Half a century in medicine through the eyes of a physician

JOHN HASSALL MB BS, FRACP

Much has happened in the field of medicine over the past 50 years. Here is a personal account of how medicine has evolved, covering selected aspects of both the technological advances that have changed the management of diseases and the issues affecting the practice of the profession as a business.

© JOE HELLER, GREEN BAY PRESS-GAZETTE, 2000

When reflecting on some of the changes in medical practice to which my generation has borne witness during the last 50 years, and allowing my professional life to flash before my eyes, some recall bias and parochialism are unavoidable. Before discussing the technological advances which have transformed the medical landscape, I will reflect briefly on some of the less spectacular changes which have influenced our hearts and minds, including those affecting the make-up of the medical workforce, how it has been educated and the environment in which it has practised.

Education, insurance, ethics and the internet

Our profession has always shown a tendency to what epidemiologists refer to as familial clustering, and for a long time it was the domain of white Anglo-Saxon males. Of those who graduated with the legendary John Hunter in 1921, 5% were women; when I graduated 31 years later the number had increased to only 13%; but women now comprise more than half those entering the faculty. There are still surgically orientated training programs that pose problems for mothers of young children, and women are still underrepresented in some areas of management, although with some notable exceptions. In the Federal sphere of the AMA, for example, the glass ceiling has been shattered with such force that shards of falling glass impaled a recent Federal Minister for Health.

Dr Hassall is Consultant Emeritus in Rheumatology, Royal Prince Alfred Hospital, Sydney, NSW.

At the University of Sydney, my alma mater, changes to the curriculum have been undertaken from time to time with the aim of producing the very best of good doctors. The most recent has been the introduction of a graduate medical program, which will ensure that doctors will be much older when they graduate. They are likely to be wiser too, but there is still much to be learned about the practice of medicine by being there; much that cannot be taught by role-playing or by genuflexion before the altar of evidence based medicine.

Graduation once conferred the privilege of attaching a doctor's badge to one's car, a status symbol to which most of us felt entitled after six years of study. But the badges have gone. For some, they may have clashed with the tristar emblem on the bonnet, but there were practical reasons as well – the badge was a magnet for villains prepared to force open the boot in search of drugs, and willing to accept as a consolation prize a fine set of golf clubs.

Another dim memory of our collective innocence is that of medical indemnity insurance. Ours was the generation that could buy peace of mind for a few hundred dollars a year with the Medical Defence Union; then there was the United Medical Protection company (UMP), and then there was none. While we blame lawyers for much of the chaos surrounding this crisis, those of us who do medicolegal work maintain with them a symbiotic relationship in which it is not always easy to spot the difference between the parasite and the host.

Advertising by doctors was once restricted to a plate of strictly regulated size to be hung outside the surgery door; anything beyond that earned sanctions of which the most feared was the scorn of one's peers. But since Macquarie Street has merged with Madison Avenue, just about anything goes. It seems that those who believe they are the best of the best are overcome by an unselfish urge to share this secret with as wide a consumer base as possible.

We have witnessed the growth of an ethics industry that has

imposed upon us familiarity with concepts of autonomy and paternalism, and of beneficence and non-maleficence. These are high-sounding words that do little more than codify standards of behaviour which are often intuitive, or which are learned by example from those who practise medicine well. The big-ticket items continue to engage and perplex philosophers and law makers as they grapple with issues as widely separated as reproductive technology at one end of the spectrum, and euthanasia at the other.

Social and political changes accompanied the introduction of Medibank in 1975 by a Labor government after their conservative opponents had been dozing at the wheel. The changes were resisted by many in our profession, embraced enthusiastically by our patients, and are now set in stone on both sides of politics. There is no doubt that universal health insurance has been of financial benefit to doctors too, but it has come at a price. Taxpayers are now aware that they contribute to our seemingly enviable lifestyles, while many members of the public have the mistaken idea that Medicare rebates are sufficient to cover the costs of running a medical practice. These costs are becoming prohibitive, and have encouraged the corporatisation of many forms of medical endeavour – from pathology and radiology through to general practice. This trend, for good or ill, is certain to continue.

The practice of medicine has become demystified and deglorified. The reverential approach to medicine served us well: it was encouraged by those practising it, and for a long time was accepted by those on whom it was practised. But it has given way to a more sceptical and realistic perception of the healing profession. This has been inevitable and for the most part beneficial; but the loss of faith has come at a cost not only to us, but to our patients as well.

