PostScript

BOOK REVIEWS

Applied epidemiology. Theory to practice, 2nd edn

Edited by Brownson RC, Petitti DB. 384: Published by Oxford University Press, 2006, $59.95 (05) (hardback). ISBN 13: 978-0-19-518741-0, ISBN 10: 0-19-518741-5

Applied epidemiology is not a classical book on epidemiology. This text focuses on areas of public health practice in which the systematic application of epidemiological methods can have a large and positive impact. It describes how best to apply traditional epidemiological methods for determining disease aetiology to ''real-life'' problems in public health and health services research. Topics covered in this book highlight the multidisciplinary nature of epidemiology.

Each chapter includes a summary and one or more case studies intended to illustrate major points from the chapter and to provide a basis for teaching exercises. All of the chapters are authored by leading experts in the fields of epidemiology and public health.

The authors present epidemiology as a foundation of public health. Some of the historical contributions of epidemiology are described and the most pressing current issues encountered in the application of epidemiological methods are discussed. The authors underline the importance of public health surveillance, and describe selected sources and data collection activities as well as outbreak and cluster investigations. Highlighting the importance of systematic reviews in public health, they provide a real-life perspective on systematic reviews, including some of the challenges involved and some of the areas in which there are differences of opinion among experts about potential solutions, and with particular focus on population-based studies. More classically, two chapters concern the risk assessment and epidemiological issues in community interventions. The chapter on outcomes research identifies some of the major limitations that arise from the uses of administrative and clinical data routinely collected for outcomes research. The methods for assessing the quality of health care are discussed. A detailed analysis of several systems designed to measure the performance of organisations on clinical measures of quality such as indicator systems is exposed. The role of the government, purchaser/employers and regulatory and accrediting bodies in developing clearing houses of quality measures is summarised. There are also chapters dedicated to the links between epidemiology and health policy and between epidemiology and the law. The different ways in which epidemiology may influence health policy are described, with the welcome reminder that ''epidemiology can provide an important basis for many health policies; however, health policy development is complicated and should not be based solely on epidemiologic data''. Finally, the last chapter proposes a framework for epidemiologists to communicate information to non-scientists and addresses several leading strategies used to communicate epidemiological information to improve the health of the public.

Easy to read and well written, this book is intended for practitioners as well as for students in epidemiology and related disciplines that rely on epidemiological methods and reasoning. It is a practical and informative book for use in academic institutions, state and local public health agencies and health care organisations.

Marie-Josèphe Saurel-Cubizolles

Incidence and economic burden of injuries in the United States

E A Finkelstein, P S Corso, T R Miller. Oxford: Oxford University Press, 2006, £26.99 (hardback).

In this book the authors present data from the year 2000 regarding the incidence of injuries in the United States and the associated economic burden.

Chapter 1 deals with the incidence of accidental injuries during the year 2000 using the ICD-9 classification and based on data from 50.1 million injured persons. The authors use tables and graphs to present information regarding demographics, cause of accident, body system affected, injury severity and injury patterns.

Chapter 2 discusses the lifetime costs resulting from accidental injuries. It is estimated that the total cost of injury to the US health system in 2000 was $80.2 billion, of which traumatic deaths accounted for $1.1 billion, inpatient costs for $33.7 billion and outpatient costs for $45.4 billion. Although only 4% of injured subjects need to be hospitalised, 42% of all medical costs are associated with this group of patients. As the incidence of trauma is generally lower in women than in men, women account for a smaller proportion of the costs of injury. The elderly (>75 years of age), who constitute 5% of the US population but in 2000 were involved in 6% of accidents resulting in injuries, consume a comparatively larger share of medical resources ($12.6 billion, equivalent to 16% of the total). More than two-thirds of all costs are attributable to traffic accidents (24%) and falls (45%).

Chapter 3 analyses the loss of productive years caused by trauma. For the year 2000 alone, the productive losses are estimated at $326 billion ($142 billion for lethal accidents, $58.7 billion for injuries treated in the hospital and $125.3 billion for injuries treated on an outpatient base). Again, most of these costs to the general economy can be attributed to traffic accidents, followed by falls.

