Book Reviews

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John Snow is probably the most famous name in the history of epidemiology and along with Joseph Lister he is the Victorian medical man best known to members of the health professions today. He is currently celebrated for his epidemiological studies of the 1853–54 cholera outbreaks in London. In his own lifetime, however, he was known as London’s leading anaesthetist. Snow was among the very first to systematically investigate the effects of ether, chloroform, and other anaesthetics. Applying chemical and physiological principles and using animal and self-experiments, he studied the relationship between blood concentrations of anaesthetics and degrees of anaesthesia, and he used what he learned to design inhalers for administering ether and chloroform. He also identified a set of physical signs that permitted the anaesthetist to monitor the degree of anaesthesia the patient had entered. This was important and influential work. If Snow had never turned his attention to cholera, his work with anaesthesia would have still earned him a place in medical history. To historians of Victorian medicine Snow’s career is remarkable also as an example of professional advancement unaided by connections or favouritism. Snow came from humble social origins but rose rapidly from the lowest ranks of the profession to one as high as a London practitioner of this day, without an Oxford or Cambridge degree, could aspire to. Ceaseless study, regular presentation of papers before his professional peers, a Spartan life style, and the successful exploitation of a medical novelty to establish a specialized practice all contributed to his success.

Much has been written about Snow, and this book is a welcome addition to historical literature. It offers the most thorough, detailed, and careful account of Snow’s multifaceted career. Like several previous studies, it reviews Snow’s research and publications and the controversies in which he participated; it also draws on local historical sources and Snow’s own case books to paint a vivid picture of Snow’s daily professional life and the circumstances of the local outbreaks of cholera he investigated. At times, as in the discussion of the Broad Street pump episode, the text offers a day-by-day account of cases and observations. The narrative is highly informative, and the text contains numerous illustrations and tables intended to amplify the authors’ arguments. From the authors’ account, Snow emerges as a highly creative medical thinker who was never content merely to collect empirical evidence but rather was driven to discover general theories, be they of narcotism or of cholera. The authors build a convincing case for Snow’s creativity as a theorist, but the Snow that emerges from this account is a familiar figure. The book’s importance lies primarily in its thoroughness and rich detail rather than in the novelty of its interpretation.

While this book has much to recommend, it does contain some historical anachronisms. The attack the authors mount on geographic information system technology of the 1990s (pp. 397–99) in discussing Snow’s use of disease maps is one of the easiest examples to spot, but there are others. In attempting to explain how Snow reasoned, the authors sometimes present a logical scheme that is simply too formal and prescient an account to describe the historical work of Snow (pp. 220–21, 256–57). There is no doubt that Snow was whole-heartedly and single-mindedly committed to his theory of cholera. It was, incidentally, this commitment to a theory that they found excessively narrow that most troubled Snow’s contemporaries. But the evidence to support the authors’ contention that Snow routinely recognized what was needed to prove his theory is harder to come by. This should hardly surprise us. After all, when he turned his attention to cholera, he lacked formal training in or prior experience with vital statistics or with the investigations of the outbreak of diseases.

A number of unexplained features in this account—the delay in beginning the house-to-house investigation in South London and the premature publication of both editions of On the Mode of Communication of Cholera, especially when the early publication of the second edition negated the ‘crucial experiment’ in South London—make more sense when Snow is seen as a Victorian practitioner who was finding his way as an epidemiologist.

Despite occasional anachronisms, this is an important work. It offers a detailed and careful account of Snow’s professional life and his studies of anaesthesia and cholera. Members of the health professions and historians will certainly benefit by reading this book. For a more complete and critical understanding of Snow and the reaction his work elicited from his contemporaries the reader would do well to couple the reading of this book with Margaret Pelling’s Cholera, Fever and English Medicine 1825–1865 and PE Brown’s overly anti-heroic but still useful account in ‘John Snow—The Autumn Loiterer,’ (Bull Hist Med, 1961, 35:519–28).

JOHN M EYLER

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Since the Declaration of Alma-Ata 25 years ago, widening poverty and health inequity prevails between and within countries. The World Health Report, released on December 18, 2003, pointed out that at the time when a girl born in Japan can
expect to live to 85 years, a girl born in Africa can only expect to live to 36 years. According to the report, the main reason for this disparity is the failing health care systems in most developing countries that require urgent investment and international support. The Japanese girl will have access to the world’s best health care when she needs it, while the girl in Sierra Leone may never even see a health worker.

