

- 3 Public opinion is not necessarily reliable or right, and nor is it a robust basis on which to base legislation. Informed public opinion is better, and the public need to be better advised about the enormous and widespread implications of legislation for assisted dying.
- 4 Sir Raymond speculates about what 'might' happen if assisted dying were legal, and states that there is no evidence from elsewhere to support some of the contentions of those opposed to such legislation. Having read many reports of procedure elsewhere, I am confident that there is indeed such evidence and participants in the recent House of Lords debate² on the Joffe Bill were certainly not unanimously reassured by supposed safeguards. Interestingly he states that 'in a civilised society it is highly unlikely that a doctor . . . would acquiesce to the involuntary killing of individuals'. That is precisely what we now do to vast numbers of unborn children.
- 5 Lastly, I do object to the description of a dying human being as 'an incipient corpse'. Our patients are still people, loved and valued, even though they are dying and it is our responsibility to care lovingly for them, not to discard them.

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References

- 1 House of Lords. Assisted Dying for the Terminally Ill Bill 2005. Norwich: Stationery Office, 2005.
- 2 Hansard, House of Lords Debate, 10 October 2005.

In response

Having replied in some detail to the letter from Dr Trimble, I feel it would be discourteous to ignore these two additional letters. Let me assure readers that I have no intention of continuing the correspondence indefinitely.

In response to Dr Berry: In limiting my reference to religion I did not intend to diminish its importance. Like most proponents of the Joffe Bill, I sincerely respect the views of those who oppose it on religious grounds. The Bill does make an effort to accommodate them. What I

question is the appropriateness of this sector of society imposing its will on those who feel differently.

Dr Hutchison's letter contains many of the points covered by Dr Trimble. Let me repeat that I am in favour of more and better palliative care and of improving public awareness of the issues involved in the debate about assisted dying.

Like Dr Trimble, Dr Hutchison misconstrues or distorts what I said in my article. I said there was no evidence of a decline in the patient-doctor relationship in the countries that have legalised assisted dying. Has he evidence to the contrary?

Finally, when I used the phrase 'incipient corpse' I was referring specifically to patients in a vegetative state, like Bland, once it had been decided to withdraw food and water and everyone was aware that death would soon follow. I was not generalising about all dying patients, and I used the phrase deliberately to emphasise my disapproval of the decision that allows a slow death by attrition rather than a more humane and speedy end.

I should add that I have had many letters from UK doctors supporting the views I expressed in my article. I do not stand alone.

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Re-training refugee and other overseas doctors

Editor – With regards to Eastwood *et al*'s article (*Clin Med* January/February 2006, pp 51–6) I appreciate that there were posts for only 70 refugee doctors out of probably 1,000. I think part of the refugee doctor problem is their initial interaction within society here. This could be helped by improving their English language and approach to initial contact with hospitals, and with regard to dealing confidently with staff and patients when embarking on Professional and Linguistic Assessments Board examinations. The initial period here is a very stressful time, particularly for doctors with difficult psychological or financial situations, to whom I advise the following:

- 1 Doctors who cannot find their way to training programmes could attend a

nursing course for short periods of training or complete a prescribing course or therapist mini-course.

- 2 Doctors could be employed initially, for example, as nurses, pharmacy dispensers, endoscopy assistants or cardiology technicians to gain financial security. They will be able to proceed and train in their profession, gain experience, fill the shortage in these jobs, cease to be a burden on social benefits, and may also proceed into management jobs.

During their non-medical career they will be allowed to enter medical professional teaching sessions to make them safe doctors in the future.

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Clinical & Scientific letters

Letters not directly related to articles published in *Clinical Medicine* and presenting unpublished original data should be submitted for publication in this section. Clinical and scientific letters should not exceed 500 words and may include one table and up to five references.

Doctor's knowledge of driving regulations: an interview-based survey

In August 2001, the Drivers Medical Group (Driver and Vehicle Licensing Agency (DVLA)) distributed guidelines on medical standards of fitness to drive to all UK-based medical practitioners. Since then, they have updated their guidelines biannually,¹ following working group meetings.

The survey reported here used a structured questionnaire, incorporating common medical scenarios, to examine the accessibility of the DVLA guidelines and of doctors' knowledge of their fundamental points.

Methods

Eight doctors involved in general medical 'takes' at each level (pre-registration house officer (PRHO), senior house officer (SHO), registrar (REG) and consultant (CONS)) were surveyed using a face-to-face questionnaire, within Milton Keynes General Hospital. Doctors were given a series of vignettes and asked to 'circle the most appropriate driving restriction' from the options listed in Table 1. The vignettes and the correct answers are shown in Table 2. Correct answers to all the vignettes were discussed with doctors at the Drivers Medical Group at the DVLA. Non-consultant grades were also asked about the existence of, and their use of, the DVLA guidelines at the time of interviewing.

