



## Masking is better than blinding

PERSONAL VIEW Daniel Morris, Scott Fraser, Richard Wormald

**C**onsider this scenario. An elderly woman has agreed to be part of a clinical trial testing a new drug for age related macular degeneration. Her left eye has poor vision, and the sight in her previously good right eye is rapidly declining. She is told that she is part of a double blind trial in which she and the doctor will be blinded to the treatment. Taking fright, she withdraws her consent and goes home, terrified that this “blinding” experiment may deprive her of what little vision she has left.

The term “blinding”—commonly used in clinical trials—is particularly inappropriate in the ophthalmological setting, not least because an outcome measure of a particular trial could indeed be blindness. What an odd situation when the word used to describe trial allocation is also used to describe one of the trial outcomes. As a medical term blindness does not really have a strict definition, but it has a much greater resonance in its sociocultural meaning.

This common meaning is emotive enough outside eye care services, but within them the word is rarely used by practitioners and is dreaded by patients.

One of the earliest trials that described masking of allocations seems to have been

**The term “blinding” is particularly inappropriate in the ophthalmological setting**

performed by a commission of inquiry appointed by Louis XVI in 1784 to investigate the medical claims of “animal

magnetism.” The commission’s goal was to assess whether the purported effects of this new healing method were the result of any real force or were illusions of the mind, and the participants were given what we would now call placebo or dummy treatments.

In the 19th century the concept of concealment of allocation was developed further with the Nuremberg salt test of 1835. Annoyed by the rise in popularity of homeopathy among the upper classes of Bavaria, the leading public health official

challenged a prominent homoeopath to publicly test a C30 (100<sup>30</sup>) dilution of salt. One hundred and twenty citizens met in a local tavern. In front of everyone, 100 vials were numbered, shuffled, and split into two lots of 50. They were filled with either distilled water or the homoeopathic remedy. The coding list was sealed and the vials distributed by a commission of people unaware of their contents. Those conducting the experiment stressed that the crucial element of its design was that anything that might enable the participants or those responsible for the trial to guess whether or not the actual medicine was given must be avoided; this concept still stands today.

Current use of the word “blinding” covers a variety of situations in a trial. Concealment of treatment allocation from those administering and those receiving it is obviously vital. Depending on the trial design, those assessing the treatment effects and the study statistician may also be unaware of allocation until the analysis is completed. Thus the word blinding is deeply ingrained in the language of trial design and evidence based medicine. To replace this word with a less emotive one requires a term that conveys the same obvious meaning of concealment of treatment.

“Concealment of allocation” is a better term for the prevention of selection bias, while “masking” is better used for the prevention of performance and detection bias. Masking is where neither the patient nor the investigator knows who is getting which treatment. Allocation concealment is preventing the subversion of the randomisation process. If the sequence of allocation is known, it is possible to select who goes into which group. It is true that proper double masking will usually deal with allocation concealment, but allocation concealment is mainly concerned with selection bias rather than detection bias.

If you are not an eye care practitioner you have probably come to the conclusion that ophthalmologists are either too “politically correct” or far too precious about their



**The claims of animal magnetism are said to have sparked one of the first trials to involve masking**

patients. However, if we look at the origin of the term “blinding,” one dictionary defines it as “to deprive of perception or insight” but also as “partial or complete loss of sight.” Neither of these terms are ones that we would wish to associate with a rigorously designed trial. In contrast, the term “masking” is defined as “to cover in order to conceal, protect, or disguise.” We can see that the word masking in itself is a better description of what we intend to do in a trial—no matter what specialty is involved.

Thus we suggest that the term blinding is avoided in trial design. If this is thought too drastic, we would at least ask practitioners to take care when using it, either when describing a trial to a patient or within consent forms or patient information leaflets.

