Cerebral symptoms from mobile telephones

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In August 1998 a 2 day workshop was held under the auspices of the United States National Research Council (NRC) to examine the research base on work related musculoskeletal disorders, and this was later followed by some deliberations of the steering committee. The report of the steering committee and the proceedings and scientific papers from the workshop are presented in this monograph.

The NRC workshop, which was attended by leading scientists from the fields of orthopaedic surgery, occupational medicine, public health, and human factors, deliberated over the research base on work related musculoskeletal disorders and their causes, incidence, and prevention, and the major areas of research uncertainty. (Needless to say, not all of the questions could be answered confidently!)

In reviewing this book, I could not help reflecting on the role of workshop proceedings and who might wish to buy such a summary: also, whether the book represented an important advance on existing major competition—such as the comprehensive critical review by NISOH, or the detailed Work-related musculoskeletal disorders: a reference book for prevention, published by Taylor and Francis. The proceedings of meetings can be a mixed feast, with tasty new morsels, and depressing omissions. For example, several surprising omissions. For example, 1 Hocking B. Symptoms associated with mobile phone use. Occup Med 1998;48:357–60. 2 Blanks RH, Curthose IS, Markham CH. Planar relationships of the semicircular canals in man. Acta Oto-Laryngologica 1993;86:185–96.
the clinical chapters (on the neck, back, upper limb, and lower limb) provide little information on putative occupational risk factors and the epidemiological evidence surrounding these. As befits a textbook which reflects the American care model in occupational health, there are passages on therapeutics such as the side effects of salicylates—and information on homeopathy, osteopathy, and chiropractice; but the bias is towards the clinical rather than the occupational health management of musculoskeletal disorders, and this too was something of a surprise and a disappointment. Fitness for work and its assessment is not considered in a meaningful way.

The question is whether the good outweighs the bad. You pay your money and take your choice: if you want a healthy dose of scepticism, this is the place to look; however, there is a danger you may receive an overdose, and if you prefer a balanced or more dispassionate account you should look elsewhere.

KEITH PALMER


Among the most serious dangers to public health is air pollution. It is at least as important as cancer and vascular disease as a cause of death, illness, and lost human potential, it is a major source of environmental damage, and it seems to be an inescapable companion of industrial progress. In the 19th century we measured a country’s power by its production of sulphuric acid, perhaps we should now do so by the acidic particles breathed by its citizens? After the very obvious air borne disasters of the 1930s due to fogs in Britain, Mexico, and the USA, there was a rapid legislative and technical response to reduce obvious sources of pollution, and then medical and scientific attention fell away until the growing menace of asthma and other respiratory diseases, coupled with our better ability to detect and measure airborne substances showed that the problems were as serious as ever, if even more subtle in their form and impact.

This book rightly claims to be the first attempt to produce a comprehensive account of the sources, mechanisms, physical behaviour, and health effects of air pollution, and of approaches to its regulation, including forays into economics, trade-offs between risk and benefit, and communication about risk with the public. There are 68 authors from Europe and the Americas, all of whom are making active contributions to understanding this huge area. Considering their research interests, they have been surprisingly well marshalled by the four distinguished editors into writing up date, readable, and informative chapters.

The general approach has been encyclopaedic as the nine major sections cover the history of air pollution, physical meteorology, atmospheric chemistry, the physical geography of air pollution related to its main sources, the measurement of personal exposure, health effects in humans and in laboratory systems, details of major chemical and particulate pollutants, the estimation of health and financial impacts and approaches to regulation including national and international setting of standards for air, and two way communication with the public. The text is accompanied by many clear diagrams and graphs, and several helpful photomicrographs, and every chapter carries many pertinent and recent (to 1998) references.

The strengths of this book are its breadth and clarity, and so its value both as a source of and post-information and compositions, and as an entry point into the detailed research literature. I particularly appreciated the information about meteorology, atmospheric chemistry, and surveillance and measuring strategies for the biologist, and the focused accounts of epidemiology and respiratory physiology, defences, and diseases, which should inform the physician about the subtle difficulties of biology. Its weaknesses are those of any approach—the reader must have some background knowledge to understand the depths of the knowledge presented, and the need for broad coverage prevents the inclusion of extensive detail. The breadth seemed correct to me in most respects, as the references always pointed to original sources that could be read with appropriate cautions and criticisms in mind. Physicians at any level, public health officials, and sanitary engineers should consult this book regularly. It will be of as much value and interest to regulators, lawyers, and industrial engineers looking into the causes and possible controls over air pollution and it will be a major source for any public group wishing to know more of the facts and do something about the aerial refuse we now breathe.

ANTHONY D DAYAN


Britain has a lengthy and mixed history in the world of toxicology; some industrial and community diseases due to toxic substances have occurred and were first recognised here from the 1st century AD onwards, and our scientists have made seminal contributions to the basic understanding of toxicology. Is this major work to be the epitaph of our achievement, as academic and industrial pressures relentlessly diminish our base of working toxicologists, or is it a further pointer to our understanding of the knowledge and practice of a subject of growing public importance? And, being the second edition of a justifiably successful monograph, how well have advances been included and presentation improved?

The new preface points out the considerable extent of the new material in the book, recognising the speed of progress in molecular toxicology coming from new knowledge in basic sciences, and the wide changes in regulatory approaches to assessing the safety of most products, food, and the environment. As a result, it has grown from two to three volumes, the extensive reference lists have been brought up to date, sometimes with the addition of focused suggestions for additional reading, and the multinational character of the list of authors has been further expanded.

The editors have served their readers well by providing a very extensive survey of the sciences and other factors that underlie toxicology as a discipline applied to the demonstration and understanding of chemical hazards and to practical control of toxic risks in the home, at work, in the clinic, and in the environment. The 116 subjects of the subject index and the 38 pages of the chemical index together lead the enquirer to critical accounts of almost every topic that could be brought into toxicology, including education, studies in man, further sources of evidence of toxicity, the cooly termed “idiopathic environmental intolerances” (multiple chemical sensitivity, and its cousins). There is particular strength in the clarity of the links made with cognate subjects—such as occupational medicine, analytical chemistry and biochemistry, immunology, and veterinary human medicine. A major feature is the concentration on methods to recognise, study, and assess toxicity in its many guises, and direct to accounts of good practices in examining substances and circumstances for evidence of toxicity, and how to use that information to evaluate the risks of exposure. The book is more, much more than a list of techniques and regulations. It is also a major reference source in its own right, providing basic and practical information about the action of many substances selected as type examples, and to further sources of evaluation. The presentation is clear, there are many clear diagrams and tables and the authors have somehow been persuaded to write or to be edited into producing highly readable text, clear and mostly concise, even when dealing with the drier topics—such as PKPD modelling, GLP, and ICH.

The weaknesses are those that are inevitable in any multi-author work, especially the concentration on national approaches in some chapters, when international differences are better recognised in others, and the difficulty that some authors have must have had of balancing personal enthusiasms against more general views that other aspects are more important.

Overall, although some can already foresee the demise of the printed book, this is a balanced and comprehensive account of what toxicology is, how to use and interpret its findings, and of its scientific and clinical base. It is equally a well presented guide to the action of many substances selected as type examples, and to further sources of even more recent or alternative information if further data are required.

It is an effective reference source, it will be a valuable aid to teaching toxicologists, allied scientists, physicians, and those who regulate, are regulated, or who expect to be protected from toxicity. Like all monographs it belongs in libraries, but it would be no less helpful in clinics, courts, and in laboratories.

ANTHONY D DAYAN