book reviews

Laws of men and laws of nature: the history of scientific expert testimony in England and America

By Tal Golan. Harvard University Press, Cambridge MA 2004. 336pp. £33.95.

This is a fascinating and timely book, with particular relevance to current controversies over the role of the expert witness. It records the troubled relations scientists and the legal system have had for more than 200 years. It was in eighteenth century England that contestants were first allowed to call expert witnesses for lawyers to cross-examine. As the complexity of cases increased, the need for both experts and lawyers grew steadily. American lawyers soon followed the English lead, and the adversarial system became firmly established in both countries.

This innovation was not without its problems. By the middle of the nineteenth century, with the widespread sale of conflicting, and sometimes bogus, expert advice, lawyers on both sides of the Atlantic had become disillusioned. There were a number of high profile cases in which doubtful or wrong expert evidence was accepted as true. The cause of justice was not well served.

Edwin Chadwick – the famous public health reformer – had a robust view of the problem, saying that it was caused, in his view, by 'the corruption and incompetence of both the legal system and the witnesses themselves'. In the 1860s, he and his colleagues recommended that, at least in civil cases, scientific assessors should sit next to the judge, as they regularly did in Scotland, and that consideration should also be given to the French practice of referring cases to officially approved scientists who would then submit their reports in writing. The British Association went further and recommended getting rid of the jury in civil cases of a technical character. Chadwick believed, however, that such reforms were blocked by lawyers 'who made profit of the existing system'. The debate was vigorous – but no changes were made.

Questions were asked as to whether the legal system was getting out of hand. In an 1879 murder case in New Haven controversies arose over tests for human blood and for arsenic, and no fewer than 106 witnesses were called for the prosecution and 70 for the defence. In 1895 there was another fillip to the growth of litigation, when attempts to introduce X-ray evidence began. Doctors started to consider how many objective tests might be needed to prevent claims for negligence, and the new practice of defensive medicine was introduced. The interpretation of the evidence brought before juries once again became the subject of conflicting expert views.

We may surely wonder (as did Chadwick's friends) whether untrained juries are equipped to handle the sheer mass of evidence and comment which can arise, and whether jurors are the best people to evaluate the opinions of rival experts. This is especially true in the United States, where prolonged cases can be taxing even to trained lawyers, and where juries in civil injury cases can assess damages at entirely arbitrary levels. In Britain, where juries are no

longer used in civil cases, a single, impartial expert usually advises the court and does not act for the litigants. In criminal cases, on the other hand, there have once again been high profile cases in which doubtful or wrong expert evidence has been accepted, only to be challenged later. The expert at fault, however, is not acting alone, since a forceful cross-examination or misinterpretation by an inexpert jury can themselves cause problems. In the adversarial system, the experts – or the counsel – may be more impressive on one side of the case than on the other. That this can arouse hostility became very clear when an eminent doctor was recently struck off the medical register for 'misleading the jury' because of his 'misguided beliefs'.

As in the nineteenth century, mistakes can surely be made. The question to be answered, however, is whether the cause of justice might be better served if lawyers and neutral experts were appointed to assist the court rather than as gladiators – most prized when they win cases which others might lose.

What Tal Golan has highlighted so well is that, during more than 100 years of debate, there has been general agreement that the way in which expert witnesses are used is in need of reform. The more radical proposals have, however, raised fears that too many changes could undermine the long established adversarial system, the jury system, or even the neutrality of the court. If this interesting book suggests a moral, it is that legal traditions that have stood the test of time should be valued but should not necessarily be sacrosanct.

MAURICE LESSOF Emeritus Professor of Medicine, Guy's and St Thomas' Hospital, London

Principles of medicine in Africa, 3rd edition

Edited by Eldryd Parry, Richard Godfrey, David Mabey and Geoffrey Gill. Cambridge University Press, Cambridge 2004. 1462pp. £120.

Too few textbooks have addressed the specific needs of doctors working in Africa. Notable and pioneering in their day, but now somewhat outdated both in their content and style, were Michael Gelfand's *The sick African: a clinical study*¹ and Campbell, Seedat and Daynes' *Clinical medicine in Africans in Southern Africa*. Eldryd Parry's two previous editions of *Principles of medicine in Africa*, published by Oxford University Press in 1976 and 1984, have made a unique contribution to this sparse literature on a continent in which the challenges to health care are massive, diverse and evolving rapidly. The magnificent new edition achieves its stated aims of putting the medicine of Africa into its rural and urban context, emphasising basic mechanisms of disease and presenting practical and relevant information for those who are at the frontline of healthcare. My only concern is whether such a valuable resource can be made accessible to its intended readership of medical students

and doctors in Africa. Its size and cost are serious disadvantages and it will need to be translated into French and Portuguese to reach the whole of sub-Saharan Africa.