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[The full version of this article with references is available on bmj.com](#)

## NETLINES

It is a huge task keeping up to date with information on treatment and prescribing. So when someone takes the trouble to survey the literature and summarise it, it is likely to make many people grateful. From Leicester ([www.ukmicentral.nhs.uk/therapeu/di\\_desp/di\\_desp.asp](http://www.ukmicentral.nhs.uk/therapeu/di_desp/di_desp.asp)) comes a regular therapeutics newsletter published twice a month, available as a PDF. The home page is just a simple listing of the current edition, but an archive is also available.

Health technology assessment reports can make interesting reading and are a valuable addition to a clinician's knowledge base. Within the website of the Canadian Agency for Drugs and Technologies in Health lies the facility to access more than 400 reports ([www.cadth.ca/index.php/en/hta/reports-publications/search?&type](http://www.cadth.ca/index.php/en/hta/reports-publications/search?&type)). A steady stream of material is added on a regular basis.

The highly respected UK "green book" can be found on the NHS immunisation information website ([www.immunisation.nhs.uk/article.php?id=400](http://www.immunisation.nhs.uk/article.php?id=400)). This factual yet user friendly immunisation guidebook is now in its third edition, published last year. All the chapters are individually available as PDFs. At the top of the web page is a helpful list of links to supporting material such as posters, leaflets, and fact sheets. This substantial compendium specifically applies to the UK but will also be of interest to non-UK readers.

It is always good to be able to ask a respected source a question and get a useful reply. On the Johns Hopkins AIDS service for the clinician forum (<http://qa.hopkins-aids.org/forum/main.html>) you can see the questions that have been posted recently, search the database, or check by category. It is easy to ask a question, and you can read the online biographies of those responding.

Case histories are an appealing and challenging way to learn, and if you are interested in paediatric radiology check out the weekly quiz at [www.pedsradiology.com/default.aspx](http://www.pedsradiology.com/default.aspx). Answers are provided in the archive.

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We welcome suggestions for websites to be included in future Netlines. Readers should contact Harry Brown at the above email address

## PERSONAL VIEW **Isabeau Walker**

# The refresher course

**T**he setting is the Mengo hospital for plastic and reconstructive surgery in Kampala, the meeting of the Ugandan Society of Anaesthesia's annual refresher course. I am working with Andrew Hodges, who has established the charity Interface Uganda and moved to Kampala with his wife and family to set up a plastic surgical training programme. Sarah Hodges is an anaesthetist and is coordinating the refresher meeting. There are a handful of speakers from Britain for the two courses, held back to back, which are attended by nearly all of the anaesthetists and anaesthetic officers in the country. That's a total of 280 of the 330 anaesthetic officers, 11 consultant anaesthetists, and three trainee anaesthetists currently in Uganda. The population of Uganda is 24 million. The Royal College of Anaesthetists has 13 000 anaesthetists on its books in the United Kingdom.

We give a series of lectures and workshops with the local anaesthetists and debate common problems: anaesthesia for caesarean sections, paediatric emergencies, acute abdominal pain. We encourage discussion from an audience that is polite, listens intently, and objects if we flick to the next slide too quickly. After all, if you have no textbook to refer to, how else will you retain this information? We explain how spinal anaesthesia has contributed to the reduction in maternal mortality after caesarean section. It is difficult to know how to respond to the questioner who says that they have no spinal needles. In Uganda ether is deemed to be the anaesthetic agent of choice for the general surgical patient. It hasn't been used in routine anaesthetic practice in the UK for more than 40 years.

We discuss the importance of careful postoperative monitoring in a high dependency area. There is no question here of intensive care to ventilate sick patients, because when the electricity goes off—which it does every other night—so does the ventilator, even in the main teaching hospital. We hear a story of a girl's quest to find out why her favourite aunt died after a hernia repair. She trained as a nurse, wanted to find out more, moved into anaesthesia, and realised that high quality postoperative care is crucial to success. Maybe a future intensivist? Maybe. We clearly speak the same language,

and wish to care for our patients. Yet our opportunities to practise our specialty are so different.