Indeed, disparity exists between the rich and the poor both in suffering and in early death. The burden of new illnesses such as HIV/AIDS have strained health care systems in developing countries even more. In addition, health care systems have also been challenged by a rapid growth of private medical services, increasing reliance on medical technology, rampant insurance markets, and a tendency towards multi-lateral agreement highlighted by the General Agreement on Trade in Services (GATS) and Agreement on Trade-Related Aspects of International Property Rights (TRIPS). Thus, while the average life expectancy of mankind increases worldwide, in the AIDS-ravaged parts of southern Africa adult mortality is higher than it was, 30 years ago. Implicit in the WHR 2003 is that the notion of the health care system is more than health care. In other words, the issue of prevention and health promotion programs, linked with social and health inequalities, also challenges countries, since the poor might not have the same access to these programs.

Strengthening health care systems towards health for all is a laudable global health goal and can provide a lead for countries to follow. Strengthening health care systems for ‘all’ needs an investment in increasing social opportunity for people in countries, particularly for those in the low-income and middle-income groups. Healthier people with more social opportunity will be able more economically productive and can contribute more to social harmony. Targeting health inequity by strengthening the health care system is therefore a way of targeting poverty.

To be successful, policy makers (governments and private sector), educators, researchers, service providers, and the public or society must acknowledge not just the ideal of ‘Health for All’ but the path by which the ideal can be achieved. Some recent successes, which have been achieved in addressing major health challenges such as SARS and polio eradication, emphasize that lives could be saved if stakeholders are committed to work together for social good.

Strengthening the health care system towards health for all would require, among other things, not only financial but also technical resources from the international community. To be sustainable, the resources must be targeted at strengthening the capacity of countries so that they can improve their health care systems and can negotiate with global partners on an equal footing. Resources should not be invested to stimulate perpetual dependency on foreign aid. Efforts must be made for countries to realize another acronym of ‘WHO’. In other words, in addition to the traditional reference to the World Health Organization, another acronym of ‘WHO’ is ‘we help ourselves’. The income expenditure criteria for defining poverty for targeting health service to the poor has been challenged and increasingly replaced by a new definition of poverty based on the capacity of the poor to improve their conditions, including their health status, education and access to natural resources. Therefore, directing health care systems towards health equity, based on strengthening the capacity of countries towards self-reliance, appears poised for a significant move towards the centre of thinking about poverty and health, i.e. as a component not as a determinant of it. Resources should be invested in helping countries to develop strategies for targeting health services based on this new thinking.

The International Epidemiology Association (IEA) is an international NGO in official relation with the WHO. Indeed, health inequity is on top of the agenda of the next World Congress of Epidemiology to be held in August 2005 in Thailand. One of the strategies of the IEA is ‘volunteerism’. Volunteerism is designed to be a mechanism for epidemiologists of different experiences and location to foster collaboration, mutual education, and personal development. Volunteerism implies that both parties to a collaboration will volunteer their skills for the use of the other. It may, for example, take the form of epidemiologists, who might not otherwise be aware of each other, working together on a project of common interest, or of graduate students working abroad under the guidance of an established epidemiologist. The idea of volunteerism fits well with an oriental philosophy, ‘kalayanamitra’, which is an Indian word ‘Mitra Kalayana’ meaning ‘friend helping friend’. In other words, the IEA views epidemiology as being important for evidence-based decision making and policy development. Experienced epidemiologists who are IEA members can share their expertise with younger epidemiologists. The IEA wants to use volunteerism or the ‘kalayanamitra’ principle in creating and documenting case studies where evidences from epidemiology are used in health policy and decisions. The IEA hopes that volunteerism can help countries realize the importance of the other acronym of WHO, i.e. we (countries) can help ourselves.

Today, nations are going through the economic transitions propelled by globalisation. In health, globalization involves some multi-lateral agreement represented by GATS and TRIPS. There are fundamental principles in the values between the ideals of health for all and the recent trend in globalization that drives the socio-economic and health care system. Under the ideals of health for all, governments have been the mainstay of health care and social services. The goals and values of governments are to meet the needs of every individual equally. That is the basis of equity. In contrast, the goal of globalization is not about equity but rather about the individual’s right to acquire good services and medicines in the most efficient way and the emphasis is on the methods to get those rights fulfilled. Equity requires that governments ensure everyone meet their basic needs and therefore governments must resort to central planning and allocate resources based on non-price mechanism. On the other hand, globalization drives for private ownership and resorts to the market mechanism to do so. If the new emphasis on strengthening health care systems as expressed by WHR 2003 is to include both public and private ownership, measures must be undertaken to empower nations to strike a proper balance to fulfil individual rights while maintaining equity of access to essential services and promote social justice.

