Dictionary of Health Economics
Alan Earl-Slater

Radcliffe Medical Press, £10.95, pp 164
ISBN 1 85775337 2
Rating: ★★★

I t would be easy to imagine the medical world in the twenty-first century without the standard tome kept in the office or library. However, such a vision would be grossly inaccurate. Nevertheless, even with limited relevance to patient care, I thought it was until I studied it and was embarrassed by my previous disdain.

Certainly economics, like epidemiology, is a partial lens that does not always reveal important information. For example, supply and demand curves do not always capture the full costs of human activity, such as the social and emotional costs of undergoing one treatment compared with another. Economic findings need to be viewed critically, taking into account limitations of constraining everything in terms of supply and demand, just as epidemiological findings should be viewed critically for reducing the world to exposures and outcomes.

But if such limitations are recognised, economics provides a powerful framework for understanding medicine in the wider world, and one’s place within it. Economics makes issues such as drug pricing, staff shortages, ageing, patient choice, and the expansion of pan-European legislation relevant to practice in new ways. Why are drugs in Britain sometimes a hundredth the price of those in the United States, while UK CD Roms are more expensive? To what extent are doctors likely to be replaced by nurses? How will European human rights legislation affect the cost of medical insurance in Britain? Is it better to give people with multiple sclerosis interferon alfa or extra nursing care? Why will the post-baby boom generation be poorer than their parents, and how will the health system cope with more elderly people?

Pocket PDR: Medical Book System
Franklin Electronic Publishers, $149.95
ISBN 1 56712 410 0
Rating: ★★★

I t took me some time to work out what a “PDR” is, but, after rummaging through the literature that accompanied this palmtop device, I concluded that it probably stands for “Physicians’ Desk Reference”. The Pocket PDR is essentially a personal digital assistant with medical information loaded on to it rather than the standard word processing and spreadsheet capabilities seen on the devices that increasing numbers of doctors wield on the wards on a daily basis. The medical information comes on “smart cards” that can be easily inserted and changed—I was provided with “The Physicians’ Desk Reference,” “The Merck Manual,” and “Martindale’s Extra Pharmacopoeia”—and the palmtop can access and read two such cards at the same time. There is an index feature as well as an easy to use search facility for each of the cards, making the process very quick and straightforward. The screen is large enough to display six or seven lines of text, which can also be personalised with annotations by the user.

I was impressed with the concept rather more than the content. It would not be too great a leap of faith to imagine all junior doctors being issued with a “PDR” and smart cards brimming with information pertinent to their job and customised to the policies of their particular hospital trust. With each job change, a new smart card could be issued that contained a standard medical or surgical text plus the hospital formulary and relevant contact information. The addition of word processing and spreadsheet capabilities would make this the ultimate in personal digital assistants—being capable of educating as well as being used as a log book. Unfortunately, the cost is undoubtedly going to preclude this happening in the near future, though, with ever increasing numbers of medics succumbing to the IT fervour that is sweeping the nation, it will probably be sooner than we think.

Yet, few health professionals are trained in economics, while relatively few economists focus on health (which may explain why many health economic analyses are too poorly conducted to provide reliable results). Earl-Slater’s dictionary should help both groups. It covers most terms likely to be encountered in health economic research, including many from epidemiology as well as policy jargon from the “new NHS.” The book is well presented, with diagrams and short examples illustrating concepts such as measures of risk. Associated terms are thoughtfully cross referenced throughout.

The book’s main drawback is its prose. Some sentences are difficult to follow for the non-economist, making an otherwise timely and useful reference book frustrating to use. Like most dictionaries and glossaries, this book needed a punctilious editor. That said, given its extensive scope and clear presentation, those who need to interpret economic and policy jargon—most of us facing the cost of ageing baby boomers—will find it well worth the effort.

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Reviews are rated on a 4 star scale
(4=excellent)
The Whole Brain Atlas
Keith A Johnson, J Alex Becker
Lippincott, Williams, and Wilkins, $150
ISBN 0 7817 1841 4
Rating: ★★

This technically ingenious CD Rom claims to offer a complete teaching guide to the imaging of brain anatomy based on magnetic resonance, computed tomography, positron emission tomography (or SPECT), plus a comprehensive guide to the imaging of brain pathology. Although the number of images cited seems enormous (13 000), it is achieved not by covering a correspondingly huge number of cases but by storing a vast number of images for each case or patient studied. Thus, for each case, the CD has the complete magnetic resonance studies (often in several modes), isotope studies, and in some cases computed tomographic studies, and so may provide hundreds of images.