We discuss working conditions—anaesthetists always complain about being stuck in theatre, unappreciated. But it is difficult to take a holiday when there are only two of you in the hospital. Maybe there will be an opportunity overseas? Maybe they should leave anaesthesia; there seems to be so much more money going into HIV and AIDS.

The highlight is the quiz at the end of the meeting. The questions are tricky, and the answers emphasise important learning points: no 5% dextrose for resuscitation, don't delay surgery for a patient who

is bleeding, magnesium is the treatment of choice for eclamptic fits. The prizes are handed out. It is humbling; the most coveted prize is an anaesthetic T piece, a basic piece of disposable equipment. These T pieces will not be disposed of: how else can you administer anaesthesia safely to the children in your hospital?

At the end of the meeting we realise that we have imparted some knowledge, but we have also learnt much about a specialty in crisis. Anaesthesia is taken for granted in the developed world. In Uganda the personnel are coping with a huge burden of work; drugs (including oxygen) are inconsistently available; equipment is barely adequate to provide a safe service. The delegates all leave with a copy of the *Oxford Handbook of Anaesthesia*, donated by the Association of Anaesthetists of Great Britain and Ireland under the "books for anaesthetists in Africa" scheme.

And we know that the situation in Uganda is the same as in many other parts of sub-Saharan Africa and that the remedies are not expensive. We have been moved by the dedication of this group of professionals, and by the efforts of individuals such as Andrew and Sarah Hodges and their colleagues, in the face of such difficulties.

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## REVIEW OF THE WEEK

## The scars that won't heal

**Robert Hunter** is impressed by a novel that examines the long term effects of warfare on mental health and relationships

*Afterwards* gives us an important glimpse of how veterans who are psychologically damaged by their war experiences struggle to cope after returning to civilian society. Seiffert, one of many new writers nurtured by the creative writing course at Glasgow University and whose first novel, *The Dark Room* (2001), was shortlisted for the Booker prize, has written *Afterwards* in an understated, almost skeletal style that paradoxically seems to make her work all the more powerful.

At the centre of the story is the developing relationship between Alice, a physiotherapist, and Joseph, a former infantryman who now works as a plasterer and decorator. As the story unfolds it becomes clear that Joseph has been struggling to cope with psychological harm resulting from service with the army in Armagh. Alice, who was abandoned by her father as a baby and is still grieving for her beloved grandmother, enlists Joseph's help to redecorate her grandfather's house. During the redecoration, David, her grandfather, seems to welcome the opportunity to confide in Joseph about his war experiences in Kenya, where as an RAF officer he bombed Mau Mau villages. The effect of this is to rekindle the terrors in Joseph's mind about his own experiences in Armagh in the early 1990s.

Enlisting in the army had, to Joseph, "felt like something real," allowing him to escape the estate where he grew up; but Seiffert slowly describes the effect on Joseph's mental health of his military experience, and we learn that Joseph had killed a suspected gunman in front of his wife and child. We begin to understand how lasting and psychologically scarring the effects of Joseph's military experience have been.

Seiffert describes well Joseph's disorientation when he leaves the army and becomes homeless: "It took over everything sometimes and there wasn't anywhere he could settle. Only a few days in any one place, if that. Friends' houses, then friends of friends, sometimes hostels. He was in a place for veterans for over a week once and that was easy at first, familiar . . . but the man in the next bed had screaming nightmares, and the day room was full of bitter talk about compensation and pensions. A lot of Gulf War blokes there, all of them angry."

Alice becomes increasingly aware that Joseph studiously avoids talking about his army past and is prone to "disappear" regularly as a means of trying to cope. She also becomes curious to know what her grandfather and Joseph had discussed together.

