological localisation of psychiatric disorder. But I am perhaps mostly perplexed by the failure to see that the use of an irreversible surgical treatment directly applied to the brain necessarily demands much higher standards of certainty over its benefits than something like dynamic psychotherapy, particularly given the political context of a profession with obvious public image difficulties. Anyone aware of the widespread coverage that our debate received in the Scottish newspapers would be immediately impressed by this public relations context, which is precisely the area the coverage focused on.

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Stigma and somatisation

In their exhaustive review of the impact of globalisation and culture on depression, Bhugra & Mastrogianni (2004) highlight the role of somatisation in many parts of the world, where it often accounts for 'common presenting features of depression' (p. 16). Emphasising both the ubiquity and cultural aspects of somatisation, they cite an earlier characterisation of common mental disorders that refers to the 'black box of

somatisation' (Bhui, 1999). In doing so, however, they miss an important explanatory feature of this process with substantial practical and clinical significance – that is, the role of stigma. Despite increasing availability of effective treatments, many people with depression (perhaps even a majority) do not seek professional help because of the stigma associated with the illness. Efforts to clarify the impact of stigma are crucial for explaining cultural aspects of illness-related experience and meaning, and highly relevant for planning interventions that are culturally appropriate and locally effective.

As one effort towards elucidating the experience of depression, in a study in Bangalore, India, we examined the role of self-perceived stigma (Raguram et al, 1996). We found that greater severity of depression was associated with higher stigma scores, but more somatisation was associated with less stigma. Through qualitative analysis of patients' narratives, we also demonstrated that patients viewed depressive, but not somatic, symptoms as socially disadvantageous. Somatic symptoms were considered to be less stigmatising since they resembled illness experiences that most people could expect to have from time to time. Consequently, studying the work of culture clarifies the nature of somatisation. From a Western vantage point, somatisation may appear enigmatic, but attention to stigma helps to illuminate the internal structure of the black box.

Bhugra, D. & Mastrogianni, A. (2004) Globalisation and mental disorders. Overview with relation to depression. *British Journal of Psychiatry,* **184**, 10–20.

Bhui, K. (1999) Common mental disorders among people with origins in or immigrant from India and Pakistan. *International Review of Psychiatry*, 11, 136–144.

Raguram, R., Weiss, M.W. & Channabasavanna, S. M. (1996) Stigma, somatisation and depression — a report from South India. American Journal of Psychiatry, 153, 1043–1049.

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Author's reply: Drs Raguram and Weiss are right to point out the role stigma plays in help-seeking. We agree that many people with depression will not seek help from Western medical sources. The problem

is more complex than that. In search of making sense of symptoms by the health professionals, we believe that the first step is by understanding the symptoms and the distress experienced by the individuals themselves through their identification that something has gone wrong; then their search for a possible explanation for their distress will lead to identifying possible sources of help and then finding a way to seek relief. However, in this process of help-seeking there are numerous culturally determined barriers. Stigma will indeed be a potential barrier but it is also likely that other factors may help modify the idioms of distress. In an earlier study of middleaged Punjabi women, we found that they were able to identify symptoms of depression, and life events causing it, but they also felt that these symptoms were part of life's ups and downs and not a medical condition; hence, they preferred to seek solace in religious places (Bhugra et al, 1997). They identified both psychic and somatic symptoms but were also clear in their discussion that sources of help were not medical. Similar observations were made in Dubai (Sulaiman et al, 2001). Our conjecture is that globalisation will influence the way individuals see their distress because media influences may affect their cognitive schema. Cognitive schema determine the meanings we impart to ongoing experience and give an expectation of the future (Strauss & Quinn, 1997). We do not hold the view that somatisation is enigmatic. It is a perfectly understandable representation of the distress which is a reflection of the explanatory models held by the individual.

Bhugra, D., Baldwin, D. & Desai, M. (1997) Focus groups: implications for primary and cross-cultural psychiatry. *Primary Care Psychiatry,* **3**, 45–50.

