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Book Reviews

Hormone Replacement Therapy and Cardiovascular Disease. The Current Status of Research and Practice. *AR Genazzani. London UK, New York USA: The Parthenon Publishing Group, 2001, pp. 188, US$77.95 ISBN: 1 84214 038 8.*

Reading this book taught me an important lesson—never include 'current' or 'modern' or 'up to date' or any words with a similar meaning in the title of a scientific book. With the large number of medical and health-related journals, information technology and media interest (particularly in women's) health issues[1] health research moves too fast for a book to be 'current' by the time it is launched.

This book brings together the presentations given during the Expert Workshop on *Hormone Replacement Therapy and Cardiovascular Disease*, organized by the International Menopause Society and held in October 2000. Since that time the results of the Women's Health Initiative Study have been published,[2] and resulted in a U-turn in thinking among many clinicians and researchers interested in this area. This was a large well conducted primary prevention trial which, far from finding that hormone replacement therapy (HRT) protected women from cardiovascular disease, was stopped early because of an increased risk of both cardiovascular disease and breast cancer in women who received the HRT.[2]

This book disappoints—it reads like a series of abstracts from a conference, with little editorial input and little critical appraisal of all of the relevant literature or even of some of the empirical data presented by the authors of the chapters. Chapter 1 begins with a description of secular trends in cardiovascular diseases in developed countries; the analysis is limited to women only. The authors conclude that these trends should be used, in different countries, to assess the likely public health impact of HRT. They assume that HRT will prevent cardiovascular disease despite the emerging evidence from trials, that had been published by October 2000, that this was unlikely.[3–5] The failure to compare secular trends in women and men is a missed opportunity to look at the likely role of endogenous oestrogen in cardiovascular disease.[6] Chapters 2–4 on cardiovascular ageing, lipid metabolism, diabetes and endothelial function are useful for someone with little knowledge in this area but more detailed critical reviews of current thinking are missing.

In the second section of the book (chapters 8–16) various aspects of 'basic mechanisms of sex steroid action' with respect to cardiovascular disease are presented. This is interesting and relevant background to the subject, but these chapters, largely presenting data from animal and *in vivo* studies, occupy one-third of the book. They often read like special pleading—the results of HERS[4] must be wrong because, look! oestrogen does all these beneficial things in animals and test tubes. Nowhere in the book does anyone try to appraise why, given the potentially beneficial physiological actions of oestrogen, the trials of HRT in secondary prevention had failed to show any benefit.[4,5]

In chapter 17 on the cardiovascular effects of HRT it is stated that:

> With one exception, major population-based trials have demonstrated that postmenopausal ERT or HRT users have a significantly reduced risk of CVD, myocardial infarction, stroke, mortality from CVD and all-cause mortality. Relative risk (RR) reductions ranged from 35 to 50% in these trials.

None of the citations accompanying this statement refer to trials—they are all observational studies, and the author fails to mention the importance of selection bias as an explanation for these results. With an emphasis on proxy indicators or intermediaries such as lipid profiles, inflammatory markers and homocysteine the chapter concludes that:

> … a sound, internally consistent body of clinical, preclinical and observational data supports the beneficial effects of ERT and HRT on CVD in postmenopausal women.

Overall the book disappoints. Because of the time delays in producing a book it is impossible to be bang up-to-date, but from its title I expected this book to contain a more critical and balanced discussion of the evidence around HRT and cardiovascular disease in women up to 2000. I also expected more information on clinical practice. There is no presentation in the book of research concerning women's attitudes towards or experience of HRT use[7] and no description of side effect profiles of the oestrogen and progestogen components of HRT and how these can be managed in clinical practice.

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Public Health Law and Ethics; A Reader. *Lawrence O Gostin (ed.). Berkeley, Los Angeles, London: University of California Press and the Milbank Memorial Fund, 2002, pp. 521 + xxxi, US$35.00 (PB) ISBN: 0–520–23174–0.*

Until the human immunodeficiency virus (HIV)/AIDS epidemic, public health law was taken for granted by epidemiologists and other public health workers. Ethical issues were hardly ever perceptible. Epidemiological monographs and journals published before the early 1980s say very little on law and almost nothing on ethics other than an occasional casual remark. What a difference there has been in the past quarter century! Several organizations of epidemiologists, including the American College of Epidemiology and the International Epidemiological Association/ European Epidemiology Group, have sponsored guidelines and codes of conduct that have taken much effort and time to prepare. The Council for International Organizations of the Medical Sciences published *International Guidelines for Ethical Review of Epidemiological Studies* in 1991. The American Public Health Association is the latest, in July 2002, to sponsor a code of ethical conduct (http://www.apha.org/codeofethics/). Monographs have proliferated, and whole issues of journals are devoted to discussion of ethical problems associated with the balance between individual rights and the collective good, mainly in the context of privacy and confidentiality, human rights and dignity, stigmatization, conflicts of interest, striking a balance between risks and benefits, equitable resource allocation, and other aspects of navigating the minefields, reefs and shoals of modern public health practice. So many ideas and opinions are available that it is difficult to keep abreast of them, difficult for the uninitiated to discriminate important and relevant facts and opinions from others less relevant. The legal problems have been clarified in some landmark decisions handed down by the US Supreme Court and other eminent legal authorities. We all benefit, therefore, when experts like Lawrence Gostin assemble anthologies. Several of these are available now, as well as summary chapters and articles in several textbooks and encyclopaedias.

This reader is more substantial than some others available. Reflecting the background and legal wisdom of the editor, it places much greater emphasis on legal than on ethical problems and issues. It includes many useful articles and excerpts of relevant judgements by the US Supreme Court and other judiciaries. It is arranged in four parts, Foundations of Public Health Law and Ethics, The Law and the Public's Health, Tensions and Recurring Themes, and The Future of Public Health. The section on Tensions and Recurring Themes is perhaps the most interesting part of the book. This addresses the tension between privacy and 'right to know' in the context of surveillance and public health research; health promotion, education, persuasion and free expression (e.g. should tobacco companies have freedom of expression to advertize the virtues of smoking?); and the troubling problems associated with paternalism and the police powers of public health.

In the Preface, Gostin suggests that the book is intended as the basis for formal academic courses, and the notion is reinforced by reference to websites where readers can find many more ideas and much more information than the book contains. Readers are meant to be read, and this one would be easier to read if the print were not quite so densely packed, but the effort is worthwhile. The designers have made it easier by including some interesting and very apt illustrations—photographs of historical interest, summary charts, and occasional tables. Epidemiologists seeking insights into both elementary and arcane details of law and ethics that are relevant in public health will find much of interest, as well as freshly recycled versions of such famous papers as the late Geoffrey Rose's classic 'Sick Individuals and Sick Populations' (which first appeared in this journal); and the frequently cited article by Michael McGinnis and William Foege on 'Actual Causes of Death in the United States'. These both fit comfortably in the opening chapter of Part One, on 'Public Health, the Population-based Perspective'.

