aspire to an ideal of fully informed autonomy that is free from internal conflict and external pressure. Yet, in reality, most decisions at the end of life are messy and involve those who are physically and psychologically vulnerable. The option of assisted dying may in fact deny to some the gentle and easy death that would otherwise be theirs. What represents the greater injustice – not killing those who want it (and for whom alternatives are available), or killing those who do not really want it? Even in the Netherlands, which arguably has the most robust safeguards of any jurisdiction that allows assisted dying, the latest official survey concludes that the transparency envisaged by the Dutch law does not extend to all cases of euthanasia.[3] It is then down to the arithmetic of suffering. How many patients dying under similar legislation, before they would otherwise have wanted, would be acceptable in order to provide for one particular version of a gentle and easy death?

JEFFREY STEPHENSON
Consultant in Palliative Medicine, St Luke's Hospice, Plymouth

References

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2 General Medical Council. *Withholding and withdrawing life-prolonging treatments: good practice in decision-making*. London: GMC, 2002.
3 Van der Heide A, Onwuteaka-Philipsen BD, Rurup ML *et al.* End-of-life practices in the Netherlands under the Euthanasia Act. *N Engl J Med* 2007;356:1957–65.

In response

I enjoyed Dr Stephenson's account of my many misdemeanours, but attacks *ad hominem* are usually a sign that one's opponent has nothing to air but his own prejudices. Of course I do not believe that euthanasia is the only way to a comfortable death. Of course I do not 'espouse the slippery slope' when I imply that inoperable cancer and intolerable suffering will be seen to be too narrow an indication as euthanasia comes to be acceptable in the future (and I provide a list you can argue about). And to go on the offensive, Dr Stephenson says that 'most decisions at the end of life are messy', and in one of my previous articles I quoted a hospital nurse who said, 'You can't provide [the dying] with what they really want'. Perhaps Dr Stephenson and his colleagues should be doing something to clear up the mess – with the help naturally of patients who have made their own preparations for death. A final point that needs emphasising is that we are getting hot under the collar about a tiny number of people: only 171 requests were received in Orlando between 1998 and 2003 following legalisation of euthanasia.

But why are we arguing like this? I have said repeatedly that the views of both sides in emotive issues like euthanasia should be respected and accepted. If we do not, it is possible to envisage a much more dangerous slippery slope, from angry confrontation to public outcry, riots and even war.

ALEX PATON
Retired Consultant Physician, Oxfordshire

Never say die?

Editor – I must take issue with Alex Paton in regard to his use of language (*Clin Med* February 2008 pp 106–7). Despite its linguistic origins, euthanasia and 'a gentle and easy death' are not synonymous terms. Surely even the most vociferous opponent of euthanasia would not wish Dr Paton anything other than a peaceful end when his time comes. However, they would certainly question the suggestion that they should take steps to end his life before that time. I am also concerned at the use of statistics; Paton suggests that, although the great majority of those responding to the survey conducted by the Royal College of Physicians in 2006 were opposed to assisted dying, this is not a representative number – surely this must work both ways and so he can not infer that the silent majority would agree with his position. In attempting to counter any suggestion of 'slippery-slope' arguments, Paton refers to the figures for euthanasia from Holland and Oregon, however the accuracy of reporting in both jurisdictions is far from clear.

There is much more at stake here than the mere wishes of individuals 'who find the idea of assisted dying morally repugnant'. The doctrine of sanctity of life 'has long been recognised in most, if not all, civilised societies throughout the modern world, as evidenced by its recognition in international conventions on human rights'. The principle of sanctity of life protects the most vulnerable in society and weakening its power would have far-reaching consequences. Paton describes 'horror stories' about aggressive care at the end of life. Respect for sanctity of life is not the same as vitalism, that is, believing that all attempts must be made to preserve life regardless of the cost. There is a 'time to die', and we must improve our ability to recognise that time, to recognise the limitations of our abilities, and hold back from distressing and unhelpful interventions. We must not, however, confuse our failings here with a need to hasten the end.

MICHAEL TRIMBLE
Consultant Physician Belfast City Hospital

How does the brain process music?

Editor – I read with interest the article reviewing music processing and the brain with evidence from many clinical studies where brain lesions lead to specific auditory processing defects (*Clin Med* February 2008 pp 32–6). I would like to add that in order to help understand how the brain processes music, there is helpful evidence provided from studies in physics and mathematics. We have come a long way in waveform analysis since a series of elegant experiments by Faraday and Maxwell in the 19th century.[1,2] In sound analysis, there is one particular method of processing waves which is particularly important. This is the Fourier transform, which is now extensively applied in many practically situations involving sound processing, such as noise reduction in audio or electrocardiographic equipment.

Fourier, a 19th century mathematician, analysed the separation of waves into components of different frequencies. The ear and the brain formulate an analogy of the process demonstrated mathematically by a Fourier transform.[3] In this process, the ear converts sound waves which come in a large packet or combination of waves into smaller individual wave components, thus allowing further analysis by the brain. In addition, experiments in artificial neural networks and the concept of nerve signal reinforcement (Markov processes)[4] have shown that the network of nerves can select