reviews

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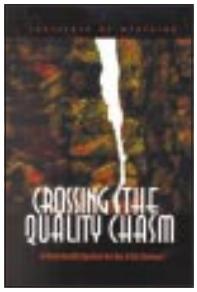
Crossing the Quality Chasm: A New Health System for the 21st Century

Institute of Medicine



National Academy Press,
$44.95, pp 364
ISBN 0 309 07280 8
See www.nap.edu for ordering details

Rating: ★★★★

Even with catchy titles, committee reports are unlikely bestsellers. This one has the background and intention to be different. The committee members, who were appointed by the US National Academy of Science for their creative thinking and knowledge of medicine, healthcare, and commerce, provide excellently researched evidence for the failure of the US healthcare system. They justify radical change and establish six aims and 10 simple rules for a completely different healthcare system. They call for a common purpose and as few simple rules as possible, based on a complex adaptive system model, and they contrast this with the current bureaucratic attempts to regulate problems created by the system itself.

The report explores the development of information technology, arguing that human brains should be reserved for judgments that are too complex for computers rather than for feats of memory. Brief case descriptions develop a powerful vision of what it might be like to experience this new healthcare. Although the authors don't go into the detail that would in reality have to be developed between those providing and receiving care, the vision is strong and convincing.

There are two major obstacles to the vision, and the book addresses both of these. The first is cost; the second—professionals' attachment to their current culture, roles, and professional identity—is probably harder to overcome. The authors argue that the present system is so wasteful that a new system could not fail to be more economic. Costs—including compensation for medical errors—are out of control. On all counts, the system is failing and there is no choice but change.

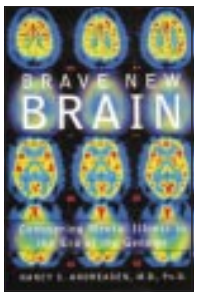
This report will influence healthcare policy makers throughout the world for at least the next 10 years. The NHS could be a more receptive environment for the vision than the US healthcare system. Even the section on funding applies to the United Kingdom. Already, government pronouncements on the NHS, on change, and on quality, and much of the work of healthcare think tank the King's Fund reflect the vision outlined in this report.

But will this be a bestseller? It deserves to be. It is relatively easy to read and is mandatory for anyone who has any interest in the future of healthcare or who wishes to understand the direction of current developments for quality, such as clinical governance. It also serves as a handbook for personal development and reflective practice. I suggest that the willingness of the workforce to embrace its ideas is crucial to the survival of the UK health service, so sales of this book could be a prognostic indicator for the NHS. Buy it and read it.

Alastair Baker *consultant paediatric hepatologist, King's College Hospital, London*

Brave New Brain: Conquering Mental Illness in the Era of the Genome

Nancy C Andreasen



Oxford University Press,
£19.99, pp 368
ISBN 0 19 514509 7

Rating: ★★★

In 1984 Professor Andreasen published a book called *The Broken Brain: The Biological Revolution in Psychiatry*. This influenced many latter day psychiatrists (myself included). Now Andreasen has produced a work in which she attempts to assay the field of contemporary psychiatric research, as psychiatry enters the 21st century, sandwiched between two major technological developments: the sequencing of the human genome and the use of neuroimaging to examine the structure and function of the living brain.

Is there a need for such a work? Are we not already deluged by brain books? Certainly, if there were a need then Andreasen would be a suitable guide. She is editor of the *American Journal of Psychiatry*, has contributed to the composition of the *Diagnostic and Statistical Manual of Mental Disorders*, has made significant contributions to the field of schizophrenia research, has studied the relationship between creativity and mental illness scientifically, and has also published early work on post-traumatic stress disorder (before it acquired that name). So, on all levels she is amply qualified. But do we need another book?

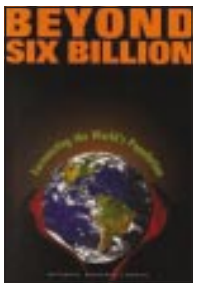
This book differs from others in that it is written by someone who has conducted original research, while continuing to treat patients. Andreasen can write scientifically, while also addressing the concerns of lay people. Many of the chapters begin with case vignettes (some of them very moving) and throughout Andreasen see-saws between cogent descriptions of scientific concepts and reference points that all will understand—a film that deals with schizophrenia, a novel whose character was depressed, and so on. This is a detailed text, not a coffee table book. It explains the principles of the new genetics, the anatomy of neurotransmitter systems, and the methodology of brain scanning. In four chapters devoted to diseases, Andreasen explains schizophrenia, mood disorders, dementia, and anxiety. She does not shirk ethical dilemmas and possesses a humane voice.