These are organised on a simple “walk through” basis and navigated from a baseline image and coded control diagram. There are also several video clips, mainly of normal magnetic resonance angiograms of the neck and cerebral vessels, which reproduce the rotation of the vessels as seen on magnetic resonance visual displays. Again, a large number of still frames can be viewed separately.

The large number of isotope studies is difficult to justify since they add little to normal anatomical knowledge and, though useful in research and in certain conditions such as Alzheimer’s disease and other dementias, they have little clinical value in most pathological brain studies. While this extravagant approach may be defensible for teaching or self teaching of anatomy, it seems rather wasteful and time consuming in teaching neuropathology. In practice, it is one of the reasons for the pathology section being unbalanced and based on only 30 cases. Thus, such vital subjects as congenital brain lesions and epilepsy are conspicuous by their absence, and others, such as neoplasm and trauma, are badly underrepresented.

In some cases the user is provided with well explained “guided tours” through an abnormality. In others, however, users may have to wade through a plethora of normal images to find those showing abnormality. These are usually unlabelled and without legends or descriptive reports, although a short clinical history can be easily produced by clicking on the appropriate code word.

Vascular lesions receive most attention (10 cases). Nearly all are labelled “acute” or “subacute” stroke and show infarcts. The important subject of subarachnoid haemorrhage is absent, while neoplasia is represented by only five cases and infections by only four. It is mystifying that one of these cases should be of a patient with Lyme disease, an interesting but rare condition, and why this case should be linked to a major article on the condition, a privilege not granted to more common diseases.

This compilation presents a good overview of normal brain anatomy, as displayed by modern imaging techniques, and introduces the user to the versatility of computer manipulation of images. The pathology section is more limited and, for the reasons mentioned above, can be regarded as only an introduction to a vast field that is better covered in standard textbooks.

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NETLINES

- For those interested in headaches, www.hscsy.edu/~haasd/index.html may be useful. The site is the work of a neurology professor, who has created a colourful interface from which it is easy to extract information. A scroll down the contents page gives an overview of what is on offer, which is oriented very much towards standard clinical practice. There is good material here, though it is primarily a text based offering.
- It is easy to be overwhelmed by the volume of medical literature being generated. One way of managing this glut of data is for someone to review and summarise key points from the medical literature on a regular basis. The Florida Academy of Family Physicians produces such reviews and posts them on www.fafp.org/public/review/index.html. Each week a few papers from well known journals are summarised and accompanied by links back to the journal’s website. This helpful service is easy to use through a simple, though stark, index-style interface. One improvement would be the addition of a facility for having the latest summaries emailed direct to users.
- If you want to find out what medical internet contributions are coming from your own locality try visiting www.medwebplus.com/location. Just choose your country from the list, which runs from Argentina to Zimbabwe, and work your way down to the location nearest you. Out of curiosity, I looked up my city, Leeds, and found over 20 sites listed. One way to improve this service would be to use maps to provide a pictorial link to the database.
- The Centre of Reproductive Medicine, Bristol, has produced a well designed site at www.repromed.org.uk. The home page includes links to four other related sites (though the link to the Society for Low Temperature Biology is dead), guidelines, a patient website, and an excellent listing of other net based resources. The guidelines are useful, though there are not that many available. There is a good spread of links, which will interest a general medical audience as well as those interested in reproductive medicine.
- A UK obstetrician has put together an interesting gestation calculator and decision support system (www.hutchon.freeserve.co.uk). This requires data from ultrasound examination and the menstrual history. The interface is simple enough, though dates can be entered in US style (month first) or UK style, and it works best with Internet Explorer version 4 or later. One nice touch is that the calculator can still be used even if you are off line.

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We welcome suggestions for websites to be included in future Netlines. Readers should contact Harry Brown at the above email.
Hollywood hails a tobacco whistleblower

*The Insider*, directed by Michael Mann, from Touchstone Pictures. On general release in north America

The drama revolves around Bergman’s efforts to persuade Wigand to speak publicly about Brown and Williamson’s knowledge of nicotine addiction, its manipulation of the drug, and its refusal to remove a carcinogenic substance from its pipe tobacco. Wigand fears that violating his confidentiality agreement will place him at personal risk and jeopardise the medical insurance benefits he receives under his severance agreement—including expensive coverage for one of his children who suffers from a chronic illness.

