## LETTERS

Letters are selected from rapid responses posted on thebmj.com. After editing, all letters are published online (www.bmj.com/archive/sevendays) and about half are published in print To submit a rapid response go to any article on thebmj.com and click "respond to this article"

### ASSISTED DYING DEBATE

## Matters arising from *The BMJ*'s stance on assisted dying

With *The BMJ* in campaigning mode for assisted suicide—the majority of relevant articles in the 22-29 August issue are in favour—it is hard to give credibility to the call for a full and fair debate by the editor in chief.<sup>1</sup>

The divorcing of assisted suicide from other forms of suicide is noteworthy, ignoring not only the tragedy and scale of suicide, which kills more people than road traffic accidents in many developed countries, but also implying artificial typologies of rationality and suffering within the act of suicide.

The feature article "A doctor who chose an assisted death" omits any reference to palliative care, confuses the legal with the ethical, and portrays ethical concerns as a largely confessional issue.<sup>2</sup>

That an action may be legal does not make it ethically correct or clinically appropriate— examples include the mandatory reporting of drivers with medical conditions in Canada<sup>3</sup> and suspected elder abuse in the USA.<sup>4</sup> The article portrays a lack of understanding that the legalising of assisted suicide should not force practitioners to provide what they consider to be a harmful intervention which contravenes their ethic of care

In addition, while care in this case took place in health settings with a religious ethos, those deeply troubled by the promotion of assisted suicide include agnostics and atheists. To portray opposition to assisted suicide as an essentially confessional issue is a dual injustice: imputing lack of independent thought to those who are believers, and denying the very real concerns of physicians who are not.

Desmond J O'Neill professor in medical gerontology, Trinity Centre for Health Sciences, Tallaght Hospital, Dublin D24 NROA, Republic of Ireland doneill@tcd.ie

Godlee F. Assisted dying—time for a full and fair debate [Editor's Choice]. BMJ 2015;351:h4517. (20 August.)

Cite this as: BMJ 2015;351:h4883

20

To date, we have posted more than 60 responses to the head to head debate "Would judicial consent for assisted dying protect vulnerable people?" published in the print issue of 22-29 August. Read the full discussion of the debate at www.bmj.com/content/351/bmj.h4437/rapid-responses -SHARON DAVIES letters editor

#### DAY CASE SURGERY

## NHS demand for operations will not be met by day case surgery

Appleby's data briefing emphasises the success of day case surgery but omits several points in an overly simplistic approach. The benefits of day case surgery are not in dispute, but the success rate of such operations and its correlation with symptom resolution, as well as the cost of failed day cases resulting in further follow-up care and inpatient treatment, are not considered.

Appleby also states that there is room for improvement, although day cases now account for nearly 80% of all elective procedures. How improvement will occur without a more detailed review of the demographics and medical comorbidities of those undergoing elective inpatient surgery is difficult to see. Specialties and clinical indications in which the rate of operating on inpatients remains particularly high also need review.

Appleby's analysis is limited in not acknowledging the growing trend for "office" outpatient procedures. If we are serious about improving patient outcomes and minimising the risk of infection, this is a new way to a more patient centred "see and treat" approach to diagnosis and treatment, avoiding the need for an anaesthetic. An example of successfully implemented ambulatory care includes one stop diagnostic and therapeutic outpatient hysteroscopy; the Royal College of Obstetricians and Gynaecologists' recommendations for care state, "outpatient-based diagnostic services should be available in the community and hospital setting, including operative procedures."<sup>2</sup>

The expansion of day case surgery alone seems unlikely to be able to absorb the exponential rise in the number of operations performed annually in the NHS. Thus we must research alternatives to surgical treatments and perform more procedures in outpatient settings rather than focus on further reducing inpatient elective operations alone.

Shreelata T Datta consultant obstetrician and gynaecologist, King's College Hospital, London SE5 4RS. UK

#### sdatta5@nhs.net

Appleby J. Day case surgery: a good news story for the NHS BMJ 2015;351:h4060. (29 July.).