The information revolution has allowed members of the public to indulge their curiosity about disease and its treatment by surfing the internet. Having previously been uninformed, patients can now become spectacularly ill-informed as they rejoice in information overload unbalanced by perspective. While demanding nothing less than full and frank disclosure from their doctors, and a scientific explanation for all that we say and do, our patients often seek solace from alternative therapists whose treatment remains blissfully unburdened by the discipline of clinical trials.

As they have become increasingly sophisticated about medicine, patients have become increasingly aware of their rights, and doctors have been increasingly called to account for their wrongs. With the Health Insurance Complaints Commission, the disaffected have a willing and enthusiastic forum through which they can seek vengeance for all manner of wrongs – some real, some imagined and some contrived. Setting its sails to the prevailing winds, the New South Wales Medical Board has introduced a veritable smorgasbord of desirable qualities for approved medical practitioners. The most surprising of these, no doubt endorsed enthusiastically by the Roads and Traffic Authority, requires that our driving record be laid bare as we apply each year for registration. I can think of some surgeons of yesteryear whose behaviour anticipated by decades the current epidemic of road rage, and can imagine how they would have reacted to the threat of deregistration.

Transforming technological advances

Advances in diagnostic imaging, anaesthesia, surgery and antibiotics during the last 50 years have allowed the miraculous to become commonplace. While most stand as a testament to man's ingenuity, some have served to highlight man's heroic stupidity. The eradication of smallpox in 1971, as the result of a worldwide vaccination program, stands as one of the greatest medical triumphs of all time. But as a result of that triumph, the world's population, having had no further immunisation against the disease, contemplates its vulnerability to the threat of bioterrorism.

The practice of medicine has become demystified and deglorified. The reverential approach... has given way to a more sceptical and realistic perception of the healing profession.

The AIDS epidemic presents many unsolved problems, but one of the most impressive advances in treatment has been the availability of medication that reduces the risk of foetal transmission from an infected mother. This treatment, however, was denied to South Africans for a long time because their leader was unconvinced that the disease is transmitted by a virus.

For just about any condition you care to name there is an interventional remedy, and it probably works. As they look at this brave new world that has such gadgets in it, our patients want part of the action, and they want it now – regardless of their age or associated illnesses, and all too often ignoring issues such as quality of life and the high costs of high technology. Such is the sophistication of existing technology that any new advance is likely to involve costs which are disproportionate to any marginal advantage over the advance immediately preceding it.

The gap between the research bench and the bedside is narrowing, and the pharmaceutical industry is helping to bridge it. But here again there are limits to what governments

can afford: witness the blow-out in the costs for COX-2 inhibitors, and the Federal Government's initial reluctance to fund biological agents for the treatment of rheumatoid arthritis.

In the 7 January 2002 issue of the *Medical Journal of Australia,* representatives of 41 different specialties were invited to highlight advances in their respective areas. The Editor of the journal suggested an analogy with silos, each containing its own specialty but with few connecting links between them. But even within some specialty houses there are many mansions as the result of subspecialisation; for example, cardiac structure and function can be assessed with such precision that the stethoscope can now be worn as an optional extra.

The most dramatic advances, with consequences beyond our understanding, include the discovery of DNA and the mapping of the human genome – with all the implications for genetic engineering, dreams of curing the incurable and nightmares about the prospect of human cloning. None of this would have been possible without advances in computer science, which continue to satisfy Moore's law that the power of computing doubles every 18 months. Buffeted and bewildered by it all, we can identify with Garry Kasparov, the grand master, who in 1997 withdrew after only 19 moves in his final game against Deep Blue, the second version of the IBM computer which had been programmed to play chess. Explaining his surrender, he said, 'I am a human being; when I see something that is beyond my understanding, I am afraid'.

Faced with the merciless march of medical science and the apparent relegation of its art, we could do worse than follow Kasparov's shining example, and withdraw – as our younger colleagues have been suggesting for some time.

Would we do it again?

The practice of medicine has allowed us the privilege of entering people's lives and being entrusted with their confidences. Sometimes it has fostered the illusion that what we did may have mattered, which makes it more difficult for us to shuffle off the stage and into obscurity. If this is difficult for a physician, imagine how much more difficult it must be for a surgeon. As though to console themselves, doctors contemplating retirement are often heard to say that they were there during the best of times; that the burden of the bureaucracy, the costs of practice and the ingratitude of the ungrateful make them glad to be out of it all. But no-one believes us; any more than we believe ourselves.

For most of us, to reflect on our professional lifetimes is to recall rare moments of exhilaration and dismay, and the long stretches in between which comprise the realities of medical practice. Exposed to the light of such scrutiny, the rich tapestry may be seen as a rather faded fabric; but I suspect that, given the chance, most of us would do most of it again. MT