Chapter 4 estimates the lifelong total costs after accidental injury to be $406 billion for the year 2000: $143 billion for lethal accidents, $92 billion for injuries leading to hospitalisation and $171 billion for injuries treated on an outpatient base. Lethal accidents (0.3%) and accidents leading to hospitalisation (3.7%) together account for 58% of the total cost. The total consists mainly (80%) of lost productivity, with the remaining 20% being the costs of medical treatment.

The last chapter analyses the economic burden of trauma. The authors emphasise the impact of the two high-risk groups, males between 15 and 24 years and women over 75 years. Compared with the year 1985 the economic burden of injuries fell by 15% in the year 2000, partly because of a reduced incidence of injury in the younger (<45 years old) age group. However, the incidence of trauma in people over 45 has risen since 1985.

The authors conclude that the enormous cost accrued by trauma, which is mostly shouldered by society as a whole, certainly justifies more investment in preventative measures.

> From a German and European perspective we conclude the following: Most European statistics on accidents are based on police reports and thus do not compare to such differentiated data sets as presented here. The only exceptions being the German workman's comp system, which does provide detailed data on work related injuries and their costs, and the Trauma Register of the German Association of Trauma Surgeons with its outcome data on more than 20000 severely injured.

In summary, this exciting and comprehensive work by Finkelstein *et al*. demonstrates once again that the US clearly leads Europe in recording and analysing accident statistics. Perhaps the next edition of the book could include a sixth chapter on the costs of injury prevention or how much is spent to keep economic cost at £406 billion.

Julia Seifert

Risky trade. Infectious disease in the era of global trade

Ann Marie Kimball. Aldershot: Ashgate, 2006. ISBN 0754642976

Infectious diseases have been a part of society for as long as humans have existed on earth and, of course, will continue to be with us for ever, but as society evolves so does the behaviour of these diseases. This book gives the reader a thorough insight into how our ''modern'' civilisation, with its so-called globalisation trends, has upset the balance between natural barriers and infection spread. Despite mankind's desperate effort to control events, these ''unseen travellers'', as Dr Kimball has aptly nicknamed infectious agents, can penetrate our defences and become a threat even to those unaware of their existence.

The main issues affecting global trade, such as financial interests, national sovereignty and lack of interdisciplinary cooperation in environmental and health security, are dealt with in a very comprehensive manner for those not so familiar with economic and international policy matters. In addition, microbiology,

epidemiology and infectious pathology topics are presented in a technical but understandable way so that readers unfamiliar with medical subjects can achieve a widespread view of the challenges and the burden that control of infectious diseases (emerging and re-emerging diseases) pose to nations.

Cooperation and interdisciplinary collaboration are strongly endorsed as the only way to achieve a timely and prompt response to international emergencies, whether they are caused by natural disasters, bioterrorism, epidemics or pandemics.

The SARS (severe acute respiratory syndrome) epidemic, which spread rapidly but was controlled by means of a worldwide cooperative network, is held up as a model to adopt and improve upon. In contrast, the lack of awareness of the threat posed by the slow spread of HIV in the 1980s is an example of why we should be suspicious whenever mass production of a biological product is launched into the world market. With these two main lessons learned we should be capable of preventing future events of this kind.

According to the author, ''The emergence of new human infections and the globalization of commerce are not threats, but realities that will mold the way the people of the world live their lives and conduct business in the decades to come.''

To tackle the challenge of emerging infections, private and public interests must have the same goals. A basic infrastructure, in terms of clean water and sanitation, public health surveillance and intervention for human and animal infectious diseases, must be promoted in those countries where it is not currently available. Transparency and sharing information on infectious diseases and product safety is a must if we are to create efficient partnerships that can ensure global safety.

In all, I found that the book raised interesting questions on infectious diseases and offered new insights into what future challenges may face mankind.

Núria Torner

Social work and social exclusion: the idea of practice

Sheppard M. Aldershot: Ashgate, 2006, £55.00 (hardbook). ISBN 0-7546-4768-4; 0-7546-4770-6.