Gostin introduces the collection with an overview of the issues in public health, public health law, and public health ethics—emphasizing issues related to human rights. He spells out issues that are elaborated in the readings and excerpts from legal judgements that comprise the rest of the book. The issues he identifies are those at the interface of law and ethics—tensions due to the police powers of public health, human rights, surveillance, privacy and 'right to know', restriction of freedom, confinement, and punishment. Some important ethical problems get less emphasis. Conflict of interest, an issue that lately has concerned many epidemiologists and other medical scientists, is not discussed at all. Probably this is because it has not led to landmark legal decisions or significant legislation, and has not engaged the attention of legal scholars, not yet anyway. The omission is unfortunate, but in all other respects this book is a useful addition to the library of all who are concerned about the ethical and—especially—the legal problems that can arise in the course of our work. All the same, I hope some one will soon assemble an anthology that deals with conflicts of interest, and suppression and censorship of scientific findings such as results of randomized controlled trials that powerful interest groups such as the pharmaceutical industry find unpalatable. Readers of this journal who seek more information and discussion of these topics may find it helpful to read the discussions that have appeared on the listserve of the World Association of Medical Editors (WAME). Many medical journal editors have been caught in the crossfire, and several eminent editors have lost their jobs because they have offended one or other of these powerful interest groups.

JOHN M LAST

Epidemiologic Analysis: A Case-oriented Approach. *Steve Selvin. Oxford: Oxford University Press, 2001, pp. 323, £57.00 ISBN: 0195144899*

This book is divided into 16 chapters, each of which provides one (or occasionally two) case studies of how to approach statistically

a different kind of data set/research question. These case studies form the basis of a biostatistics/epidemiology course taught to students with a background of two or three semesters of biostatistics at the University of California, Berkeley. The data sets used in each case study are available in ASCII format from a website.

The potential advantage of this kind of book is that it allows the author to cover a relatively wide range of material in relatively little space. Thus a number of methods appear which are not usually found in such textbooks; examples include the bootstrap, principal components analysis, non-parametric regression. A surprising gap in the methods presented is any discussion of how to deal with data in which observations cannot be assumed to be independent, for example when repeated measurements have been made on individuals or when some form of cluster sampling has been used. Another notable absentee is any mention of the Bayesian approach.

A disadvantage of this kind of book is that the reader is not provided with much of a framework in which to locate the different methods presented. Furthermore, as indicated in the title, the emphasis is almost entirely on data analysis with very little discussion of such key epidemiological concepts such as bias, confounding and effect modification.

My attention was first drawn to Chapter 3, entitled 'Randomized Trial', by the contents list which indicates that the reader will learn about bootstrap estimation and permutation tests among other things. The data set presented includes 48 patients with Alzheimer's disease randomly allocated to receive a treatment or placebo. The data comprise each individual's treatment allocation, and the result of a memory recall test at baseline and 6 months post-treatment. The analytical approach adopted surprised me somewhat. First, the analyses largely focussed on the change between baseline and follow-up (the 'change score'). No mention was made of the disadvantages of this approach,[1] or of the advantages of using analysis of covariance instead. Indeed, analysis of covariance was not mentioned in this chapter though an analysis of covariance model does appear in a chapter on multivariable linear regression. Second, the analysis of change scores was almost entirely based around statistical significance testing and the resultant *P*-values. The reader is presented with four statistical methods to test the null hypothesis that the mean change scores in the two treatment arms are equal: the t-test; the Wilcoxon rank sum test; a test based on the bootstrap; a randomization test (with one-sided *P*-values presented in each case but without any discussion of one-sided versus two-sided tests). Only in passing is a 95% confidence interval for the mean difference mentioned and the conclusion at the end of the chapter mentions only the test results stating that patients on active treatment have 'significantly less deterioration' than patients on placebo. There is no discussion of statistical versus clinical significance. I went back to Chapters 1 and 2 to see whether these contained any discussion of the relative merits of confidence intervals and *P*-values. Chapter 1 is entitled 'Measurement of Trend' and, like Chapter 3, presents the results of a number of statistical significance tests but gives very little space to confidence intervals. Chapter 2, 'Odds Ratio and Relative Risk', does better with a discussion of confidence intervals for the odds ratio at least appearing before the *P*-values. The data set used for the case study of odds ratios comprises mother-infant pairs in whom the outcome is binary (low birthweight or not) and two risk factors are considered (maternal smoking and ethnicity). One oddity of this section is that the author states that there are two distinct ways to describe the association between smoking and low birthweight, one 'model-free' and one model-based. However, all the analyses presented appear to be based on the assumption that the binomial probability model underlies the data—as one would expect. In some of the methods the model may be implicit rather than explicit, but I remain to be convinced that any of them are truly model-free.

Another oddity is the way in which the author presents the analysis of case-control data. There are two chapters dealing with such data. The first chapter deals with an individually matched case-control study (two controls per case). Unsurprisingly the chapter ends with a discussion of conditional logistic regression. The second case-control chapter presents an unmatched study to investigate the influence of vitamin use on risk of neural tube defects, controlling any confounding effects of ethnicity. Somewhat surprisingly, the author chooses to analyse these data using Poisson regression. However, the results are then used to derive estimates of log odds ratios and hence odds ratios. Why did the author not demonstrate instead the use of logistic regression to analyse an unmatched case control study—which is surely what everyone does in practice?

In summary, I am entirely persuaded of the merit of the overall approach of this book. More importantly, some of the approaches suggested do not constitute what I would consider standard or best practice. This book will not be top of my list to recommend to students or colleagues.

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The Black Death Transformed: Disease and Culture in Early Renaissance Europe. *Samuel K Cohn Jr. London and New York: Arnold and Oxford University Press, 2002, pp. 318, US$65.00 (HB) ISBN: 0-340-70646-5.*

Relying on an impressive array of archival sources that covers a geographical range from Africa to India, Italy to Vietnam, Samuel Cohn Jr argues that the disease commonly known as the Black Death was something other than the rat-based bubonic plague whose bacillus was discovered in 1894. Cohn charges scientists and historians alike with having ignored, denied and even changed contemporary testimony when it conflicts with notions of how modern plague should behave. Cohn's work re-examines the epidemiological evidence of the late-medieval plague and concludes that its cycles, seasonality, contagion, speed of transmission, the age and sex of its victims, and the occupational and topographical incidence of mortality not only differentiates late-medieval from modern plague, but also frees from suspicion two supposed protagonists of Western civilization—the rat and the flea. Furthermore, Cohn reassesses the connection between the Renaissance in Europe more broadly and finds that from 'the utter despondency felt with the

plague's first strike, contemporaries expressed a new sense of confidence' (p. 4)—a confidence derived from the swiftness with which Europeans adapted to their new bacillus.