Cite this as: *BMJ* 2015;351:h4877

## Author's reply

Datta makes some valid points that my short piece did not cover about the outcomes of day case surgery, limits to its further expansion, and the use of outpatient treatment as an alternative. <sup>1</sup> On the first point, I agree that, given the current scale of day case surgery, there is less clearly scope in the future for further expansion—but it is unlikely to be zero. <sup>3</sup>

On success rates, my understanding of the evidence and various reviews is that (at least in the past and given the right patient selection) these have been as good if not better than procedures carried out as inpatients.

And on the greater use of outpatient settings as a substitute, that is clearly to be welcomed and I would not suggest that expanding day case work is the only response to the need to use scarce NHS resources more cost effectively. The more general point I tried to make in the piece was that there have been areas of tremendous improvement in NHS performance (generic prescribing is another) that may have lessons for further improvements in other areas.

John Appleby chief economist, King's Fund, London j.appleby@kingsfund.org.uk

Cite this as: BMJ 2015;351:h4879

### CHEATING IN MEDICAL SCHOOL EXAMS

# Why students might find it difficult to recognise "cheating"

We agree that "cheating" extends far beyond simple plagiarism in coursework or examinations but do not believe that its definition includes students simply benefitting from colleagues sharing their experiences. <sup>1</sup>

We are familiar with the phenomenon of students reproducing questions after leaving the examination hall. Anecdotally, we believe this is actively encouraged by some providers of paid-for revision programmes. Published reports suggest that student collusion does not alter the outcomes of some clinical examinations.23 We have assessed several students who, while able to recite learnt catchphrases, fall well below the standard needed to pass; these candidates are typically identified by "global rating scales" on marking schemes.4 It could therefore be argued that sharing examination material does not, ultimately, affect the end results. Indeed, some medical schools openly publish planned examination stations.

It is therefore clear why students might struggle to identify the boundary between professional and unprofessional behaviour. Postgraduate (such as royal college membership) examinations provide explicit guidance to candidates that examination material must not be shared—that it is unprofessional. In the absence of similar guidance to undergraduate students, it is unclear whether they recognise their behaviour as cheating rather than an aspect of near-peer teaching—familiarising future candidates with the required examination technique. Failure to recognise such "cheating" may reflect institutions' failure to clarify ground rules with students, rather than deliberate acts of sabotage by students.

We agree that further investigation is needed. We particularly support efforts to determine the degree of interactivity that can be practically included within a clinical assessment to genuinely test ability while controlling for differences in difficulty between clinical cases.

Kathleen Collins clinical teaching fellow kathleen.collins2@nhs.net

Scott W Oliver clinical teaching fellow, Postgraduate Office, Ronald Miller Education Centre, Wishaw General Hospital, Wishaw MI 2 ODP, UK

1 Tonkin AL. "Lifting the carpet" on cheating in medical school exams. *BMJ* 2015;351:h4014. (18 August.)

Cite this as: BMJ 2015;351:h4770

## Author's reply

Collins and Oliver make the point that students' performance in Objective Structured Clinical Examinations is not altered by prior knowledge of the stations, <sup>1</sup> <sup>2</sup> a point also illustrated by the incident reported by Professor Brennan and colleagues from the Royal College of Surgeons.<sup>3</sup> I would agree that prior knowledge is less important in examinations where the candidate

has to perform a task rather than simply check a box in a written examination. My article was focused on written examinations, in particular multiple choice questions, where rote learning the question and answer does not require a working knowledge of the relevant clinical area.

I can reassure Collins and Oliver that there was no ambiguity in the guidance provided to our students. Each examination paper, including the one that was photographed, contained clear instructions regarding its confidentiality. However, I agree that it is crucial that medical schools and postgraduate education providers clarify the ground rules on what is, and is not, acceptable behaviour.