Using the Statistical Package for the Social Sciences, a one-way analysis of variance was performed to test for a global difference in vignette responses between doctors, using 95% confidence intervals. This was found to be statistically significant ($p < 0.001$). The chi-square test was therefore used for all pair-wise comparisons, using the Bonferroni adjustment for multiple testing.

Table 1. Optional answers for each vignette.

A	None
B	1 month
C	6 months
D	12 months
E	2 years
F	Notify the DVLA yourself
G	Patient to notify the DVLA
H	To be seen by cardiologist and/or neurologist
I	Don't know

Results

Knowledge of guidelines

All thirty-two questionnaires were fully completed (100% response rate). Seventeen out of 24 non-consultants recognised the existence of the guidelines, but of these only six had actually read them.

Knowledge of driving regulations and intergrade differences

Overall, 140 of the total 384 responses (37%) were correct. Of these, 25% were

answered correctly by PRHOs, 36% by SHOs, 33% by registrars, and 51% by consultants.

We found statistically significant differences between the answers given by consultants and PRHOs ($p = 0.001$), between consultants and registrars ($p = 0.03$), and between PRHOs and SHOs ($p = 0.05$). For more details, see Table 3.

Discussion

The responses received in the survey and the rationale for correct answers are summarised below.

Seizures (provoked, unprovoked and pseudo) and cerebrovascular disease

Eight of the 32 doctors were unaware of the basic fact that a first seizure mandates a 12-month driving restriction (V1). In V2, the patient repeatedly ignoring medical advice must be told that his doctor will inform the DVLA. This must be documented in the case notes and in a letter to the patient.

V3 exemplifies clear non-epileptic seizures and V4 presents a clearly provoked

Table 2. Vignettes (V1–12) used and their correct answers.

Vignette	Vignette Description	Correct answer
V1	30-year-old female with her first primary generalised tonic-clonic seizure.	D (12 months)
V2	25-year-old male with known generalised epilepsy who has been previously and repeatedly warned to discontinue driving and inform the DVLA. He has not done this and continues to drive.	F (Notify DVLA yourself)
V3	27-year-old female with a clinically clear non-epileptic seizure (pseudoseizure).	A (None)
V4	19-year-old female describing light-headedness, nausea and sweating before blacking out. Her friends hold her up until she stops fitting.	A (None)
V5	55-year-old hypertensive male with a seizure 12 hours after a completed TIA.	B (1 month)
V6	23-year-old female with known insulin-dependent diabetes with her first seizure. Blood glucose is 1.5. She recovers promptly after appropriate treatment, and admits to have taken extra insulin that day as she was suffering with a diarrhoeal illness (provoked seizure).	A (None)
V7	43-year-old male with a long history of alcohol abuse has a withdrawal seizure.	D (12 months)
V8	55-year-old hypertensive male with a hemiplegic TIA, who has fully recovered.	B (1 month)
V9	65-year-old male felt dizzy after prolonged standing in warm weather, and was witnessed to pass out and recover rapidly.	A (None)
V10	40-year-old female has three episodes of loss of consciousness with no prodrome, no witnesses, and a normal electrocardiogram. Neurology and cardiology opinions offer no further insight.	C (6 months)
V11	56-year-old female with stable angina who has recurrent episodes of loss of consciousness, all preceded by palpitations. No treatment is planned.	C (6 months)
V12	40-year-old male with moderate aortic stenosis suddenly collapses at work for 10 seconds with rapid recovery. No treatment is planned.	C (6 months)

TIA = transient ischaemic attack.

Table 3. Number of correct responses to vignettes (V1–12) from the 32 doctors interviewed (maximum score per grade is 96).

	V1	V2	V3	V4	V5	V6	V7	V8	V9	V10	V11	V12	Total
PRHO	7	5	5	1	1	4	0	0	1	0	0	0	24
SHO	5	8	7	0	0	4	3	5	3	0	0	0	35
REG	4	5	6	2	0	4	2	2	5	2	0	0	32
CONS	8	6	6	2	1	4	7	5	5	2	2	1	49

reflex anoxic seizure with prodromal symptoms and a significant postural component (DVLA guidelines refer to this scenario as containing the three 'p's) – no driving restrictions apply to either.

In V8, only 12 doctors understood the one-month restriction after a transient ischaemic attack. A seizure within 24 hours of the transient ischaemic attack (TIA) (V5), with no other precipitant, is classed as a provoked seizure. Only the one-month post-TIA restriction applies.

The isolated hypoglycaemia-provoked seizure in V6, secondary to excess insulin, incurs no driving restriction, whereas an alcohol withdrawal seizure (V7) incurs a year's driving restriction.

Overall, less than 50% of doctors correctly answered questions regarding a variety of seizure presentations (V1–7); 50% of the incorrect responses answered with either options (f) or (h).