Moving beyond the geographical limitations of the Sudhoff collection, Cohn engages the earliest extant burial records, letters, wills and testaments, saints' lives, chronicles and other plague tracts to challenge our fundamental assumptions of the disease. Cohn's *ad fontes* approach to the subject confirms the devastation and terror of the disease, but also brings to light distinct differences between the malady and the modern plague, such as speed of transmission, virulence and mortality, seasonality, and the ability to acquire immunity. The sources comment at length on the seeming 'universality' of the disease; that is, it appeared to move with lightning speed and hit far-reaching geographical areas within a short period of time. Alongside this 'universality' writers were concerned by its virulence and high rate of mortality, with many referring to it as the 'Big Death'. The pattern of deaths further differentiates the two according to Cohn. For the late medieval disease, deaths occurred in a pattern along household clusters, with a significant number of infected people directly linked to exposure to another infected person within the same household. This pattern of deaths does not hold true for modern plague. Moreover, while the late-medieval disease attacked those in closest physical proximity to the infected (the doctors, priests, gravediggers and notaries), 19th and 20th century plague researchers found the 'safest place during plague was the plague ward of hospitals' (p. 123).

In terms of its seasonality, plague could occur at any time of year and could last through the year in places with wide variations in temperature and humidity. This seeming lack of seasonal specificity in light of narrow climatic restrictions on the reproductive cycle of the insect raises questions concerning the role of the rat and flea. Furthermore, Cohn claims that there is no extant account of a rat epizootic preceding a plague outbreak and those sources that do mention rats or mice do not single out rodents from other animals. Despite the problematic nature of the source material, Cohn suggests a possible pattern: autumn plague in the colder northern and central parts of Europe as well as the northernmost areas of Italy and summer outbreaks in the warmer zones of the Mediterranean. Cohn admits the often contradictory nature of this evidence, but challenges epidemiologists to re-examine such trends for alternate explanations.

Man's ability to acquire natural immunity differentiates the two eras of plague most strikingly. During the second phase of plague immunity to the disease led to a new sense of medical progress and the records reveal a sense of optimism characterized by a tendency to move away from the astrological and omnipotent explanations prevalent in the earlier phase to social and political ones. Instead of a deep sense of despair and pessimism, by the second phase the sources reflect a new sense of optimism based on the efficacy of recipes and remedies. The quick acquisition of natural immunity to the disease furthered this growing sense of optimism as lowered mortality rates indicated successful medical intervention. This sense of optimism and hope spread beyond the medical realm and laid a foundation for the Renaissance not only in Italy but in far-reaching regions affected by the disease. Furthermore, man's ability to survive the disease paralleled changes in his understanding of it and significantly altered his psychological and cultural experiences as the disease recurred throughout early modern Europe.

Fear of a repetition of the vast mortality typical of the late-medieval disease influenced the ground-breaking discoveries of the bacillus and the aetiology of modern plague in the 19th and 20th centuries. Histories of the disease of the past led to an unprecedented international scientific response on the one hand, but on the other, it led to a delay in the discovery of the modern plague's epidemiology. Cohn cites case after case where scientists were aware of the distinctions in the diseases' microbiology but went to almost ridiculous links to 'square the circle', maintaining the fallacy. Time and again scientists such as Manson, Hankin and Hirst confronted the difficult issues of speed of transmission and viability of contagion, but allowed the historical past to accompany them into the laboratory. Furthermore, he argues that the historical and scientific communities have overlooked and undervalued the role of the British in India. Untapped archival resources of the Indian Plague Commissions (documents based on fieldwork and data gathered by military and medical officials) bring to light the significant role the British played in epidemiological studies of a modern plague.

While modern scientific knowledge has generally enhanced our understanding of the medical world of the past, in the case of the plague it has been a hindrance. Contemporary scientists and historians continue to 'square the circle', for it has been much easier to 'amend the paradigm than question the disease' (p. 42). Cohn challenges the work of Le Roy Ladurie, Norman Cantor, Paul Slack, Ann Carmichael, Gottfried and Michael Dols (among others) for losing sight of, or explaining away, the evidence. 'Even the most cited text on the BD, Boccaccio's *Decameron*', he argues, 'is far from being the iron-clad testimony for cutaneous identity across the centuries' (p. 81). Cohn's reassessment of oft-overlooked evidence (much of which is included in impressive appendices) and ability to look beyond modern plague as an explanation will challenge historians and scientists alike to re-evaluate the late-medieval and early modern malady. Well-conceived and well-argued, *The Black Death Transformed* will remain an important work for many years to come.

MICHELE CLOUSE

Just and Lasting Change. When Communities Own Their Futures. *Daniel Taylor-Ide and Carl E Taylor. Baltimore, MD: The Johns Hopkins University Press, 2002, pp. 350, £13.50. ISBN: 0-8018-6825-4.*

Just and Lasting Change is a book about development and health. Development, primarily, and how health can be both a catalyst and a product of development. In the post-colonial world, most communities and states share a legacy of poor health indices and marginal existence for the majority of its members. There is progress, yes, in terms of falling infant mortality and rising *per capita* incomes; yet, this is too slow to benefit millions of people. The emerging health technologies of gene manipulation and highly expensive vaccines seem far removed from the immediate problems of hunger, malnutrition, ignorance, and poor living conditions, which account for the majority of the ills of

mankind. There are, however, communities, states, and nations among the third world that have shown that, even amidst this discouraging scenario, better health is possible, and through it, social and economic uplift.

This book is both a description and a prescription: a description of some such communities, and the process through which they achieved enviable health levels, as well as a prescription for other societies to follow suit. The prescription is centred on what the authors believe constitutes the core of success of these exceptional communities. They call this SEED-SCALE. SEED is Self-Evaluation for Effective Decision making, and in turn this constitutes three principles. The first principle is the need for three-way partnerships for community change: partnerships involving the community, experts, and officialdom. The second principle is the need for basing decisions on locally specific data, collected at the community level. The third principle stresses the necessity for change in behaviour of the community, without which development and health are impossible. SCALE can be interpreted along three dimensions. In their own words:

> SCALE One selects, learns from, and promotes successful community projects (Successful Change As Learning Experiences). SCALE Squared transforms demonstration projects into learning centres for others (Self-help Centers for Action Learning and Experimentation). SCALE Cubed promotes systematic extensions throughout regions and societies (Systems for Collaboration, Adaptive Learning, and Extension).

All three are important, but do not necessarily follow one another in the said order.

Thus the book describes several successful development experiences that have brought health benefits to people, some initiated as small village-based projects, some through concerted and sustained statewide action, and yet others through imaginative policy change which facilitated the other routes. The authors' contention is that all these successful projects incorporated the broad principles of the model outlined above (SEED-SCALE) in one way or the other. This is the key to their success.

The main criticism against this line of argument is that it could very well be a *post-hoc* imagery that fits the available facts into the framework of the model in a Procrustean fashion. One selects stories that exemplify one's model, and glosses over facts which tend to contradict it. Also, these experiences range from projects intentionally initiated in poor and backward areas with the express purpose of improving the health conditions of the people (Jamkhed and SEARCH would be examples), to the historical experiences of a whole region for a considerable period of time, such as those of Kerala. In the former case, each action is planned to bring about change; in the latter, a series of historical coincidences have come together to bring about a positive change. In clubbing these together and asking the question, 'what happened in these instances?', we forget to ask the equally important question, 'what did not happen?' For instance, for all the success of Jamkhed, rural health care in Maharashtra is not much different from the rest of India, with greed being the primary motive in the health care sector. Kerala, with its much vaunted health indices, faces its own problems, such as high social morbidity, as exemplified by one of the world's highest suicide rates. The processes and institutions that have taken the state this far seem to have no answers. Thus, while agreeing that all that the authors have stated is true, one is still left with the feeling that there are missing pieces of the jigsaw.