Where are the weaknesses? As with any book that attempts to cover a broad field, some infelicities occur. These are probably slips of the pen: the putamen lies lateral and not medial to the globus pallidus (p 73); reduced not elevated serotonergic tone is associated with impulsivity and suicide (p 311); and in the index, the name of one British psychiatrist is left floating, with no page attribution (obsessives will find Johnstone, Eve, on p 143). Elsewhere, the balance of Andreasen's expertise is clearly present in the schizophrenia chapter, while that on dementia lacks the same degree of detail. However, these are minor points. I think a lay reader, a medical student, or a generalist who wishes to update on current psychiatry will find much that is useful and inspiring in *Brave New Brain*.

Sean A Spence *senior clinical lecturer in psychiatry, University of Sheffield*

Beyond Six Billion: Forecasting the World's Population

Eds John Bongaarts, Rodolfo A Bulatao; Panel on Population Projections, Committee on Population, National Research Council



National Academy Press, $29.95, pp 258
ISBN 0 309 06990 4
Available to read free online at www.nap.edu/books/0309069904/html/

Rating: 0

This is a study in political correctness. It takes a comfortable global view and forecasts that humanity, having passed the six billion point two years ago, is now heading for nine billion by 2050—a year which many readers can expect to see. A report issued this month by the United Nations Population Fund predicted that the world's population would reach 9.3 billion by 2050 (*BMJ* 2001;323:1088). Other recent studies show the world's population growing more slowly and reaching nine billion only in 2070. It was only two billion when I was born. Nearly as much growth will take place in the next 50 years as took place in the last 50. Whereas the populations of industrial countries are now outnumbered four to one, they will be outnumbered seven to one by 2050. More than half the population growth will be accounted for by "population momentum." This is the inevitable growth in a young population that would take place if every family were to have two children (strictly 2.1) from now on. It can only be reduced if families of less than two children become the norm in rapidly growing populations.

If the global view is hardly reassuring, the local view is too terrifying for this book to contemplate. It fails to consider the plight of agricultural communities that outgrow the carrying capacity of their local ecosystems and have no new land to migrate to, and have economies that fail to provide sufficient exports, which they can exchange for food and other essentials—that is, they are demographically trapped. I once asked Jack Caldwell, Africa's most eminent demographer, how much of Africa he thinks is trapped. He replied that he thinks most of it is. Africa has been a net food importer for 20 years. Its population was set to quadruple before AIDS, and even now it is set nearly to triple. The end result of entrapment is starvation and population driven violence.

Not only does this book fail to confront entrapment, but demography and development economics don't do so either. All must therefore be considered intellectually corrupt—subject to the Hardinian taboo (named after the US ecologist Garrett Hardin) that prevents us humans—with the exception of China with its one child families—from confronting our population problems.

This book is a reminder, not so much to read between the lines, as to look over the edge of the population precipice and to steel ourselves for what is going to happen. For more about this, readers are going to have to ask their search engines to look for disentrapment on the web.

Beyond Six Billion looks so impressive—a shiny hardback sponsored by the four US National Academies, and written by the most eminent politically correct "yes men" that it was possible to gather round a table, all of whom presumably know what the real situation is. They appear to have got it right globally, but they have ignored the problem locally. They have persuaded the reader that all is well, when in fact all is far from well.

Maurice King *honorary research fellow, the University of Leeds*

Items reviewed are rated on a 4 star scale (4=excellent)

Do we need another anthrax test?

Researchers at the Mayo Clinic have unveiled a new test for anthrax "that can spot the microbe's DNA signature within 35 minutes," the *San Francisco Chronicle* reported on 6 November. The "unveiling" excited the rest of the US media, and why shouldn't it, for a new and rapid way of diagnosing this deadly disease must surely be a triumph?

The lead researcher, Franklin Cockerill, did his best to persuade journalists at a press conference last week that the discovery was indeed a breakthrough. The rapid test, he said, will allow for speedier treatment of people exposed to anthrax. It will also "alleviate undue anxiety more quickly in people who have not been exposed."

The researchers, funded by Roche Diagnostics, were working on the test before 11 September, but it was not a high priority. After the terrorist attacks, explained Dr Cockerill, they spent "25 hours a day, seven days a week" on its development. Roche has distributed the test to 24 laboratories around the country, initially free of charge, and hopes to get expedited approval for its product from the Food and Drug Administration.