Concern about the quality of care available for injured veterans is increasing in the United States and the United Kingdom. Recent testimony to the US Senate's Armed Forces Committee described the struggle of many veterans to have mental health problems taken seriously

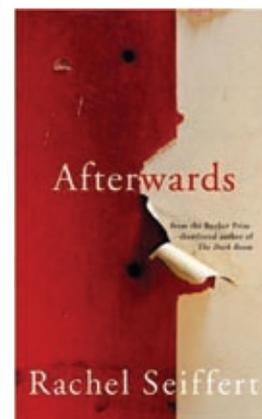
by military review boards seeking to limit costs. In the UK, the ex-services mental welfare charity Combat Stress and the Royal British Legion have each reported a significant increase in numbers of returning service personnel with post-traumatic stress disorder and other psychological illnesses. As described in *Afterwards* these mental problems often result in anxiety and depression, substance abuse, violence, and homelessness.

There has also been concern that the UK's "military covenant"—namely, the historical obligation, recognised since the Napoleonic wars, for the state to care for military personnel who have served their country—is being less than fully honoured or is even ignored. This resulted in the publication of an open letter to the prime minister, signed by national figures and relatives of members of the armed forces who have died recently in the Middle East, following Ministry of Defence plans to close the UK's only dedicated military hospital at Haslar in Gosport and replace it with a military ward at Selly Oak Hospital, in Birmingham. Throughout the rest of the country NHS services will be expected to provide outpatient services for injured service people. Whether or not these new services will provide adequate support for the growing number of mentally traumatised veterans from Iraq and Afghanistan remains to be seen; but as *Afterwards* illustrates, such services will have little or no effect on the many subclinical cases of battle shock.

*Afterwards* is an important and timely new work that avoids political viewpoints but will make readers think beyond the headline figures of war fatalities, terrible as these are, to the effect of war on ordinary lives, relationships, and families.

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See also *Clinical review*, p 789

**Afterwards**

Rachel Seiffert

William Heinemann,

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**Afterwards will make readers think beyond the headline figures of war fatalities to the effect of war on ordinary lives**



## Call of the curlew

FROM THE  
FRONTLINE  
Des Spence



My face clung to the seats as I crossed the Pentland Firth for the first time. I was unable to raise my head for fear of heaving. The Orcadians, welly booted and boiler suited, laughed and joked through cigarette smoke as they chewed on bacon rolls. I wanted to bawl.

Ten years later I stood on the deck, drenched in sea spray. I chewed a bacon roll as the boat heaved and rolled fiercely. Basketball booted and stretch jeans suited, I clung to my new PVC Woolworths suitcase. In life it is often easier knowing what you don't want—I turned my back on Orkney.

City life is different from the remote island life of my childhood. Cities are polarised communities, divided by deprivation and wealth, and foreign to each other in almost every way—schools, health care, transport, and lifestyles. In theory all general practitioners do the same job, but in reality urban and suburban practices are different countries, with their own language and customs.

A friend of mine returned to take up a GP position in Orkney, and many other professional people have returned home to Orkney over the years. Why would they choose such a small and closed environment?

Remote communities offer limited choice in all things but especially in education and health care. There is therefore a strong vested interest in making public services work, with the most influential people in the community having no opt out clause. There is also a lack of anonymity in remote communities—people know you from primary school. Whether you become a doctor, lawyer, or member of the Scottish parliament, you have little scope to take up pretensions on an island, or you will soon be reminded of the time you cried for your mummy. Lastly, families are more stable because they have remained for generations in certain areas—consequently there is no faceless crime in a small community. The bottom line is that a community that is raised together stays together—it works.

Many of our social and medical problems are a product of the widening schisms in our society—and all communities are the worse for it. Despite all the sophistication of our urban life, there is much to learn from rural communities. With the absolute certainty of youth long gone, I wonder if I was right to leave.

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## No miracles in the NHS

THE BEST  
MEDICINE  
Liam Farrell



"It's Our Lord," said my receptionist, "and before you ask, He has ID, a gold credit card."

"Hang on," He said as He entered the surgery, "I'd asked for a doctor that believes in Me."

"Nothing personal, Lord," I said, "but to rational people you're slightly less believable than Santa Claus or homoeopathy, all that Samson and Goliath stuff."