The authors, nevertheless, have stated their case with logical reasoning and convincing examples. They have drawn on their considerable professional experience in doing so: the senior author is a much respected name in Public Health, having served on the faculty of both Harvard and Johns Hopkins, as well as in India and many developing countries, and with international agencies. His deep professional experience of supporting health change at the community level elevates the book to a distinct high plane. One of the commendable aspects of the book is its easy readability and clarity of language. The production and printing are also of top quality.

As a native and resident of Kerala, however, I cannot help but point out some factual errors that have crept in: (1) Rani Laxmi Bayi, who in 1847 presided over the opening of the first Christian mission school for girls, was not the 'wife of the Maharaja of Travancore'. In true matrilineal fashion, the wife of the Maharaja had no official role in Travancore. The title 'Rani', meaning queen, was taken by the mother, sisters, or maternal aunts of the reigning Maharajas. (2) The name of the late PGK Panikar, distinguished scholar and economist, has been spelt as PGR Panikar throughout the chapter. (3) The Kerala People's Science Movement, though a progressive reform movement, was more active after the 1970s; it could hardly be credited with the pressure for land reform of the earlier decades.

On the whole, this is one book I would unhesitatingly recommend to anyone interested in underdevelopment and health; or, to use the more familiar and politically correct jargon, 'international health'.

V RAMAN KUTTY

Work Stress. The Making of a Modern Epidemic. *David Wainright and Michael Calnan. Buckingham, UK: Open University Press, 2002, pp. 240, £17.99 (PB) ISBN: 0 335 20707 3, £55.00. (HB) ISBN: 0 335 20208 1.*

Stress is a quick and convenient explanation for many health problems these days, from a heart attack to a pimple on the nose. In this timely book, David Wainright and Michael Calnan present a critical analysis of what they term the 'work stress epidemic'. In doing so they present a challenge to the work stress literature and make a number of salient points and suggestions about the individualized nature of the work stress phenomenon, before outlining a new approach to researching the topic. This is to be welcomed, but in the later half of the book they seem also to challenge their own approach by introducing a theoretical position which is as individualized as the one they are trying to replace.

In chapter one they address the popular discourse of work stress and give themselves the task of unpacking the 'ambiguity' at the heart of the work stress debate. They address this discourse from legalistic, governmental, trade union, and media views before presenting qualitative research on lay understandings of work stress based on 20 informants in Dover. Using a simple thematic approach to good effect, the authors are able to consider concepts of managerialism, workload, pressure, surveillance, and job insecurity. This is a prelude to a discussion of

the evidence on symptoms of work stress where the authors suggest that it is part of popular imagination, but that it also becomes physically embodied as symptoms. They conclude that, in both public and lay accounts, work stress is ambiguous and poorly defined.

They then describe an 'orthodox' model of work stress which is based on a putative series of causal relationships (changing nature of work leading to 'work stress' leading to poor health) which lead to a series of solutions (reverse changes at work, instigate 'good' management, and therapy for the worker). They then develop a critique of this model and in particular the epidemiological view of an 'epidemic' of work stress. Research based around this model is criticized for perpetuating the myth of a golden age of work, for promoting a culture of victimhood, for having simplistic approaches to causality, and for promoting solutions that are individualized. They make a convincing case that the work stress epidemic is an individualized and historically specific response to adverse working conditions where problems are internalized and individualized.

In chapter two the authors examine the scientific construct of work stress. In a wide-ranging discussion, they trace the origins of the scientific discourse, from Cannon's Darwinian notions of 'fight or flight' in the early 20th century; Selye's General Adaptation Syndrome in the 1920s; the boost to psychological research on stress from military interest in the post war era; through to the Scandinavian interest in job autonomy in the latter half of the 20th century. They emphasize the importance of the socio-political context in which the theories and research activity developed. Their main point is that through such research, the worker is reconstructed as a 'work stress victim'. Powerlessness and alienation are replaced by epidemiological measures of 'decision latitude' and 'social support'. Concepts such as negative affectivity, demand control models, and effort–reward models come in for particular criticism. Psychological research based on the Type A hypothesis, locus of control, and coping models of stress are dissected in a similar fashion. The main point being that these approaches fail to address the mind body problem in any satisfactory way.

In chapter three they outline an alternative sociological approach to the work stress problem. They propose a 'triple helix self' where mind emerges from the external environment, from discourse, and from corporeality. This, it seems to me, is an idea that could have been more fully developed in the book. But before we have a chance to digest this idea, the authors charge into a comparison of Marx's account of commodity fetishism and the phenomenal form of work stress, which hides the historical and cultural factors that result in damaging work experiences being presented in an individualized and medical form. This is a useful point, however, in order to develop it the authors spend some time contrasting essentialist notions of the self with the concepts of ideology and power. The reader is drawn into a rather sketchy account of Althusserian and Foucauldian understandings of ideology and power before being presented with an alternative that draws heavily on Sartre's notion of consciousness. This sets the stage for a discussion of Goffman's oeuvre; to emphasize the importance of the presentation of the self and the sociology of the emotions in relation to work stress as a way of understanding the possibility of dissonance between the physiological effects of stress and subjective emotions (*schizokinesis*).

We are then presented with a case study of workers in general practice based on a postal survey of 81 practices and qualitative interviews in 10 practices. A useful appendix to the book provides details of the research methods employed. The research highlights the ambiguity of the concept of job control. The authors conclude that work stress is about a 'mode of feeling' which has physiological and cognitive dimensions and they suggest that more should be made of the neglected concept of worker resilience. Drawing on Michael Calnan's work on the medical profession, the complexity of general practice is used to support the argument for a more expanded conceptualization of work stress than exists in current models. There are some fascinating insights here. However, this does raise the question whether general practice may be too unique a context in which to undertake empirical work on the work stress phenomenon?

Chapter four gives a historical account of work stress and examines evidence for claims that work conditions worsened in the last quarter of the 20th century. The authors tackle the evidence on job insecurity, working hours, job intensification, and management. The weaknesses of received wisdom are exposed but there is a vast literature on new regimes of work and this section does not do justice to this. The narrative jumps to the experience of a pilot research project on the shipping industry undertaken by the authors. This is a heuristic device to introduce what the authors perceive to be a shift in trade union activity away from collective representation to a focus on health and safety at work. This shift, it is argued, is dependent on the emergence of the stress at work discourse that contributes to the medicalization and de-politicization of work relations. Drawing heavily on the work of Frank Furedi they relate this change to an increasing socio-cultural focus on emotions, a heightened sense of anxiety around health risks, a victim-blaming culture, and the emergence of a therapeutic state.

