reviews

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Changing the Face of Medicine: Celebrating America's Women Physicians

An exhibition at the National Library of Medicine, the National Institutes of Health in Bethesda, Maryland, United States, until 2 April 2005

www.nlm.nih.gov/changingthefaceofmedicine/

Rating: ★★

They treat the whole patient, striving to balance their personal lives and the needs of individual patients and entire communities. Deciding which issues to focus upon, they direct research and funding and are instrumental in implementing the policies, developing the drugs and treatments, and drafting the legislation to meet emerging medical challenges. They are … America's women physicians.

So not all that different from men, then? "Changing the Face of Medicine" celebrates women's achievement of parity with men in American medicine, while giving due attention to the often appalling adversities over which they have triumphed.

It took a century and a half. When Elizabeth Blackwell graduated from Geneva Medical College in upstate New York in 1849 she was the first woman to qualify as a doctor since the renaissance. Even then, she had been admitted on to the course only after the male student body had voted in favour of it, apparently as a joke.

COLUMBIA UNIVERSITY HEALTH SCIENCES DIVISION/AUGUSTUS C LONG LIBRARY

Virginia Apgar examines an infant's head

After qualification, Blackwell and her followers found that their problems were just beginning. Facing exclusion from employment in medical schools, hospitals, and laboratories, they set up women's medical schools and hospitals for women and children. The exhibition shows that the close association between women doctors and the medicine of women and children has been enduring.

A century after Blackwell's graduation, some of America's most renowned women physicians were best known for their work with children. Two examples were Virginia Apgar, whose score for evaluating a newborn's vital signs bears her name, and Helen Taussig, the founder of paediatric cardiology.

It is only in the past few decades that women doctors have felt free to range as wide as their male counterparts. When Linda Shortliffe received her board certification in urology in 1983 there were only 15 women urologists in the United States; now there are more than 200. The medical and surgical team set up by trauma surgeon Susan M Briggs to respond to national and international emergencies dates from 1999.

Surgery and academic research held out longest against women. The career of Florence Sabin (1871-1953) is exemplary in this respect. One of the earliest woman physicians to build a career as a research scientist, she suffered such harassment from other interns when she worked for Sir William Osler that she was left with little time for her own research. Later she was passed over for promotion to a position for which she had been regarded as a certainty. The incriminating minutes suggest that the selection committee preferred a man for the job—any man—to a woman.

But if it is any consolation for the years of discrimination, the wheel has turned full circle, and then some. While America's first women physicians had to confront prejudices about their supposed intellectual and physiological limitations, today's have to deal with their possible superiority to men. "Are Women Better Doctors?" asked a *New York Times Magazine* cover story in 1988.

If the exhibition has a limitation, it is that it is couched almost wholly in terms of personal stories. A few statistics might have given us a more accurate insight into how women are faring in US medicine today. For example, compared with men, how many women apply to medical school, how many are accepted, and how many graduate and with what grades? How many women are

AMERICAN BOARD OF UROLOGY

Linda Shortliffe (back row, second left) breaks into the inner sanctum of urology

practising medicine 10, 20, 30, 40 years after graduation? What is their average salary and how far up the medical hierarchies have they progressed? Compared with their male peer group, how many children have they had?

It is noticeable how many women physicians featured have been photographed with their children—a far higher proportion, one suspects, than if the exhibition was celebrating America's male physicians. But there's a niggle: how typical is that? According to the *Financial Times*, a recent survey for US lobby group the National Parenting Association found that 42% of female corporate executives aged 41-55 were childless as were half of those earning more than $100 000 (26 September 2003). Has US medicine found ways to accommodate motherhood that US business has not?

It is a success of the exhibition that it made me think of things beyond its remit, such as what was, and is, happening elsewhere. Finding themselves unemployable in mid-19th century America, some early women graduates came to Europe for clinical experience, which suggests that European prejudices may not have been as strong. One hundred and fifty years later, are European women doctors ahead or behind their American counterparts? And whatever the case, what are the reasons?

This exhibition leaves you in no doubt that the most powerful agents of women's advancement in US medicine have been women physicians themselves. Women physicians elsewhere might want to take note.