The film’s poignant portrayal of Wigand is more faithful to actual events than its representation of Bergman, whose story of rebellion and resignation from CBS is overstated. The drama deports the difficulties faced by Wigand, who was threatened by Brown and Williamson’s chief executive, Thomas Sandefur (Michael Gambon), and followed by shadowy figures on several occasions. He even found a bullet in his mailbox. His position becomes more precarious after he has given an interview to CBS and the company decides not to show it because of fears that Brown and Williamson may sue, which might jeopardise CBS’s anticipated multimillion dollar purchase by Westinghouse.

The film is enthralling, but it should not be mistaken for reportage. Its adverts proclaim: “Ordinary men of uncommon courage risk all to speak out and change everything.” However, for those who have participated in shaping the recent legal measures against tobacco companies in the United States and who know the chain of events of the past five years, *The Insider* oversells the relative importance and impact of its story, which is simply one chapter in a longer tale.

It may not be any consolation to Brown and Williamson that, by the time the real Jeffrey Wigand went public, most of his information had already been exposed. Even his painful experiences were not unusual, as they were experienced in various guises by other whistleblowers and anti-tobacco activists, as told in the forthcoming book *Civil Warriors: The Legal Siege on the Tobacco Industry* by investigative reporter Dan Zegart. What concerned the tobacco companies—fast becoming America’s preferred defendants—were the legal ramifications of the fact that Wigand could recite the damnable facts as a former high level executive. This may help to explain Brown and Williamson’s reaction to the movie’s release. The company accused Disney of stretching the truth—an ironic claim from a cigarette manufacturer—and warned that it might sue. It also commissioned a survey of movie patrons, evidently designed to support its predictable allegation, as part of any legal action, that the movie inflamed public prejudice against the company and caused it financial harm.

To briefly correct the film’s view of history, the shot that launched the revolution was actually an award winning investigative piece by another *60 Minutes* producer, Walt Bogdanich, then with ABC News, who in February 1994 exposed tobacco manufacturers’ secret manipulation of nicotine to addict smokers—more than a year before Wigand was interviewed. Bogdanich’s expose featured an interview in silhouette of the premier whistleblower, a former employee of RJ Reynolds codenamed “Deep Cough.” The starting report galvanised the US Food and Drug Administration to open its historic investigation of tobacco, prompted Congress to convene the hearing in which seven tobacco chief executives swore that nicotine was not addictive, and led to the filing of the first ever class action litigation on behalf of injured smokers—events that helped inspire Wigand to come forward.

So it seems oddly banal when Pacino’s self righteous Bergman exclaims to his superiors, as if by revelation, “Big Tobacco is a story!” Ultimately, however, the film’s failure to tell the complete tobacco story does not diminish the power of its message. As bad as CBS looks, Big Tobacco fares worse. Perhaps the foremost impression is—in best Disney style—the tobacco bosses’ personification of evil. Brown and Williamson’s Thomas Sandefur verily drips the stuff. By fuelling public revulsion, the film should help speed the growing cultural tide against the tobacco industry and its lethal product—a valuable contribution by any measure.
Time for a sinister practice

Between 8% and 15% of Western populations are left handed. The difficulties they face in a society constructed for right handers are unrecognised by the majority. Even our language reflects the discrimination against the left handed. The French word gauche for left has come to mean clumsy or awkward, and the Latin sinistrum has developed evil connotations. Contrast this with the words adroit and dextrous, which, derived from their French and Latin equivalents for right, mean clever or skilful. The origins of these words have more to do with the historical mistreatment of the left hander—for example, forcing left handed schoolchildren to write with their right hand, than any defect inherent in such people.

The medical world has been guilty of propagating this discrimination. Clinical teaching dictates that all examinations should start from the right hand side of the bed. This position clearly favours the right hander. From the beginning medical students are instructed to use their right hand regardless of hand preference. This teaching is reinforced by the many textbooks of clinical examination on the market.

Is there a problem? Currently, there is no objective evidence, as no surveys have looked at handedness of undergraduates and their experiences throughout their clinical years. There is no doubt that some left handed doctors have excelled themselves in the medical field. In wider society left handers have overcome difficulties to become notable artists, sportsmen, musicians, etc. Yet these talented few can blind us to the problems that more ordinary people face. It is claimed that left handers suffer more accidents, have increased rates of delinquency, and die younger than right handers, although these claims have been challenged.