In the final chapter, two different responses to the work stress phenomenon are outlined; attempts to change organizations and attempts to change individuals. The medicalization thesis is discussed in depth but it might have been more useful to have this earlier in the book. The authors conclude that the discourse of work stress is historically specific and that becoming a work stress victim involves a relinquishing of autonomy and damage to individual identity. This leads us up to the statement that political and trade union struggles are 'ideologically and organisationally defunct'. Unfortunately, this nihilistic outlook is combined with the view that resistance to the therapeutic imperative is a form of heroism and that resistance to the work stress discourse is likely to come from 'the mentally competent and emotionally resilient subject who has high expectations of human potential'. I have no problems with criticisms of the therapeutic state but, in this final section, one is left with the feeling that counter tendencies toward community and class are ignored in the pursuit of evidence to support this basic political position. Furthermore, the notion that social trends toward individualization can only have an individual response seems to me to be to be just another ideological mask; the kind which the authors themselves have been exposing busily in the rest of the book.

IAN REES JONES

A War of Nerves. Soldiers and Psychiatrists 1914–1994.
Ben Shephard. London: Pimlico Books, 2002, pp. 487, £12.50. ISBN: 0-7126-6783-0.

It is the night of 9/10 July 1916 on the Somme, 9 days after the opening of the Battle of the Somme, the first day of which alone had cost 20 000 dead and 40 000 wounded; the worst single casualty list in the history of the British Army.

The 11th battalion of the Border Regiment had taken part in the attack on 1 July. Of its strength of 850 men, by the end of the day 516 had gone. It was withdrawn from the line, but returned 1 week later, now numbering 250 out of its original compliment of 850. The officers now in charge, all the original officers having been killed, were then told to chose 100 men for a trench raid.

News spread among the men, and a number started reporting sick to the battalion Medical Officer, one Lieutenant Kirkwood of the Royal Army Medical Corps. He agreed the men were unfit, and wrote a memorandum stating why. The first of July had demoralized the unit, and the intervening few days had not helped, possibly because one of their main tasks had been sorting through the kits of their dead comrades, and digging out the dead and decomposing bodies under continuous shell fire. Dr Kirkwood reported that 20 of the unit were now suffering from shell shock. It made no difference, and the attack went ahead. It was a predictable failure. Afterwards Sir Hubert Gough, Army Commander, vented his rage on the men, who had blighted the honour of the army, and 'shown an utter want of manly spirit and courage which is expected of every soldier and every Britisher.'

But Gough's real rage was reserved for Kirkwood. According to Gough he was totally unfit to be a regimental medical officer, he had 'no conception of its duties or role … as long as he is allowed to remain in service he will be a source of danger to it … Sympathy for the sick and wounded is a good attribute for a doctor, but it is not for him to inform the Commanding Officer that his men are not in a fit state to carry out a military operation'.

Kirkwood was dismissed.

But that was not the last word. Sir Arthur Sloggett was in overall charge of all medical services in France. A tough but wily politician, he deplored Gough's action, blaming instead the Brigadier who had ordered the attack in ignorance of the state of the battalion, with the Medical Officer being the unfortunate scapegoat.

Kirkwood's story is but one of the many fascinating episodes recounted by Ben Shephard in his masterly account of the complex relationship between psychiatry and the military. It is a story populated with numerous well-drawn characters, few of them heroes, few of them villains either. Instead it is a tale of moral complexity and ambiguity. What is the relationship between adversity and mental illness? Why do men break down in battle? What if anything can be done to prevent this? And what is the task of the military psychiatrist? Is he responsible for the welfare of the men, protecting them from needless horror, as Kirkwood believed? Or he is the agent of the military, acting as do all men in uniform, to assist the completion of the mission, to win the fight irrespective of any later mental consequences?

Shephard's seminal account shows clearly that most military psychiatrists tend to follow the majority, and to act largely as servants of the military. Kirkwood is the exception, not the rule. But Shephard is far too good an historian to condemn them as unfeeling agents of authority. He is aware of two uncomfortable issues. First, we should remember that maintaining military manpower to allow the mission to be completed is indeed the task of all military doctors—the motto of the US Army Medical Corp is after all '*to conserve the fighting strength*'.

Medically qualified readers of this journal will be aware of the concept of triage—to give priority to those in need. Civilian doctors do this in every Accident and Emergency Department in the land, in order to treat the most medically sick first. But for military doctors triage means treating first those who can be returned to action at the expense of those who cannot. The military doctor prioritizes the needs of the group, the army, continuing its mission, whilst for the civilian doctor there is no mission to complete. One of the intriguing questions raised by Shephard, and currently being fought out in the High Court, is whether or not the collective, group values at the heart of military culture can survive in our current individualistically orientated society.

Shephard also highlights a second dilemma, one that also remains unresolved. First World War doctors were never clear as to the best methods of either preventing or treating war related psychiatric disorder—and if we are being honest we are not much further forward either. However, on one thing they were sure. Treating psychiatric injury like physical injury—evacuating those afflicted out of harms way and safely to the rear, did not work. Instead, individuals became separated from their unit, convinced they were suffering from serious quasi physical disorders (hence the rapid abandonment of the term shell shock, since it implied a physical concussion to the brain), and soon began to view themselves as failures, chronically sick, and broken down. Their long term prognosis was poor and most did not recover. Instead the doctrine insisted that men should be treated in uniform, with their comrades, close to the front line, and be told they were simply exhausted, and would be able to return to their duties in a matter of days.

Even now, we still do not know if this policy really does prevent long term psychiatric disorder. If it does, the military can have their cake and eat it—conserve the fighting strength and reduce subsequent psychiatric disorder at one and the same time. Given the impossibility of ever conducting a randomized controlled trial on the subject I doubt we will ever know. Instead, we are forced to fall back on anecdote and experience. We are left to marvel at the fortitude of the human spirit, since most men do not develop psychiatric disorder after combat, even if we think they should. We respect the many and ingenious ways in which psychiatrists have attempted to reduce this, but above all end up convinced of the unchanging mental cost of warfare.

Shepherd himself ends his journey pessimistically—that at various points in the narrative psychiatrists have made things worse (he is scathing about the political manipulations that led to the introduction of the diagnosis of post traumatic stress disorder (PTSD) after America's Vietnam ordeal, and merciless about the iatrogenic mess that constituted the Veteran's Administration's well meaning but misguided attempts to treat the new condition). Shephard is certain that psychiatrists can harm, and remains to be convinced they can do much good.

Shephard's narrative drive never falters, and his knowledge of the literature is awesome. His book must be read by anyone

with any interest in the subject of men at war. It is a moving and compassionate account, but not an optimistic one. Shephard correctly has little time for the historical Whiggish narratives so beloved of amateur psychiatric historians—contrasting a Dark Age in which men with psychiatric disorders were shot with our own enlightened era in which they receive psychotherapy to heal all wounds. Both are simplistic and inaccurate, since there is no Holy Grail that can prevent the mental cost of war. Perhaps the lesson is that the only proven way of preventing war-related psychiatric disorder is not to send men to war.