"Hey," He said, "Samson was a decent hardworking man; runs a barber shop now—or was it then? Omnipresence can be confusing.

"I'm feeling a bit depressed," He continued, idly bringing my dead budgie back to life. "Two thousand years, and very little gratitude; when things go well they take it for granted—when they go badly I get the blame."

"Boy, could I sing a few bars of that," I said. "The real question is, just how depressed are you?"

"Oh, not too bad, I suppose," He said gamely. "So I thought . . . maybe a few tablets . . ."

"Alas," I said, "the latest

guidelines from the National Institute for Health and Clinical Excellence (NICE) on mild to moderate depression are unequivocal; no medications for you, Lord. Take plenty of exercise, eat a balanced diet, and try and get out some more."

"What else do they suggest?" He said, visibly unimpressed by my lifestyle advice, further evidence of His human side.

"There's counselling," I said.

"That sounds good," He said, "I'd like counselling. Where do I go?"

"Hey, we can put the show on right here in the barn," I said, hoping a Mickey Rooney reference might cheer him up. I patted his knee and said, "There, there."

He seemed to find this unhelpful.

"Anything else?"

"Of course," I said, "Do you think the fine people at NICE are idiots, that they have no idea what's really going on out there, on the streets? Cognitive therapy is a very effective treatment."

"Great," He said, "I'll have that?"

"I have more bad news," I sympathised. "Because your depression is only mild to moderate, you're not an urgent case. I can't refer you directly, you'll have to see a psychiatrist first, and non-urgent psychiatric cases are usually not seen for about six months, and the waiting list for cognitive therapy is another six months after that."

"About a year in total," He calculated, biting his lip. "That's a long time to be depressed. Any other treatment options?"

"Nada, Zippo," I said helpfully. "Nada, Zippo," echoed the revived budgie.

"So what NICE are saying, in effect," He reasoned painfully, "is that there are no treatments for mild-to-moderate depression."

"It is you that say it, Lord, not me. Have a NICE day," I said, getting up and washing my hands.

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# Life unlimited

It is an old hobby horse of mine that what drives many people to seek medical assistance, when they have nothing much wrong with them, is not so much fear of illness as fear of meaninglessness. This is what drives them also to such extravagant and obvious self destructiveness: for the crises that result from their conduct at least lend to the vacuity of their existence the patina of drama. Unfortunately, we doctors are not experts in the meaning of life.

The well known literary academic Terry Eagleton has just published a book entitled *The Meaning of Life* (Oxford University Press). I do not think it is any criticism of it that it does not provide a definitive answer to the conundrum, that we could profitably push into our patients' hands and say, "Here, read this," in the pious expectation that, having read it, they will not bother us again with their trifling complaints.

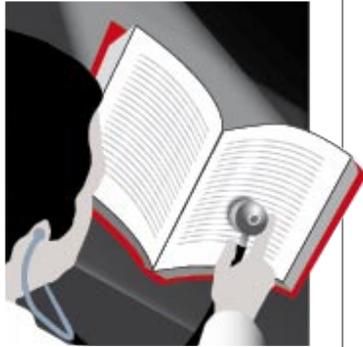
Here I must confess, in the spirit of declaring an interest, to an irrational and base prejudice against academics and intellectuals who publish under diminutives of their own first name. I mean, who could have taken seriously *A Treatise of Human Nature* or *The Decline and Fall* if they had been written by Dave Hume and Ted Gibbon?

But if Professor Eagleton's occasional lapses into politico-linguistic correctness irritated me, and I found his conclusions utopian and therefore fatuous, I was none the less impressed by his lucidity and (more surprisingly) his fair mindedness. He claims not to be a philosopher, but he does a fair imitation of one.