But why is Roche in such a hurry? The Centers for Disease Control already has a test for anthrax DNA that is remarkably similar to the "new" one. Both use the polymerase chain reaction in which DNA is multiplied to make it easier to identify. The *New York Times* (8 November) pointed out that a rival drug company, Cepheid, had been selling "a quick DNA test for anthrax" since May 2000. Other companies are racing to offer similar commercial tests.

The *Chronicle* claimed that public health authorities were unimpressed with Roche's test, which still hadn't been evaluated in a clinical setting, only in the laboratory. California's medical officer, Michael Aschler, told the paper that there was no need for a new test, while the Centers for Disease Control had failed to endorse any commercial test for anthrax.

With anthrax fear spreading across the United States, did Roche merely spot an opportunity to market its test? Of course not, says the company. Dennis Coverdale, vice president of corporate relations, said: "We as a company hope the anthrax threats go away tomorrow."

So Roche will provide the test free of charge over the long term? "Probably not," he said, but "we haven't decided what we will do with pricing."

Online sites have seized on public fear to sell "anthrax medications and survival kits" (*BMJ* 2001;323:942). The tactic seems to be working—over 32 000 Americans in Florida, New York City, and Washington DC have taken antibiotics through fear of having been exposed to the disease (*Washington Post*, 11 September). Roche's test received huge US media coverage, and it is easy to imagine a scenario in which thousands of worried people demand the test to alleviate their anxiety. Roche says it is just trying to help those in the front lines do their job—but when the company starts charging for the test, such help will only come at a price.

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vCJD: health risks and health scares

Panorama: "Coming Clean," BBC 1, 11 November at 10 15 pm

What a programme making dream this must have been for the *Panorama* crew. It featured a fatal disease, a government scientist turned whistleblower, a buried report, and a set of surgical instruments locked in a hospital attic.

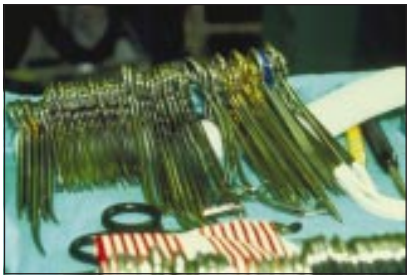
The disease was variant Creutzfeldt-Jakob disease, an illness with a complex and turbulent history, and now thought to be transmissible through the reuse of contaminated surgical instruments. The whistleblower was the government microbiologist Dr David Hurrell, who audited the country's surgical equipment cleaning procedures, and told all to *Panorama*. The buried report showed that there were "serious flaws" and "barely adequate" procedures in most hospitals. When NHS executives received the report, it was suddenly classified as "strictly confidential," and Dr Hurrell was told to destroy all copies. The surgical instruments locked in a Nuneaton hospital attic were used on a patient who then developed vCJD. Once the disease had been diagnosed, the instruments were traced, and are kept in a room to which only one person has the key.

The programme was certainly dramatic, and engaging. It concentrated on the life-cycle of the report, from commissioning to extinction ("the survey that didn't happen," as it is called in government circles). We were fed sequences of cars being driven around in fog, and interviews with the report author crouched in the back of a London cab. Did someone say *Crimewatch*?

Was this a programme aimed to heighten public awareness of an important health issue or another case of media scare-mongering? Respondents to *Panorama*'s website (www.bbc.co.uk/panorama) mostly thanked the programme for lifting the lid on the "cover up" but others found the programme alarmist, and criticised it for leaving no support information.

The government said the report had a "negative outcome," and for this reason did not want it to be released into the public domain. But the programme did not explore what exactly the "negative outcome" was. Was the government worried that poor hospital cleaning procedures could pose a serious risk of transmitting vCJD or was it worried that a minimal health risk could provoke unnecessary public anxiety?

Essentially this was a programme about health risk, but *Panorama* shied away from examining how much information about health risk should be publicly available. The public, the programme said, want to be treated as "adults" and kept fully informed. Yet we know that people find it hard to understand risk and deal badly with uncertainty, even though the government and medical profession generally advocate openness and transparency. The programme featured a man with haemophilia recounting his distress at receiving a letter that said that he had received blood products from someone who had later developed vCJD. His wife asked him if that meant he was going to die. The camera repeatedly focused on him smoking and cradling a roll up between his fingers—was this meant to be a cliché representation of his anxiety or was *Panorama* not aware of the irony of the shots? The man's risk of death from vCJD cannot compare to his risk of death from lung cancer.