SIMON WESSELY

Homocysteine in Health and Disease. *Ralph Carmel, Donald W Jocobsen. Cambridge: Cambridge Univeristy Press, 2001, pp. 510, £100.00 (HB). ISBN: 0-521-65319-3.*

If you search *PubMed* with the word 'homocysteine' you will get 6854 hits and over 2000 of these have been published since the new millennium. With such a plethora of papers it is not surprising that several books on the subject have also appeared. *Homocysteine in Health and Disease* is one of them.

Homocysteine is an amino acid, metabolized from an essential dietary amino acid, methionine. The metabolism of homocysteine is dependent on several enzymes, which require adequate bioavailability of the co-factors folate, vitamin B_{12} and pyridoxal phosphate (vitamin B_6). Total plasma homocysteine (tHcy) has been considered as a potential risk factor for cardiovascular disease, Alzheimer's disease, neural tube defects and several other diseases.

The 'homocysteine hypothesis' has all the ingredients of an epidemiological story unfolding. A human model of extreme disease exists, where children with the severe genetic disease, hyperhomocysteineuria develop premature atherosclerosis and thrombosis. Observational studies looking at the effect of mild hyperhomocysteinaemia demonstrate an increased risk of cardiovascular disease but there is enough doubt about confounding and reverse causality to warrant trials. A single nucleotide genetic polymorphism with a specific functional abnormality increases homocysteine levels giving us the ability to measure the unconfounded association between homocysteine and various diseases. Results of genetic studies have been disappointing but very large studies are needed. Folic acid is a cheap effective intervention for lowering homocysteine and at the moment does not have any known obvious side effects. Randomized controlled trials (RCT) have shown that folic acid supplementation in the pre-conceptual period is effective in preventing recurrent and primary neural tube defects. Randomized controlled trials of folic acid for the secondary prevention of cardiovascular disease are afoot and if folic acid is shown to be protective, no matter how small the effect, this is likely to tip the balance in favour of compulsory fortification of flour in the UK. The possibility looms, however, that much of this could be another example of confounding by a healthy lifestyle. Beta-carotene and hormone replacement therapy provide historical examples of this, where RCT did not confirm the positive protective effect seen in observational studies.

So, it appears, there is something for everybody in the 'homocysteine hypothesis': biochemists, geneticists, nutritionists, epidemiologists, public health personnel and physicians. Equally, there is something for everybody in this book.

The book is divided into two main parts. The first part deals with the chemistry, biochemistry, physiology and clinical chemistry of homocysteine and is not for the faint hearted. The second part is more clinical, dealing with genetic disorders, acquired disorders, hyperhomocysteinaemia and its consequences and treatment.

In the first chapter, Bridget and David Wilcken provide a good overview of the evolution of homocysteine research. This is followed by section one which contains four chapters on the chemistry of homocysteine. The first two are difficult to read without specialist knowledge of chemistry. The second two chapters provide a molecular, *in vitro*, explanation of how homocysteine might cause vascular disease. They explain the basic phenomenon of oxidation, the formation of reactive oxygen species, which are damaging to the endothelium and the consequent reduction of nitric oxide, which is normally protective.

The biochemistry section has three very specialized chapters on S-adenosylmethionine, its associated methyltransferases and S-adenosylhomocysteine hydrolase. Thankfully, Finkelstein summarizes them in his chapter on the regulation of homocysteine metabolism. He uses the Metabolic Diagram on the endplate of the book with a reference number on the diagram for each reaction being described. Other authors make appropriate use of this throughout the book.

Some of the biochemistry chapters are jargon laden and full of abbreviations while others such as the chapter on cobalamin-dependent remethylation, though equally complex, are more comprehensive. As the book progresses, it becomes easier to read with excellent sections on homocysteine and the kidney and one on measuring homocysteine in the clinical chemistry section. Although the first part of the book is written by those in laboratory-based disciplines and some knowledge or interest is needed, it provides excellent reference material for understanding the molecular and biochemical mechanisms of effect.

Readers of the *International Journal of Epidemiology* may be more likely to dip into the clinical chapters and basically you will probably find anything you want to know about homocysteine. Vitamin deficiencies, severe inherited enzyme deficiencies, common polymorphisms which affect these enzymes to a greater or lesser extent, are all discussed in tremendous detail and are very instructive for clarification of the basic facts.

Rima Rozen provides a clear outline of the common homocysteine related polymorphisms. Henk Blom writes an excellent chapter on the many causes of hyperhomocysteinaemia, including drugs, and in the opening paragraph reminds the reader that reverse causality may explain the association between homocysteine and several diseases. The Bergen group, who have contributed so much to the homocysteine literature, give a helpful review of the various lifestyle factors associated with homocysteine. Verheof and Stampfer deal with the methodological problems of case-control and cohort studies and tabulate 'Four Popular Hypotheses': homocysteine (1) does not cause vascular disease; (2) is a risk factor only in high-risk groups; (3) is related to thrombosis not to atherosclerosis; and (4) is a marker for low vitamin B status, which confers the true risk. A fifth one of course is that it is causally associated with atherosclerosis but the estimate of effect is very small. This comes out in the discussion.

In addition to this epidemiology section, there are distinct chapters on coronary heart disease, cerebrovascular disease and peripheral vascular disease, a further section on cellular mechanisms in the pathogenesis of atherosclerosis and one on cardiovascular physiology, much of which had been dealt with earlier.

This is a weighty tome. Much of it is specialist biochemistry and not for the casual reader. There are no simple summaries although it is an excellent detailed reference book. It is complied by a team of experts and is likely to appeal to a range of readers from a variety of disciplines. Clinicians and epidemiologists will find the biochemistry section of the book useful for background reading and understanding. Likewise, in the second part of the book, basic scientists will get a good, critical summary of the epidemiological and clinical issues.

UNA FALLON

Venus on Wheels: Two Decades of Dialogue on Disability, Biography and Being Female in America. *G Frank. Berkeley, USA: University of California Press, 2000, pp. 284, £13.95 (PB). ISBN: 0-520-21716-0.*

In *Venus on Wheels,* Gelya Frank tells the story of Diane DeVries, with whom she has collaborated for the past 20 years. In this beautifully written text, Frank interweaves biographical material with historical and social processes to create a 'cultural biography'. Through this she displays how DeVries's experiences and sentiments have been—and remain—embedded within the USA's cultural, social and political milieu. Winner of the Eileen Basker Memorial Prize for studies in gender and health (2000), this book is compelling reading for anyone interested in the experience and context of disability.