Tony Delamothe *web editor, bmj.com*
tdelamothe@bmj.com

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

ART

Pharmakon

A Wellcome Trust exhibition at the TwoTen Gallery, 210 Euston Road, London NW1, until 6 February 2004

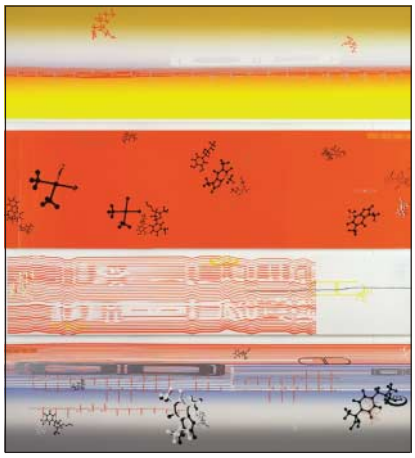
Rating: ★★

This exhibition claims to explore the downside to our ever-increasing levels of pill consumption. It purports to ask whether our dependence on prescription medicines could lead to a culture of "selling sickness," allied with an increasing unwillingness to take responsibility for our own health.

Artist Beverly Fishman has taken the shapes and colours of prescription pills and medications and reworked them into a series of extraordinarily bright and busy paintings. The results are unsettlingly dayglo—luminously brilliant shades of orange, yellow, and green deck the walls of this small and unassuming gallery space facing London's traffic choked Euston Road.

These layers of vinyl on powder-coated metal are bold and arresting, and likely to catch the eye of drivers and passengers caught in the eternal jam outside. But they are highly abstract works, and as such are open to a multiplicity of interpretations. The exhibition's curator, Denna Jones, says that Fishman's landscapes are "translations of an industrial process, one in which prescription medications travel from source to consumption." The appropriation of the materials of the industrial graphic products industry—the smooth, matt finish of pills and the visual language of the advertising industry—combined with shorthand references to molecular structures and ECG patterns, is said to make a statement about our relationship with prescription drugs.

But much as I enjoyed looking at these landscapes—and there are less than a dozen of them in the whole exhibition—if I hadn't been told they were commenting on the prevalence of drugs in society I could equally have thought that they were making a statement about how anything is sold in the modern world—training shoes, for example, or compact discs. But perhaps my reaction itself is a telling comment on the power of pharmaceutical marketing.



Dividose P.H.T. by Beverly Fishman

Trevor Jackson *assistant editor, BMJ*
tjackson@bmj.com

Madness Explained: Psychosis and Human Nature

Richard P Bentall

Allen Lane, £25, pp 640
ISBN 0 713 99249 2

Rating: ★★★

My first close contact with a clinical psychologist was when I was a new consultant, intent on fostering a multidisciplinary approach, during my first ward round. Nervously I pumped up the team spirit in the assembled crowd. In truth, I hadn't a clue what I was going to do. The psychologist looked stern and impenetrable. He took to contradicting everything I said. Desperately I would agree with him, only he would then change his point, saying that I had not understood. We went round like this for a while. I nodded and smiled and adopted what I hoped was not threatening body posture. Eventually I entreated him to spend some time with the patient. Anything to help move things on. I received a barrage of reasons as to why this was clearly not an appropriate case for him to take on. It was then that the penny dropped. He was more interested in being right than being helpful.

Of course, I have since worked with very friendly psychologists but it was with trepidation that I approached this book. The author wants us to be crystal clear that he is not a psychiatrist. He is a clinical psychologist. He stops short of saying that these are of two separate biological species but I had the feeling he might believe this. Anyway, I can now report that "flooding" (massive exposure to an anxiety provoking situation) really works. I actually began to enjoy the experience.

The book sets out to do three things. Firstly, to blow the lid on the limitations of the classifications currently employed in psychiatric practice, in particular the *Diagnostic and Statistical Manual*, now in its fourth version (*DSM IV*). This full scale attack on inadequate disease entities and their historic origins will not necessarily shock and awe. Perhaps in the ivory towers there is real honour at stake, but in everyday practice I have encountered only a healthy awareness of the limitations of the *DSM*. That said, this is a furious, well written, and thoroughly enjoyable assault.

Secondly, we are led around a maze of past and present psycho-socio-biological observations, and these are woven into a theory of sorts. It may be a little laborious but there is a lot here that is worth understanding. That the observations are often limited and the theory a little stretched is no great disappointment. This is an impressive review of literature, enthusiastically presented.