This book aims to clarify the principles and characteristics of social work by explaining its relationship to social exclusion. The author provides a comprehensive analysis of the relationship between social work and social exclusion, with its emphasis on those aspects of social exclusion that belong to the area of attention of social work. This is a logical choice from the social work perspective, but rather disappointing for those who are more interested in the phenomenon of social exclusion than in the specific elements of social work. The author claims in the preface to have written this book with different groups of readers in mind: not only readers with an academic interest in the principles and practice of social work, but also a wide audience in social work and other related areas such as social policy. To me, as a reader belonging to the latter group, the first part of the book is indeed interesting. Unfortunately, as it continues, the book becomes more and more a plea to justify the status of social work as a distinctive discipline. This may be very important for readers working in the academic field of social work, but does not appeal to readers with a general interest in social exclusion and related concepts. I would advise the first group of readers to read this book from beginning to end. The second group will profit most from the subject index; they may be advised to check the reference list carefully, since Sheppard has done a good job in providing an overview of the most essential literature regarding the themes (e.g. need, authority and choice, empowerment, coping and social functioning) described in this book.

Mieke Rijken

Hong Kong's health system: reflections, perspectives and visions

Edited by Gabriel M Leung, John Bacon-Shone. Hong Kong: Hong Kong University Press, 2006, US$59.50 (hardback), pp 546.

This book, comprising 22 chapters within four parts, is the output of a multidisciplinary think-tank of academics, who aimed to provide an evidence base to support health care reform in Hong Kong. Like many nations, Hong Kong has recently experienced health care reform at an unprecedented rate. For example, in 2002 the government introduced charges for accident and emergency department patients. The aim of this book is to provide guidance and examples of international best practice to policy-makers and health care managers, and to impart knowledge about Hong Kong's health system to postgraduate students.

The collection begins with historical overviews of demographic transitions and the epidemiological, technological and economic forces underlying change, focusing on universal concepts of equity, market structures and patient choice in health care decisions. Attention is paid to integrating East and West philosophical thought in Chapter 3. An interesting focus is on the Confucian tradition, in which there is recognition of governments' duty to protect the welfare of their people and an emphasis on individual effort and self-reliance. This is in contrast to the polarised political debates in Hong Kong between liberals, who favour a laissez-faire, individualistic approach, and collectivists, who prefer reform that regulates providers. This chapter has useful applications to international debates about health care reform. Chapter 6 is of particular interest as it describes comparative health system models in East Asia. Many of these have pursued systems of social insurance in recent years, and share the universal problems of rising costs and attempted cost-containment, alongside ageing populations. The chapter includes a useful summary of the advantages and disadvantages of social insurance-based systems. The role of public health in social justice is presented in Chapter 7, which is critical of public health and its failures in Hong Kong. The authors support a historical analysis of public health, and funding for public health information gathering, in order to improve policy formulation. Public health is portrayed as being at the crossroads in Hong Kong.

The next sections of the book focus on organisation, management, quality indicators and targets and financing issues. An international perspective is frequently adopted, for example on managed health care and potential transferability to Hong Kong. The UK National Institute of Clinical Excellent is held up as a model for evidence-based guidance on health technologies. Chapter 11 focuses on long-term community, residential and hospital care for elderly people. While lip service is paid to the need to promote ''healthy ageing'', the chapter is oriented towards traditional models of geriatric medicine, although a case is made for integration with community care. The need to delay disability is referred to, although the solution is seen in narrow terms of modified housing and age-friendly communities. While these are important, there is scant reference to Western responses to the costs of an ageing population (e.g. policies to promote ''active ageing'' and increase disability-free life years).

This book covers so many topics, that, while fascinating, depth is frequently sacrificed. However, as is stated in the epilogue ''… contributors have attempted to highlight key questions, rather than provide complete answers … presented as material to be reflected upon, perspectives to be debated and visions that challenge orthodox thinking …'' (p. 485). While this can be frustrating for the reader who wants to understand more about the health care system in Hong Kong, it does raise awareness of key health care reform issues and perspectives. For this reason, it is a book which merits a place on the reading lists public health courses in the West, where awareness of health care reforms often tends to be restricted to the USA and Europe.

Ann Bowling