DeVries was born in 1950 with no legs and 'stumps' for arms and was brought up by her parents in California, far from the disapproving eyes of relatives in Texas. Her father made adaptations in the house, including wheelchair ramps and cutlery. DeVries attended summer camp for disabled children once a year and was fitted with a range of prostheses throughout her childhood. Eventually she rejected the prostheses, finding it easier and more comfortable to use an electric wheelchair. Throughout her adulthood she preferred not to conceal her disability, and rejected the voluminous clothing that had sometimes been foisted on her during her childhood. While her parents treated their daughter like any other child as much as possible, when DeVries reached 13 her mother no longer felt able to cope and the decision was made to send DeVries to a rehabilitation centre. She remained there for the rest of her school-age years, where she enjoyed playing the rebel, a role which she continued to a certain extent in adulthood. As a student in the 1970s DeVries increasingly engaged with the emerging disability rights movement and feminism. Through this, she found an empowered voice as a marginalized, disabled woman. When DeVries qualified as a social worker and found it hard to find employment, she had a framework with which she could express her anger at discrimination. In turn, DeVries became a public face of disability in the USA. With more impact than many drier texts, Frank's work makes it absolutely clear that DeVries is 'normal'. Through this she highlights the constructed nature of disabled identities as 'arbitrarily constructed and imposed on people, relegating them to a lower status and sometimes to an inescapable caste' (p. 168).

Frank's collaboration and friendship with DeVries is central to the book: this collaboration facilitates a reflexive turn in Frank's work. Frank examines her own reasons for engaging with DeVries and describes their moments of discord as well as harmony. Frank surmizes that her interest is because of her own experience of marginality and difference, but she does not sensationalize either her own or DeVries's identities. The acknowledgement and analysis of the importance of interaction between researcher and researched has been a theme in many social sciences for some time, and this book is an excellent example of putting that concern into practice.

Venus on Wheels is a text about many things: Diane DeVries; society; prejudices; and the emergence of social movements. It also reminds us how good biographical ethnography should be done. It draws out memorable details but contextualizes them in their time and place. We are left with no doubt about the character of DeVries, but understand her character as inseparable from her environment, in all its meanings. This book should also remind us that there is a place for preserving anonymity of informants, but that there is also a place for shouting their identities from the rooftops.

RACHAEL GOOBERMAN-HILL

War or Health? A Reader. *Ilkka Taipale* et al. *(eds). New York: Zed Books, 2002, pp. 652, £16.95 (PB) ISBN: 1-86549-951-0, £55.00 (HB) ISBN: 1-86549-950-2.*

Arguably the 20th century was the most violent and brutal one of all times, and an estimated 100 million people or so died as a result of warfare. With increased globalization and sophistication in the means of waging war, we have no reason to believe that the 21st century will fare better. As a result, there is a growing interest in the health consequences of conflict. Much of the work in this area, over the past several decades, has been descriptive in nature, focussing on the effect of war on military personnel, with repetitive or otherwise inconclusive findings, and ultimately of little concern to health professionals or policy makers alike. This rather substantial book is different. Although it examines the health and social consequences of warfare from the point of 'ordinary' people, the anthology focusses on the preventive dimension of war-making as it relates to health, hence the title, *War or Health*.

This book, put together by Physicians for Social Responsibility in Finland, covers a wide range of topics from the history of war-making, arms-systems, demography, the health and social impact of war to war prevention and management. It contains 65 chapters organized in six major sections. The first two sections of the book deal, respectively, with the history of warfare as it relates to military medicine, and an overview of arms systems including conventional, biological, and non-lethal weapons as facilitators in the aetiology of wars. Although the 15 chapters in these two sections are strongly centred on warfare and weaponry rather than health, they contain a great deal of detailed and intriguing historical information providing a unique opportunity to learn more about these topics.

From our perspective, Section 3 is the pick of the book and most deserves close reading. It includes chapters discussing the health and social effects of warfare, including the demographic impact, the effects on health care systems in conflict-ridden areas in various parts of the world, and the health consequences of war on vulnerable groups such as children, women, and the elderly. The role of children and the use of sexual violence against women, including rape, as tools in war strategies receive detailed attention. The various case studies and facts provided here demonstrate the far reaching impact of conflicts on services and people. Whereas the emphasis on the long-term psychological impact of war on civilian and military populations is laudable in the book, there is no reference to the published literature on the long-term impact of war on physical health. Section 4 reviews some aspects of social structures in relation to war, and is perhaps the weakest section of the book. The focus is on the destructive impact of language, psychology and the media, with little or no theoretical insights or policy implications. A similarly short section on the environmental impact of warfare, containing case studies of nuclear and chemical pollution, follows.

The last section on prevention is perhaps the most interesting of all, despite the seeming lack of connection with health in many of its chapters. It reviews international conventions and regulations of war-making, preventive diplomacy, the role of international non-governmental organizations in minimizing the impact of war in an era of 'fragmented' identities and globalization, and peace-building by civilians including medical doctors. The authors of the many chapters in this section offer fresh insight into evaluating the consequences of war, as well as ideas for preventing it and restricting its impacts. The role played by individual doctors and medical associations in banning mines and influencing policy makers in other ways is highlighted.

A host of authors with their version of 'everything' you need to know about war and health, a preface by Kofi Annan, the Secretary General of the United Nations, and an endorsement by Gro Harlem Brundtland, the Director-General of the World Health Organization, underscore the international scope of this book and the role played by the UN in peacemaking. Yet, this is really a European book both in coverage and authorship. Prolonged conflicts in the Middle East now and in most recent past, including the long Iran-Iraq war, the continuing internal ethnic war in Sudan, over 15 years of civil war in Lebanon, as well as the various Arab-Israeli wars get scant attention. It is questionable whether the UN here, and elsewhere, could play an effective role in limiting the actions that are currently allowed in wars. There is a systematic and detailed review of work done by influential actors, including non-governmental organizations and scientists, in minimizing the health consequences of war or preventing them. However, despite the emphasis on the preventive dimensions of warfare, we gain little knowledge about the structural or institutional forces at play in reproducing ethnic and international destructive conflicts. As in much of the social sciences of health, issues of power, interest, and class at both the national and global scale are largely underplayed in the aetiology of wars.

Some chapters are not backed by references and others are entirely adapted or based on earlier publications and existing knowledge. Nevertheless, this is a well-written book, strongly argued, which includes a little-known discourse on the history and origin of warfare and weaponry with extensive information on the impact of war on health and health systems, as well as a welcome blend of the role of different actors in prevention. We highly recommend it, not only to established and apprentice researchers and health professional interested in conflict, but also to public health practitioners and policy makers as well.

ABLA MEHIO-SIBAI
MARWAN KHAWAJA

Health Care in Central Asia. *Martin McKee, Judith Healy, Jane Falkingham (eds). European Observatory on Health Care Systems series. Buckingham/Philadelphia: Open University Press, 2002, pp. 213 + xiv, £22.50 (PB). ISBN: 0335209262; £65 (HB) ISBN 0335209270.*

My wife and I worked in Kazakhstan and Kyrgyzstan as advisers on primary care for 3 months in 1995 for a North American agency in Almaty. I returned for another couple of weeks in 1996 for the UK Overseas Development Agency. If this book had been available then I would have made fewer mistakes, understood sooner what I was seeing, and might have jumped off that bus before I was pushed. It is an excellent guide for any first visitor.

All the chapters are well and clearly written, with less repetition than is usual in books of this kind. The authors generally do their best to write for the World Health Organization rather than the World Bank, though bankspeak seems obligatory now for all experts wanting continued support from their sponsors.