Thirdly, the author wants us to know some of his personal story, why explaining madness is important to him. The ever present distraction, though, is that intense sense of professional rivalry, almost palpable. In the glossary I learnt that "because doctors have a long history of telling other health professionals what to do, they are usually the leaders of multidisciplinary psychiatric teams." It threw some light on my encounter with that first clinical psychologist. In retrospect I am just glad that he didn't boo and hiss at me. The explanation of madness offered here—"essentially, though not exclusively, a cognitive framework for understanding symptoms, rather than disease entities, as variants of normal mental processes"—is supposed to make us more humane, tearing down the walls between madness and sanity.

Explanations of madness will continue to provide insight as well as mislead. But as long as all the explanations of madness just add up to a very small piece of a very large pie, in the real world at least, we have to remember the importance of being helpful rather than right.

Or perhaps I could explain it better like this. Madness is like being at the wheel of a car that you don't know how to drive on the streets of an unfamiliar city. A psychologist is someone who will look under the bonnet to show you how the bits and pieces seem to connect. A psychotherapist is someone who can point out the traffic jams but may also lose you down a dark narrow street where you end up in a ditch. Psychiatrists are like those men in tow trucks. They can fill the tank with chemicals, they can pull you out of the ditch and sometimes the conversation in the cab on the way home can be surprisingly enjoyable. And they love to turn on those flashing lights …

Nigel Lester *consultant psychiatrist, London*
nigel@dr.com

What the Industrial Revolution Did for Us: Modern Medicine

BBC 2, 28 October at 8 pm

Rating: ★★★

Presenter Dan Cruickshank has an infectious, donnish enthusiasm and joie de vivre that television producers obviously believe lends popular appeal to subjects that some viewers might otherwise consider dry as dust. In the latest episode of *What the Industrial Revolution Did for Us*, Cruickshank brought his straightforward storytelling and capacity for wonder to bear on the earliest controlled medical trials and the birth of modern medicine.

Introducing us to the achievements and discoveries of the likes of vaccine pioneer Edward Jenner, James Lind, who discovered the cause of scurvy, and William Withering, who is credited with introducing digitalis to medical science, Cruickshank explained how doctors in the 18th century were beginning to overturn 2000 years of hearsay, speculation, and hope. They were replacing it with science, with experiment and observation, and were giving medicine a new place in society.

BBC

The enthusiastic Dan Cruickshank

While industrialisation had made Britain rich, it had also made Britain sick. Diseases such as smallpox, typhus, and tuberculosis had dire consequences, and these consequences were intensifying on Britain's increasingly crowded streets. In the mid-18th century the average life expectancy was 36 and, as Cruickshank said, Britons had one overriding preoccupation: their health. Maybe not much has changed in that respect, nor in people's tendency to turn to quack remedies—some harmless, such as woodlice ground with nutmeg and sugar, some deadly, such as mercury and arsenic—in their desperation for a cure.

But in the 1700s the anecdotal began to gave way to the tried and tested. When William Withering, a Shropshire physician and botanist, heard how a man with dropsy had recovered after drinking a herbal medicine that had been brewed from foxglove, he had to know exactly how the plant had worked. He spent 10 years researching effects of foxglove and the correct dosage of digitalis needed to strengthen the contractions of the heart muscle. Withering published the results of his clinical trials in 1785.

James Lind was a Scottish naval surgeon who carried out a new kind of trial of the various cures that had been suggested for scurvy. Lind discovered that vitamin deficiency was the cause of scurvy by taking 12 men, all with similar symptoms of scurvy, dividing them into six pairs, and giving each pair different dietary supplements: cider, an unspecified elixir, seawater, vinegar, citrus fruit, and a mixture of garlic mustard and horseradish. Lind's way of thinking, as Sir Iain Chalmers, editor of the James Lind Library, explained, was "exactly the way that today we distinguish useful treatments from harmful ones."

JENNER MUSEUM, GLOUCESTER

Blossom, who had a leading role in the discovery of vaccination

Perhaps the disease that Britons during the Industrial Revolution feared most of all was smallpox. It was Gloucestershire doctor Edward Jenner's curiosity about milkmaids' apparent immunity to the disease that led him to devise the experiment (involving a milkmaid, a young boy, and a cow named Blossom) that gave us vaccination.