ANTONIA REEVE/SPL

Contaminated?

Dramatic presentation diluted the scientific facts of this important and poorly understood disease. We were told that there had been no cases of vCJD from surgical instruments or blood products. Also we heard that research on mice brains—due to be published last week by Professor John Collinge of Imperial College, London—would show that metal wires contaminated with vCJD can infect another animal brain after only half an hour's contact. Professor James Ironside, of the CJD Surveillance Unit, told the programme that transmission was "no longer theoretical and is a real risk." But there was little to inform the public on the degree of this risk. Almost a year ago the government announced an extra £200m for sterilising surgical instruments to minimise the risk of passing on vCJD during certain operations and gave advice about reducing risk by disposing of surgical instruments and using single use instruments after tonsillectomies. It would have been useful to examine whether advice and money had changed practice.

Doctors are rightly encouraged to share information with the public, but a good doctor develops intuition to know how and what information to provide. It is hard to know whether *Panorama* should be criticised for provoking public anxiety or praised for airing a difficult issue. Perhaps we'll get the answer to that in our surgeries and clinics over the next few weeks, when patients ask us about the risk, and whether or not to go ahead with their operations.

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WEBSITE OF THE WEEK

Pet bereavement In this week's Soundings (p 1195), Trisha Greenhalgh describes the emotional consequences of losing a pet. Doctors often have to help patients who have suffered a loss, but what can they offer beyond the normal constraints of bereavement support and counselling? Is there something specific for those who have lost pets and need help to manage their grieving?

In Memory of Pets (www.in-memory-of-pets.com) is a professional looking site, adorned with thumbnail pictures of angel cats and dogs, winging their way to heaven. As "one of only a few free and permanent pet loss and grief support sites on the internet," it is making a concerted effort to help take the grieving process to its latter stages: daily and annual commemorative ceremonies. Now it is possible to join thousands of bereaved pet owners across the globe in a rosebud lined, candlelit vigil in honour of pets past and present.

The curiously named Lightning Strike (is it sudden death or a rapid support service?) "pet-loss support page" aims to provide everything a grieving pet person could want (www.lightning-strike.com). Post a message to tell the world how wonderful Fluffy was. Chat to other lost souls who have been through the same thing. The site is just a touch saccharine and, for those bursting to express their feelings through art, there is a section dedicated to poems commemorating those furry friends that have progressed to the afterlife.

Though it lacks the gloss and lustre of more professional sites, perhaps Lightning Strike offers the better "cybershoulder to cry on." It lets you send a "Pet loss postcard" to offer your condolences to the recently bereaved. What better way to show that you care?

Of course, these sites aren't for everyone; some patients may feel that you aren't taking them seriously. The Association for Pet Loss and Bereavement (www.aplb.org) can help. It is a non profit organisation dedicated to supporting those who have lost a "beloved companion animal." APLB was founded by professionals and provides publicity, literature, tapes, and counselling for those who are dramatically affected by the death of their pet.

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PERSONAL VIEW

Stuck in the middle?

I have just emerged from three years stuck between the medical profession and NHS managers on one side and the public, the media, and local politicians on the other. The only issue was whether or not the NHS could continue to run a blue light accident and emergency department at Kidderminster Hospital, one of the smallest district general hospitals in the country, with no paediatric department and just a single consultant in emergency medicine.

I was the local member of parliament, a government minister, and the husband of a general practitioner. What could an MP do in these circumstances? Well there were only two choices—either back the changes recommended by professionals or back a futile, misguided but popular (and populist) campaign against them. No MP could try to sit in the middle of this storm.

Arguments for scaling down the emergency department to a minor injuries unit were overwhelming. The local consultants said that the department wasn't safe and the King's Fund, brought in by the campaign, said it wasn't viable. Local GPs, alienated by how insensitively the health authority handled the case for change, at first kept their heads down. When they finally went public with their support for the changes, local people simply disbelieved them. "It's a case of patients against doctors; someone has to stand up for the NHS," a fervent woman said to me. I took the view that, unfortunate as it was, change was inevitable. The health authority didn't make the case for change very competently, but basically it was medically right.