All that said, I remain astonished that so many intelligent observers could have spent so much time in such a fascinating and often exhilarating part of the world, so crammed with compressed modern history and so full of future possibilities, but transmit so little of that excitement to their readers. Kazakhstan alone is the size of all Western Europe, moved completely from nomadic to fully literate industrialized society in less than 30 years, and sits on top of the world's largest oil and gas reserves outside Saudi Arabia. It is a cockpit of new geopolitical rivalries, which largely explains intense international interest in its disintegrating health services. Books of this kind would be even more useful, and a much better read, if some responsible broadsheet journalism were included, and some space given for local professionals, and the people they serve, to speak for themselves. Those I met had plenty to say.

JULIAN TUDOR HART

Bacchic Medicine. Wine and Alcohol Therapies from Napoleon to the French Paradox. *Harry W Paul. Amsterdam, New York: Editions Rodopi, 2001, pp. 341, US$28, EUR 30 (PB) ISBN: 90 420 1111 4; US$75, EUR 80 (HB) ISBN: 90 420 1121 1.*

I looked forward to reviewing this book because the title suggested that it would be taking a critical look at not only the history of wine and alcohol as therapeutic agents, but also at the current and widely accepted ('established') view that alcohol

in moderate amounts is positively beneficial to health in general and to the cardiovascular system in particular; a view about which I have serious reservations. I had expected to be informed about the past but not entertained, and so I was pleasantly surprised to be presented with a well balanced story, told with a sharp eye, on the social, political and scientific aspects of both past and present endeavours in this field. This contribution to the Wellcome Series in the History of Medicine is written with learning, with humour, with some sarcasm and not a little irony (I did not know that academics did irony!). The author is a professor of history (Florida), with a special interest in the development of science in France, and he presents a highly readable analysis of the machinations of all those involved in the pursuit of the 'truth' about alcohol in general, and wine in particular, in relation to health and disease. You will get the measure of the man from his story of the role of wine in popular (folk) medicine and it is difficult not to rise to the shock quality of phrases such as 'Wine occupied a position of considerable significance within the therapeutic arsenal of popular medicine; it was nearly as important as shit, and was indeed often used as a vehicle for this valuable item of popular *materia medica*'. Wine as a symbol of blood seems poor stuff by comparison.

From the popular to the professional therapeutic modes of the 19th century in France and Germany, where alcohol and opium became pleasant and efficacious substitutes for purging, vomiting and bleeding. Specific wines were given for specific purposes and with due regard to the temperament and social standing of the patient, but overall, red wine remained, as it does today, the favourite of the medical profession and even in the 1800s, doctors played a critical role in fostering a highly positive image for the consumption of red wine.

Throughout the 19th century there was fierce debate in France and Britain regarding the medical reputation of alcohol and it was not until the end of that century that alcohol therapy came to be regarded as 'one of the great errors in the history of medicine'. The emphasis then shifted from the role of alcohol in therapy to an issue we are still debating, namely the effect of light to moderate drinking on health. For those with no awareness of the long history of the current debate and whose knowledge of the literature is limited to recent publications, it will be highly educational to read about the past! French and British wine therapies are dealt with in entertaining detail and it is refreshing to know that the English doctors essentially agreed with Louis Pasteur that the English working class should be persuaded to drink pure and pasteurized wine, thus adding a good food to their diet.

For at least 100 years the issue of whether wine is good or bad for the health of the drinker has been keenly debated in scientific, industrial and political spheres with considerable overlap in these several areas of activity by the participants. The attempts to establish the scientific basis for an ancient remedy have been hard fought with considerable support for the superiority of wine over beer or cider and certainly over spirits. Research reporting the beneficial effects of moderate wine drinking were well covered in the medical and popular press, while reports dealing with negative aspects of alcohol consumption received little attention. Nothing seems to have changed! The role of the medical profession in all this was not beyond reproach and doctors have always been prominent among the privileged consumers of good wines, and the organizers of societies designed to promote the virtues and benefits of wine drinking have never been short of vigorous medically qualified supporters.

We come to the past 50 years and the increasing scientific evidence for the role of wine as an antiseptic and bactericidal agent and, in the 1950s, the discovery of flavonoid phenolics (polyphenols) in red wine. On to the use of wine in treating hypertension and heart disease and then to the possibilities of preventing the development of atherosclerosis by regular wine consumption. It is intriguing to realize that the scientific studies on the effects of wines' constituent elements preceded the later epidemiological studies supporting the protective effects of alcohol in general and wine in particular. There is a vigorous, balanced but brief review of the 'French paradox', enlivened by the information that 'only 28% of French men and 11% of French women drink wine regularly and only half French adults drink wine at all'!

The payoff for a reviewer is the opportunity to ride their own hobby horse. I enjoyed this book but was aware of the absence of any comment on the methodological biases in epidemiological studies evaluating the effects of alcohol or wine on health and disease, such as the changes that take place in an individuals alcohol intake with the passage of time and the factors determining such changes e.g. increasing ill health and medication. Such a process leads to an accumulation of ill health among non-drinkers in particular, with relationships between alcohol intake and morbidity/mortality showing linear positive relations in younger subjects and U-shaped curves only in older subjects. In choosing a baseline group for comparisons, no amount of adjustment or even stratification can take adequate account of such changing behaviour, particularly when only one point in time is used for classifying alcohol intake.

There is no doubt that each type of alcoholic beverage contains different constituents with differing effects on a wide variety of physiological, biochemical and hormonal systems and thus each will be found to have some effects specific to itself. However, one suspects that alcohol itself will be the key determinant of outcome of drinking, and that in the long view the 'protective' effect of light or moderate intakes of wine or any other alcoholic beverage will pale into insignificance in the overall aetiology of any disease.

Anyone interested in the 'alcohol story' should read this book for pleasure and enlightenment and everyone working in this field should do so to prevent them from thinking that they have found something new!

AG SHAPER

Evidence-based Medicine Toolkit. *Douglas Badenoch, Carl Heneghan*. London: *BMJ Books, 2002, pp. 64, £9.95. ISBN: 0-7279-1601-7.*

Clinicians are encouraged to practice evidence-based medicine (EBM) so far as it is available and it is a component of most medical exams. Most doctors and medical students only need an introduction to the terminology of EBM and a guide to where they can find more in-depth information should they require it. The *Evidence-based Medicine Toolkit* provides just that. It is a slim 64-page distillation of larger EBM texts that covers topics such

as defining appropriate questions, using bibliographic databases like MEDLINE, appraising articles based on different study designs, levels of evidence and a glossary of terms. Sometimes brief guides aimed at the beginner are actually very difficult to understand because of the lack of explanation of complex terms. The *Toolkit* largely gets around this by not attempting to include too much in this small volume, although some of the worked examples do require some thought. Although this book is aimed at clinicians and not epidemiologists, it is useful to have an aide-memoire conveniently available in one small volume while writing or refereeing papers. Even the best of us occasionally need reminding on how to calculate the positive likelihood ratio or the post-test probability! Available at less than £10 and half of that as an e-book, it represents a good value reference for the experienced and an introduction to EBM for the beginner.

PETER BRINDLE