The programme came across as part documentary, part historical drama, with Cruickshank appearing face to face with fresh faced milkmaids and sailors sucking oranges and lemons. But this was far more than history-of-medicine-lite: this was an entertaining and successful attempt to explain the origins of the clinical trial and the value of the evidence based approach.

Trevor Jackson *assistant editor, BMJ*
tjackson@bmj.com

Public health doctors "hopeless" at using media

PR chief says they must learn how to present their stories

Public health doctors have long criticised the media for getting their priorities wrong and giving space to relatively minor problems, such as the recent outbreak of severe acute respiratory syndrome (SARS), while ignoring the major threats of smoking, alcoholism, and obesity.

Professor Sîan Griffiths, president of the Faculty of Public Health Medicine, illustrated the point at a seminar organised by health think-tank the King's Fund last week, by comparing the media response to two reports in which she had been involved.

The first was on the SARS outbreak in Hong Kong. Professor Griffiths had co-chaired the committee set up by the Hong Kong government to assess the effectiveness of the health authorities' response. It was published in October and had received front page coverage in all the Hong Kong newspapers. Altogether 299 people had died in the episode, 63% of whom were older people.

By contrast, a report on older people in the United Kingdom dying from cold—issued in March by the National Heart Forum, Help the Aged, the Faculty of Public Health Medicine, and others—produced almost no media response at all. That report, *Fuel Poverty and Health: A Toolkit for Primary Care Organisations,* tackled the issue of why Britain had 40 000 excess deaths every winter, when many colder countries did not see a similar increase.

"Three hundred deaths in Hong Kong resulted in huge coverage. Forty thousand excess deaths in the United Kingdom got no coverage at all," Professor Griffths told the seminar, which had been organised to discuss the recent King's Fund report *Health in the News: Risk, Reporting and Media Influence* (*BMJ* 2003;327:688).

But public health doctors at the seminar were told that they themselves were partly to blame. Ron Finlay, chief executive of the advertising and public relations agency Fishburn Hedges, said: "Public health professionals must learn how to present their stories to the media."

BBC radio correspondent Roger Harrabin, one of the authors of the King's Fund report, agreed. Public health professionals "are pretty hopeless" at presentation, he said.

Professor Griffiths also concurred. She said that public health doctors had learnt that lesson in Hong Kong. Consequently a series of seminars had been organised between journalists and public health doctors to improve communication. She suggested that it might be a good idea to do something similar in the United Kingdom.

Annabel Ferriman *news editor, BMJ*
aferriman@bmj.com

PERSONAL VIEW

Patients, doctors, and sickness benefit

In the United Kingdom more than 2.7 million people of working age—about 7.5% of the working age population—are now claiming incapacity benefits. The number has more than trebled since the 1970s. Similar disturbing trends have been reported across Europe, at a time when all the other indicators are that general health is improving. Each person now claiming incapacity benefit began by asking their doctor for a sickness certificate.

As businesses increasingly prioritise corporate profit above any other considerations, the population becomes polarised between those who have no work and those who have too much. The growing number of people who are either unemployed or away from work because of sickness is balanced by workers who are subjected to longer and longer hours and ever increasing demands and expectation. "Leaner and fitter" organisations have cut staff to the minimum, increasing the stress on those who remain. The resulting feeling of loss of control has a negative effect on health. As soon as one person feels no longer able to cope and takes sick leave, the pressure on the remaining staff is ratcheted up yet again.

At its best, work is a source of fulfilment, dignity, social contact, achievement, usefulness, and economic self sufficiency; at its worst, a source of anxiety, sleeplessness, fear, humiliation, and despair. Almost no one wants to be excluded from the opportunities offered by work, but many people are defeated by its demands. Much has been written about the increasing absence due to illness, but the voices of those directly affected are seldom heard. Their stories are heard in the general practice consulting room, and each story is different and requires a different solution. The predicament of someone who feels forced out of work by an uncontrollable workload is different from that of the teacher who feels threatened by violent pupils and different again from that of the person with no educational achievement and who may come from a family entering its third generation without work.