What effect did all this have on me? Well, working as an MP became impossible and it led to my defeat at the General Election. Local people, whipped up into a state of high emotion, felt justified in abusing me while I was out shopping, pushing my children in the park, or attending a local football match. They complained that I did not understand local feeling. They claimed that I was just following the party line or that ministerial office had bought me off (which to anyone involved in Westminster is clearly nonsense). Eventually I was accused of being singlehandedly responsible for nothing short of mass murder. For three years I felt as if I was under siege.

It was not without its ironic moments. For example, someone who thought he was going to die as a result of having "his" accident and emergency department taken away from him slammed a door in my face. At that moment, my mobile went off. It was the president of a Royal College who called to say he was appalled about the turn of events and wanted to offer every support.

Am I glad it's over? You bet. Defeat was hard but not as hard as what went before. Life is more peaceful now. I have an anonymous life again and my children have their dad back.

How do I feel about it now? Well I don't blame the medics. They were right to follow the advice of their Royal Colleges, the King's Fund, and every other independent body that looked into the situation. When Professor Robert Winston came to Kidderminster and tried to explain how what was going on was precisely right, the local media dismissed his views. Lord Winston might be one of the world's leading doctors, the campaign complained, but what did he know about Kidderminster!

> Outwardly popular but dangerous services simply cannot be allowed to continue

What will happen now? Well, the extra services for Kidderminster for which I argued while an MP are coming following a Royal College inquiry. Has my opponent, Richard Taylor, a retired doctor and now the MP, produced a plan to bring back blue light accident and emergency, the one issue on which he was elected? No, of course not, and health ministers say that he has no plans to do so. If there were a way to bring it back, Dr Taylor would have explained how to do it long ago.

Where does this leave local people? Well, like the Duke of York's army, they've been marched up the hill and down again. They've been told that in losing their emergency department, a great wrong has been done to them and that their lives are in danger. The local paper has repeated this claim week after week.

Where does this leave structural change in the NHS? That's the real question. I'm a lawyer and so had a career to return to. Losing my seat was a disappointment but not a disaster. Other politicians, learning the lessons from Kidderminster, may think twice before opposing any campaign against a change in medical services, however essential. Local medics don't see it as their job to sell change in the NHS to the public, and who can blame them? They are busy, pressurised, and most have no allegiance to the government or their local health authorities.

That leaves a vacuum—whose job is it to face down public anger? The Bristol children's heart surgery saga shows that outwardly popular but dangerous services simply cannot be allowed to continue. Unfortunately I cannot see there being many recruits for the job of being vilified as public messenger for essential NHS changes. We will all be the losers.

David Lock *former member of parliament for Wyre Forest and government minister*
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SOUNDINGS

Critical event audit

I noticed the previous evening that she wasn't her usual lively self, but it was still a shock to discover her curled up, stiff and cold, the next morning. The children immediately attempted post hoc resuscitation by generously refilling her food tray. But to an experienced eye, there was no denying the clinical reality. Smokey Bin Hamster was no more.

Their next reaction was to stage a cover up. Don't tell the cleaner, they insisted. Their ill formed plan was to leave the dead creature curled up in her cage, shifting her position daily, and to walk past occasionally within the cleaner's earshot saying, "Gosh, Smokey's asleep again."

This plan was soon seen to be untenable, and our communal guilt surfaced. We started to trade indictments. Who had tried to see if she would eat cold chips two days before she died? Who had tied a conker to the roof of the cage? Who had first abandoned the rota for cleaning her out? Who had walked her along the piano keys? Whose friends had all had a go at Pokey Smokey?

One of the kids decided that she had died of depression. He had been the only one who had ever understood her feelings. The rest of us, he claimed, had taken her for granted. Rubbish, I said, the culprit was Bart Simpson. It said in the guidelines ("Caring for your hamster") that you shouldn't keep them near the television, especially loud and violent programmes. If you kids hadn't kept playing that bloody video she would still be alive.

In the silence following the row, I regretted my outburst and reflected on the blame culture that we had allowed to develop. The hamster could not be brought back, but the event should be seen as a learning experience, and processes put in place to prevent a similar disaster in the future. I found it hard to admit, even to myself, that I'd never read the guidelines properly, nor had I arranged appropriate training for the principal carer. Lines of accountability were unclear, and, worst of all, the crucial task of changing the water was either everybody's or nobody's job.

One week on, we are still slightly numb from the event, but we have all learnt a lot and we now have an evidence based care pathway in place with essential roles assigned to named individuals who are appropriately trained and supervised. And six days on, young Ginger is still the picture of health.

Trisha Greenhalgh *professor of primary health care, University College London*