All the editors have worked in Africa and are familiar with its problems. Of the 117 authors, 42 currently live in Africa and at least 27 are of African origin. The excellent introductory section, 'Health and disease', identifies immediately some of the most important challenges to medical care in twenty-first century Africa: urbanisation, starvation, forced migration and inefficient health services. In 'People and their environment', Eldryd Parry describes perfectly the clinical approach needed in Africa to diagnose the patient's illness. Infectious diseases have 45% of the book devoted to them, an allocation still justified by their importance as causes of death and morbidity in the continent. Control and prevention are of paramount importance but, especially in Africa, these aspects should not be delegated to the rare public health experts and epidemiologists. At the bedside with family, friends and other visitors clustered around, the hospital doctor has a valuable opportunity to promote disease prevention. How often is the pregnant woman, successfully diagnosed and treated in hospital for malaria, sent back to her village to almost certain reinfection for want of simple advice about using an insecticideimpregnated mosquito net and attending an antenatal clinic for 'intermittent presumptive treatment' with antimalarials?

The 41-page chapter on HIV/AIDS by Alison Grant and others deservedly takes pride of place among the descriptions of specific diseases; but although the text is thorough and informative the authors have missed the opportunity of making their descriptions even more readable and memorable by employing more imaginative layout and illustrations. Colour, new to this edition, has not been fully exploited by these and most of the other authors, and some inferior low resolution images have slipped in, unworthy of a book of this quality. Discussion of public health measures for prevention and control of HIV/AIDS occupies merely four pages and fails to highlight the religious, political and sociological barriers to the implementation of effective measures. Here was a chance to refute the Vatican's allegations about condom usage and their unrealistic reliance on abstinence. Chapters on sexually-transmitted infections by Philippe Mayaud and others, and on the skin by Ben Naafs and others, demonstrate the teaching value of good clinical illustrations.

Africa is experiencing an epidemic emergence of Western-style chronic non-communicable diseases such as diabetes mellitus, hypertension, ischaemic heart disease, stroke and asthma. The new edition contains valuable chapters on these emerging diseases, tackling the practical difficulty of their management in rural Africa. The subject of malignant disease, often neglected in textbooks of tropical medicine, is especially well covered in the chapter by John Ziegler and Edward Katangole Mbidde. Traditional medicines and traditional beliefs about disease receive passing mention in several of the chapters, but these powerful influences on perception and presentation deserve more thorough discussion.

Principles of medicine in Africa is a worthy publishing endeavour, which does great credit to its contributors and publisher, Cambridge University Press. It is a valuable addition to the reference and teaching literature on medicine in Africa, which is now relevant to the whole world thanks to globalisation of disease. Most of all it

deserves to be distributed widely throughout Africa, but in what form and at what cost?

References

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DAVID A WARRELL Professor of Tropical Medicine and Infectious Diseases, University of Oxford

The moral state we're in

By Julia Neuberger. HarperCollins Entertainment, London 2005. 400pp. £16.99.

Throughout Julia Neuberger's impressive and varied career she has consistently shown strong sympathy and respect for the most vulnerable members of society, and anger at our failure to provide the support and care they deserve. In this book her thesis is that we have become 'less and less caring for, or even aware of the suffering of, the most vulnerable'. At the same time, almost in contradiction, she expresses her astonishment that so many people of all types and backgrounds supported her in her desire to write about it. The immediate question is: what does it mean to say that 'we' have stopped caring? Have the individuals who comprise society abandoned the idea of helping the most needy? Or has authority – the government? – discouraged the readiness to help others that was once a feature of British life? The answer is probably both.

Individuals have become more self-centred; 'as we look deeper and deeper into ourselves, we lose the will to think of others'. An obsession with personal gratification is fuelled by the media offering exotic travel, tantalising food, and advice on improving one's house, car, garden and, above all, sex life. Self-indulgence and consumerism triumph over the welfare of the community, utilitarianism is no longer seen as a credible philosophy and compassion for the weakest in our society is out of fashion. At the same time governments of both major parties in Britain have failed to nourish and preserve the best aspects of the welfare state, so that help for the most vulnerable has been diminished. But there is more to it than that. In one way or another we have made it more difficult for people to provide help. Frequent reports of physical and sexual abuse in children's homes, schools and foster homes have led to closer screening and suspicion of would-be carers and deterred many from taking on the care of children. Fear of injury through lifting, or of litigation if things go wrong, limits the amount of help nurses give to their patients. Risk aversion has become a potent

To illustrate her thesis, the author has chosen five main topics; the elderly, the mentally ill, the young and vulnerable, the prison system and the outsider (asylum seekers in particular, immigrants in general). By tracing the historic approach to each of these problems, she shows how present attitudes have evolved and makes some suggestions about how they might be improved. In contrast to the powerful descriptions of our inadequacies in dealing with the problems of these five groups, her proposals for putting things right are not