It is easy for beleaguered policy makers to regard claimants of incapacity benefit as manipulative and general practitioners as failing in their role as gatekeepers to the welfare benefit system. Such a view is unhelpful, as patients and general practitioners are well aware of their predicament.

The discipline of general practice is founded in the long term relationship between doctor and patient, which nurtures mutual respect and trust. Patients can trust doctors only if they feel heard and understood, and this can happen only if doctors, in turn, trust patients to give a truthful account. If general practitioners feel themselves to be under pressure and begin to regard every request for a sick certificate as suspicious, trust is very rapidly undermined and, once gone, is difficult to rebuild. Increasingly general practitioners feel themselves to be the functionaries of an oppressive economic system and obliged to control access to the benefit system, a position that conflicts with a responsibility to act as the individual patient's advocate.

Undoubtedly, many people currently claiming incapacity benefit have lives that could be better, in many ways, if they could return to work. People who are excluded from work have worse health and a lower expectation of life. General practitioners understand this and yet are acutely conscious of the huge barriers that can prevent return to work. Experienced doctors are also aware of a critical point of irreversibility after a period of absence from work: the longer one puts off trying again, the less likely is one ever to manage it. In Britain the average length of absence from work among people who have been on incapacity benefits for 12 months or more is eight years.

> General practitioners feel themselves to be the functionaries of an oppressive economic system

The solution lies not in cajoling claimants or their general practitioners but in rediscovering, even requiring, a socially inclusive solidarity in the workplace. Many labour organisations seem to have lost their way in the later years of the 20th century and now devote more resources to providing counselling for individual workers than in improving terms and conditions for everyone. The number of people taking sick leave will fall only if doctors can refer workers—as soon as absence from work looks likely to become prolonged—to non-stigmatising employment rehabilitation that is genuinely supportive.

People trying to return to work need opportunities for part time work in sheltered environments, and they need to be able to exert a degree of control over their work and to be paid more than they would get on benefit. All businesses and workplaces should be supported and even subsidised to provide environments that accommodate a range of capabilities but within which everyone is allowed the dignity of work. The obligations of economic profit and social solidarity pull in different directions, and the conflict is played out between patient and doctor in the consultation over sick certification. However, more can be done to resolve the problem outside the consulting room than inside it.

Björn Nilsson *family doctor, Kolbäck, Sweden*
Iona Heath *general practitioner, London*
iona.heath@dsl.pipex.com

SOUNDINGS

Diagnosing house officer fatigue

In a reaction to much hyped extrapolations about excessive hospital accidents and deaths, the educators and administrators who (over)regulate clinical medicine have decided that the root of all trouble is resident fatigue.

They might have been better off addressing the real structural defects of modern hospitals—too much paperwork and bureaucracy, unavailable patient records, nurses pushing paper instead of nursing, doctors' patients scattered over 12 floors, and chief residents (registrars) doing everything else but closely supervising junior house officers.

But instead the armchair generals have promulgated specific directions on how many hours residents may work, how many days they must take off for rest and recuperation, and how after a night on call they may spend the afternoon in bed, even if 80 patients are scheduled for the clinic that day.

The result is massive discontinuity and pervasive chaos. Senior attending physicians wander about alone because their residents are in class, in a (largely misnamed) continuity clinic, or in bed. Residents work in shifts, in teams, like primitive man hunting in packs, constantly signing out to one another, giving rise to the "he is not my patient syndrome," so that no resident can name a patient truly his own.

Yet the armchair generals remain troubled. If fatigue is the cause of all evils, then how is it to be diagnosed? Don't we need criteria, algorithms? Fortunately a committee of academic medical school rear admirals has recently issued specific guidelines, explaining how a psychiatrist has assembled a list of symptoms suggestive of excessive fatigue. They include involuntary nodding off, waves of sleepiness, lethargy, irritability, mood lability, poor coordination, difficulty with short term memory, and tardiness or absences at work. Fatigue may manifest itself as depression and the resident may need "to consult his/her primary care physician."

Clearly these vague instructions require quantification, peer review, and evidence based verification. But pending the development of a reliable downloadable algorithm, the committee advises that the psychiatrist expert in diagnosing fatigue may be contacted by email.

George Dunea *attending physician, Cook County Hospital, Chicago, USA*