'Simple' faints

V9 describes the three 'p's, similar to V4. V10 demonstrates repeated loss of consciousness with no clinical pointers. Cardiogenic loss of consciousness is described as either recurrent (V11) or secondary to a structural cause (V12). If the cause is identified and treated, there will be a one-month ban, but if the cause is not treated, the ban increases to six months.

Similar studies, albeit with some limitations, have also concluded that doctors' knowledge of driving regulations was poor.^{2,3} This reflects the reality of limited teaching and discussion about driving restrictions. In addition, patient compliance with driving advice is known to be poor, despite good patient recall of the advice given.⁴ Doctor's failure to provide adequate advice, with poor documentation of intent, has medico-legal implications. Indeed, two doctors were found guilty of just such a

breach of duty of care, after their epileptic patient had a fit while driving and hit a cyclist. They had not given the patient proper guidance on driving and they were held liable for the cyclist's death.⁵ Our study may provide a baseline level of knowledge for such legal cases.

Conclusion

Overall, the results of the survey demonstrate that only one-third of patients will receive correct driving advice for many of the commonest acute medical conditions, such as syncope and possible seizures. Not only was doctors' knowledge poor but awareness of where and how to obtain information was inadequate. Our data suggested that consultants demonstrated the best knowledge, followed by SHOs.

In view of the medico-legal and public safety issues, it is clear that educational measures are needed. Indeed recently, DVLA policy-makers have produced reminders of their website and documents alongside the February 2005 edition of *General Medical Council News*.⁶ Currently, many unnecessary medical referrals and additional DVLA consultations occur, as shown in our survey, and this should provide economic incentives for further education initiatives.

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- 4 Maas R, Ventura R, Kretzschmar C, Aydin A, Schuchert A. Syncope, driving recommendations, and clinical reality: survey of patients. *BMJ* 2003;326:21.
- 5 Clare J. Recommendations on syncope and driving must be observed. *BMJ* 2003;326:601.
- 6 *General Medical Council News*, February 2005.

A new development in medical education: simulated medical emergencies

Simulation is a training method that has been adapted from the airline industry, and its use in anaesthesia and emergency medicine is now well established. In addition to providing training in technical skills, simulation is well suited to developing generic, portable human factor skills. This letter describes how we are using simulation to train junior physicians to manage medical emergencies.

Deficiencies in the management of acutely unwell medical patients were highlighted recently in a National Confidential Enquiry into Patient Outcome and Death report.¹ Medical emergencies often occur when senior support may be less available, yet training in medical emergencies lags behind that carried out in other areas of medicine and is frequently based on experiential training. Emergencies are inherently stressful situations where poor performance and outcome can occur all too easily, despite optimal knowledge. We have therefore attempted to improve the training of junior doctors in medical emergencies with the use of a medical simulator.

Medical simulation evolved from airline simulation training. Human factors – such as poor communication, poor leadership and unfamiliarity with equipment or procedures – have been implicated as contributing to numerous air crashes and near misses. In response to this, the airline industry developed the use of simulation training. Aircrew were put in a simulated 'crisis' and their management was analysed. Teaching involved developing

technical skills but focused mainly on non-technical skills. Technical skills relate to factual knowledge and the ability to undertake certain practical procedures. The value of simulation, however, lay in the teaching of non-technical skills, for example team working, communication and leadership – portable skills that allow an individual to operate effectively with an unfamiliar team.

Simulation has been widely used in anaesthetic training but only recently in the training of medical emergencies in the UK.² A sophisticated simulator mannequin and carefully designed environment create a high degree of realism (Fig 1). The mannequin has reactive pupils, palpable pulses and numerous other variable features. It is operated from a control room which has a two-way mirror and closed circuit television (CCTV) showing the whole simulated crisis area. One operator acts as the voice of the mannequin whilst another runs the scenario, altering the computer model as events unfold. The scenario is run by pre-programming the computer to alter physiological parameters according to certain events.

Several common medical emergencies are simulated, such as anaphylaxis, acute life-threatening asthma and tricyclic antidepressant poisoning. Each candidate undertakes a different scenario and is viewed via CCTV by the remaining candidates and an instructor. After each scenario, the whole group is debriefed and video clips are used to highlight particular behaviour. Human factors such as communication skills, team working and leadership skills are closely examined, and good practice is highlighted and encouraged. The teaching methods are designed to be supportive as the simulation, like real medical emergencies, is deliberately stressful. Simulation should not be used as a means



Fig 1. Medical simulation suite.

of assessment but rather a valuable teaching method. The study group is drawn from both acute medicine and emergency medicine, reflecting the considerable overlap between the two disciplines.

To date, feedback has been very positive, with over 90% of candidates saying that the course has altered their behaviour and improved their confidence in dealing with critically ill patients.

For more information about the course, contact Harriet Frankland at hf237@medschl.cam.ac.uk

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