Anne L Tonkin emeritus professor, School of Medicine, University of Adelaide, Adelaide 5005, SA, Australia a nne.tonkin@adelaide.edu.au

Cite this as: BMJ 2015;351:h4771

#### **RESPONSE**

## Susan Greenfield replies to Vaughan Bell and colleagues

A year after I wrote *Mind Change*, Vaughan Bell and colleagues claim I'm scaremongering about potentially adverse effects of internet and computer use. They assert there's no evidence that "typical internet use harms the adolescent brain." Tellingly, they don't define "typical use" or reflect on the escalating use preoccupying children—crucial omissions given reports from Ofcom, <sup>2 3</sup> the House of Commons Health Committee, <sup>4</sup> and Public Health England. <sup>5</sup>

Recent research shows teens using screens for an average of 10.75 aggregated hours daily.6 Such findings raise the all important question: where should we draw the boundaries between harmless use and misuse? Change in brain structure and function in response to experience is a well-established phenomenon. High levels of multi-tasking, internet use, or playing video games<sup>9</sup> are associated with significant differences in the anterior cingulate cortex,<sup>7</sup> dorsolateral prefrontal cortex,8 supplementary motor area,8 orbitofrontal cortex,8 and cerebellum<sup>8</sup> or ventral striatum, <sup>9</sup> or both. With internet addiction, the reductions in certain prefrontal functions and striatal dopamine receptors and transporters resemble those in other addictive disorders. 10-13 As discussed throughout Mind Change, the chicken and egg problem applies to many such findings. Nevertheless, evidence indicates that duration of internet addiction is negatively correlated with grey matter volume at various cortical sites8 and that attention problems are both a consequence of and a predisposing factor for protracted video gaming,14 an activity associated with acute striatal dopamine release.15

Although Bell and colleagues claim that social networking "enhances" friendships, increased use of social media does not correlate with a larger offline network or feeling closer to friends in the real world. The editorial overlooks peer reviewed studies reporting adverse effects of social networking such as increased volatility and narcissism and reduced self esteem, along with distortions of the sense of self. Although they assert "people generally portray their identity accurately," various studies refute this. 27 28

Bell and colleagues insist it's "entirely implausible" that screen technologies influence the development of autisticlike traits. Dr Leonard Oestreicher's rapid response on thebmj.com challenges this 29; furthermore, links between those traits and screen technologies have been reported. 30-34 Regarding video games, they state "multiplayer cooperative games are increasingly common, and evidence suggests these kinds of games might lead to an increase in socially beneficial thoughts and behavior." But the dominant narrative in popular games concerns men engaged in violence.35 Repeated exposure to media violence diminishes responsiveness in an inhibitory frontolimbic network<sup>36</sup>; a recent meta-analysis concluded that violent video games increase aggression. 37 Bell and colleagues acknowledge "valid concerns... about digital technology"; with video games they focus on "displacement" of academic activities, a concern that's beyond dispute.38 But it's not clear why they overlook concomitant displacement of real world interactions and

thereby opportunities to develop socially beneficial thoughts and behaviour.

Bell and colleagues take exception to my reasoning that reliance on search engines may foster superficial mental processing at the expense of deep knowledge and understanding, but concede "when people know they can access information . . . they are less likely to remember the content." They note this effect "is not restricted to the use of technology . . . people who work in teams are less likely to remember facts when others hold the information." Thus, memory is vulnerable to factors including screen technologies.

A further criticism is that I haven't submitted my arguments to peer review. But *Mind Change* is a book presenting the results of numerous peer reviewed studies in neuroscience, psychology, sociology, and epidemiology. Furthermore, publications since *Mind Change* indicate that it's an increasingly validated wake-up-call. <sup>6 7 10 13 34 37 39</sup>

Given that the digital world offers unprecedented multifaceted possibilities, we should be alert to its opportunities and threats. Bell and colleagues conclude: "the public deserves to participate in the debate fully informed of all the evidence." That's why I wrote *Mind Change*.

Susan Greenfield senior research fellow, Lincoln College Oxford, and CEO, Neuro-Bio, Lincoln College, Oxford OX1 3DR, UK susan.greenfield@pharm.ox.ac.uk

Competing interests: None declared.

Full response at: www.bmj.com/content/351/bmj.h3064/rr-2.

Cite this as: *BMJ* 2015;351:h4960