A passage in the book that stirred strong emotion in me, not because I disagreed with it (disagreement with an author is one of the pleasures of reading), but because, inadvertently, it returned

## BETWEEN THE LINES

Theodore Dalrymple



**No one would choose such a disability, and yet it did not prevent him from living as fully as any of his contemporaries**

me to my childhood, concerned disability:

"In Aristotle's eyes, the reason why you could not be really happy sitting in a machine [that delivered pleasurable stimuli directly to the brain] all your life is much the same reason why you could not be fully happy confined to a wheelchair . . . it is simply that to be stymied in one's ability to realize certain powers and capacities . . ."

As a child, my closest friend, from whom I was virtually inseparable for several years, was struck down by polio. It was all the more tragic because it happened immediately before the advent of immunisation against polio. He was rendered paraplegic; my parents, as I now realise, lived in mortal terror that I would be similarly affected.

His mother, however, was a staunch Christian Scientist, whose black, limp bound *Key to the Scriptures* by Mrs Eddy was a mysterious presence throughout my childhood, and would have no truck with illness, which she regarded as a kind of error. She expected him to make no concession to it. "His sticks," as we called his crutches, became just a normal part of our lives. I can still hear in my mind's ear the clicking sound they made as we went everywhere together.

He went on to have a much more interesting career than the majority without his disability. Here, then, is a paradox, if a fortunate one: no one would choose such a disability, and yet it did not in the least prevent him from living life as fully as his contemporaries.

The solution, perhaps, is this: that, within quite wide limits, limitations do not limit us. Infinity is our glory, as it is our burden.

Theodore Dalrymple is a writer and retired doctor

## MEDICAL CLASSICS

*La Belle Dame Sans Merci* By John Keats

First published 1820

Keats, it is well known, had some medical training. He completed his house jobs at Guy's Hospital after becoming one of the first people to pass the licence of the Society of Apothecaries. His experience of the family tuberculosis that would kill him at the age of 25 and his early years of surgical assistance gave him knowledge and experience of death, the only clue to his medical background that can be seen in his work.

In *La Belle Dame Sans Merci*, an imitation of a medieval ballad, an alluring, otherworldly damsel has fatally tempted the "knight-at-arms" who is found, at the poem's beginning, "alone and palely loitering." The narrator who addresses the opening line to the knight could be a medic taking a history—"Oh what can ail thee"—and goes on to a physical inspection of the lovelorn and possibly hallucinating knight: "I see a lily on thy brow/With anguish moist and fever-dew." The flower, a symbol of death, connects in the next line to another flower, a rose, seen fading on his cheeks, which "fast withereth too." When consumption was at its height, the pallor of the skin was felt to be in beautiful contrast with the rosy cheeks. These changes, however attractive, Keats knew were a death warrant. Tuberculosis had no cure. Indeed it was steeped in mythology involving spirits and even vampires.

The knight's reply to these inquiries—the rest of



**O how are you feeling, knight-at-arms?**

the poem—is his story of the faery lady, followed by his recounting a sinister dream populated by "pale warriors, death-pale were they all," who inform

him ghoulishly that "La Belle Dame Sans Merci/Hath thee in thrall." He finishes by reflecting on his captive, hopeless state, repeating the famous first verse with a subtle change in rhythm, "And this is why I sojourn here/Alone and palely loitering/Though the sedge is withered from the lake/And no birds sing."

A mysterious poem of seemingly endless interpretations, it uses images of death to straddle the supernatural and make it eerily present. Keats, by his own account, was not the most attentive student: "The other day, during the lecture, there came a sunbeam into the room, and with it a whole troop of creatures floating in the ray; and I was off with them to Oberon and fairy-land." Eventually he deemed himself unfit for surgery, saying of his last operation, "The opening of a man's temporal artery . . . I did it with the utmost nicety, but reflecting on what passed through my mind at the time, my dexterity seemed a miracle, and I never took up the lancet again."

Not every desultory junior doctor has such insight. Keats was a doctor for whom medicine could not compete with poetry. Our literature is the greater for it. Tamzin Cuming, specialist registrar, general surgery, Homerton Hospital, London [tzcuming@hotmail.com](mailto:tzcuming@hotmail.com)