Strauss, C. & Quinn, N. (1997) A Cognitive Theory of Cultural Meaning. Cambridge: Cambridge University Press.

Sulaiman, S., Bhugra, D. & De Silva, P. (2001) Perceptions of depression in a community sample in Dubai. *Transcultural Psychiatry*, **38**, 201–218.

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Disability and post-traumatic stress

Neal et al (2004) recently found no association between post-traumatic stress and judgement of disability. Therefore, they concluded that the clinical importance of

post-traumatic stress disorder (PTSD) and its symptoms may be questionable. However, in our opinion their conclusions need additional consideration.

First, their multivariate analysis of variance compared the degree of disability of persons with PTSD with that of people with other mental health problems. From their results they could only conclude that PTSD caused no additional disability compared with other mental health problems. Moreover, from a statistical point of view, the sample size is not sufficiently large, especially when one tries to find differences between groups given the significance level used (P=0.01). In addition, the authors do not give insight in the multicollinearity between the independent variables of the multiple regression analysis; the expected high intercorrelations may have influenced the results.

Second, is it not strange to question disability in people with PTSD, major depressive disorder or alcohol dependence, while disability in social or professional functioning or in other important areas is a requirement for all DSM-IV diagnoses? Also, the authors took subjective judgement of disability as their main outcome measure and not objective measures of disability, such as the number of days not at work.

Third, previous studies found contrasting results. Brown *et al* (1996) and Lydiard (1991) report that major depressive disorder comorbid with anxiety disorders (i.e. PTSD) is more severe than major depressive disorder alone in terms of depressive symptoms, course of illness and treatment response. Finally, even if PTSD does not cause additional disability above major depression, the diagnosis is still relevant for the correct choice of treatment.

Brown, C., Schulberg, M. J., Madonia, M. J., et al (1996) Treatment outcomes for primary care patients with major depression and lifetime anxiety disorders. *American Journal of Psychiatry*, **153**, 1293–1300.

Lydiard, B. (1991) Coexisting depression and anxiety: special diagnostic and treatment issues. *Journal of Clinical Psychiatry*, **52**, 48–52.

Neal, L. A., Green, G. & Turner, M. A. (2004) Post-traumatic stress and disability. *British Journal of Psychiatry*, **184**, 247–250.

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Author's reply: The multivariate analysis of variance demonstrated no significant difference between the group with DSM-IV PTSD and the group without DSM-IV PTSD in terms of the severity of disability. This finding is unrelated to the other mental health problems measured in the study, as shown by the analysis of covariance. The power of the study was 0.85 (assuming a detectable difference of 3 out of 30 on the Sheehan Disability Scale and α =0.01). This is acceptable for limiting the chances of type II error. Multicollinearity is only of importance when trying to draw inferences about the relative contribution of more than one predictor variable to the success of the model. In this study the Beck Depression Inventory (BDI) (or its variant the M-BDI) was the only variable retained in the regression models and so multicollinearity is not an issue. Disability is not an absolute requirement in DSM-IV. The utility of objective measures of disability v. subjective measures was discussed in the paper. However, the subjective experience of the patient is probably of most value in clinical terms. Other studies have found contrasting results, as discussed in the paper's introduction. However, most have methodological limitations. The treatment of PTSD, as opposed to depression, may be relevant to the DSM-IV diagnostic criteria but may not be relevant to the patient.

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In defence of complainants

It is interesting that the complaints involved within the study by Lester *et al* (2004) were not subject to independent legal scrutiny. The reader therefore has no idea of their merits.

Anyone who has experienced the difficulties of authorities and courts will realise that bureaucracy and confusion pervade each institution. Anyone who has attended one of our supreme courts will know that the service is slow, correspondence often goes missing, checks are required to ensure that the correct folders and paperwork are presented, and often uncomfortable questions are ignored. These are characteristics