So why has no one complained? Probably because indoctrination begins on the first day of the clinical course. If they experience any initial difficulties left handers are likely to be told that there is no alternative to using their non-dominant hand for examination. Medical students will be too intimidated to protest or will accept this without question so early in their clinical careers.

How many medical students are affected by this? There were 11 807 entrants to United Kingdom medical schools in 1998. If we assume that between 8% and 15% of these are left handed then there could be as many as 944 to 1771 medical students forced to use their non-dominant hand for clinical examinations every year.

Some doctors may remain sceptical. Those right handers who have difficulty empathising should try palpating abdominal organs with their left hand, or recall the difficulties they had (or still may have) examining the left eye during fundoscopy. When faced with a lack of access to the right hand side of the bed would these doctors move the patient or even the bed?

But why should doctors examine from the right hand side of the bed? The only reason is tradition. We have been examining this way for decades. Yet there is no reason why a high standard of clinical examination cannot be performed from the left hand side of the bed, using the left hand. It would require very little effort to adapt our present approach to examination for the left hander.

Most of the examination would simply be a mirror image of conventional techniques. The radial artery can be assessed by the left hand, the jugular venous pulse with the left eye dominant, the tendon reflexes elicited with the left hand, etc. Some modification would be required for the asymmetrical organs, such as the heart, liver, or spleen.

For this to be possible, the profession has to acknowledge that a problem exists. The royal colleges would need to take the lead in promoting this enhanced style of clinical practice. Clinical teachers and examiners of all levels would need the mental dexterity (or should that be mental sinistrity?) to assess students opting to use their left hands. Such a revolution in clinical practice would be liberating for left handers. They need not waste time attempting to learn how to assimilate information from their non-dominant side. Instead they can focus on the ever increasing demands of the medical curriculum.

For decades our methods of clinical examination have gone unchallenged and remain rooted in tradition. The emphasis of examination from the right side of a patient has the potential to cause difficulties for the left hander. This rigid adherence to historical practice echoes the efforts of misguided school teachers, who forced their left handed pupils to scribe with their right hands. This practice has been abolished by schools, yet we perpetuate it in the medical world. If change was desired it would be a simple matter to modify clinical techniques to allow examination from the left. This enlightened approach would be enabling to the left handed doctor. The left hander already faces many difficulties in our right handed society. Is it not time that we adopted a more flexible approach to clinical examination?

From the beginning medical students are instructed to use their right hand

T A Roper senior registrar in medicine for the elderly, Leeds

The lords medical

I liked the House of Lords with its families of accidental legislators. Hereditary peers were motivated by the unfashionable principle of noblesse oblige. Without them, all parliamentarians are driven by personal ambition, just like the rest of us.

The upper house still has 26 lords spiritual and a similar number of law lords. The third great profession, medicine, is underrepresented. There are noble doctors but they have been selected by the prime minister for their excellent personal qualities—despite (you feel) rather than because of their medical backgrounds. By contrast, bishops arrive in the house by “achieving seniority.”

When the chamber is finally demerits, medicine, too, should be represented as of right. It consistently outscores other professions in terms of public respect. More importantly, doctors, even senior ones, still talk face to face with the people.

Law lords interact with commoners through the medium of other lawyers. Bishops communicate mainly with their coreligionists. Only doctors talk on a daily basis with a wide range of people about the things that the people really care about. This is reflected by the fact that when members of the House of Commons go back to their constituencies they hold “surgeries.” They do not hold court or preach.

With so many lawyers in the lower house, the upper chamber should practise positive discrimination to include other professions. A starting point would be 26 elected lords medical. Nowadays, over half of medical graduates are women, so this group should have the correct gender balance.

Election would not be straightforward. Unfettered self nomination and alphabetism, as favoured by the General Medical Council, are undesirable. There should be an electoral college with lay people, some medical editors perhaps, and representatives from the mélée of organisations which currently fail so dismally to give a single coherent voice to our profession.

The only rule regarding election of the lords medical would be that they should be aged under 45 when they begin their single 12 year term. This means that none of the medical grandees who could champion this change would benefit from it. A fatal weakness, perhaps, but it is still an idea worth archiving.

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