Therefore, strengthening health care systems in countries to achieve health for all in the era of globalization has become a challenge to countries because ‘health for all’ and ‘fulfilling individual rights’ are based upon different social values. It is hoped that countries understand these underlying social values and create a unified approach to strengthening health—one...
which aims at compromising the two different social values. This unified approach will require close collaboration between the Ministry of Health and the Ministry of Finance as well as the involvement of stakeholders in healthy debates. Thus, the unified approach seeks to support ‘health for all’ by bringing ‘all for health’. It requires that all partners develop innovative methods to: improve health despite limited resources; increase resources for health through private and foreign investments; create incentives for research and provision of quality care; and develop high quality public health services in response to the changing context as created by market economy, new health problems, and challenges associated with a rapid rise in health care cost following globalization while poor countries are still striving to make ends meet.

The challenges put forward to all of us by the WHO calls for a new system, a new way of doing things with our partners involved. This new system will be wanting in legal, managerial, and other non-health knowledge in its designs and operations. The people both rich and poor will have to take part in the initiatives not only in expressing their needs but also in the development of innovative finance, organization of health service, and the arrangement of appropriate regulation and incentive structures. All these will need evidence and the IEA is committed to being in close touch with the WHO and other countries to give technical support through volunteerism or Kalayanamitr.

Finally, our commitment is for the well-being of mankind. The commitment may be fulfilled through unselfish and intelligent solidarity. Solidarity begins with an expression of willingness to work together but will continue through well organized exchanges, sharing, and networking. This new commitment of the WHO to strengthen evidence based health care systems with the spirit of health for all can provide a fertile ground for the IEA and the WHO to enhance our existing solidarity and commitment to equity in health for development. The IEA will spare no effort to support the WHO and work with like-minded partners in our quest towards equity and social justice through strengthening the health care systems involving all relevant sections of the society.

CHITR SITTHI-AMORN


This report, prepared by a WHO Scientific Group in the scope of the Bone and Joint Decade 2000–2010, takes the reader through the burden of the most prominent musculoskeletal conditions. The rheumatic diseases cause more pain and disability than any other group of conditions in developed countries, and the same pattern of morbidity is now being seen in the developing world. Osteoarthritis and osteoporosis are particularly prevalent among older people, and their number is predicted to increase in all countries notably in the developing ones. It is also expected that in these countries there will be a huge amount of road traffic accidents with inevitable consequences on the economy to pay for health and social services. Some impressive general figures on the burden of musculoskeletal conditions supports the importance of this issue for the years to come. The collected evidence will enable the development of strategies to improve the health related quality of life for people with these conditions and to help nations throughout the world to prepare for the expected increase in physical disability.

The aims of this project were to: identify the current global burden of musculoskeletal conditions; estimate its future magnitude; establish what can be achieved by effective prevention and treatment; establish the actual and the ideal provision of care; determine costs and priorities; and finally establish methods for monitoring the extent to which the goals are being achieved. The report focuses on five specific conditions: rheumatoid arthritis, osteoarthritis, osteoporosis, major limb trauma, and spinal disorders. The systematic review that was made, requiring active collaboration of experts and researchers in the field all over the world, revealed the prevalence, incidence, and course of each condition in all the WHO areas: Africa, Americas, South-East Asia, Europe, Eastern Mediterranean, and Western Pacific. For each condition the report also covers the definition, the potential sources for further data, and the recommendations for making estimates of incidence and prevalence rates of the global burden. The severity and course of the conditions can be envisaged in models, including the description and quantifiers of loss of health, and the role of geographical and socio-economic factors.

The WHO Scientific Group goes beyond the traditional parameters of diagnosis and mortality and adopts measures of functioning and disability as well as quality of life. The aim was to arrive at a common framework that enables to predict health care needs, such as service utilization, length of hospitalization, recovery, and social integration. Since musculoskeletal conditions are long lasting, the International Classification of Diseases (ICD) based on diagnosis is not suitable for its study as in general people do not die from it. It is important to know not only how long people live but also how well they are living. The ICF International Classification of Functioning Disability and Health (ICF) is an interactive universal model providing a very useful framework for health care and decision making on the identification of needs, targets, outcomes, priorities, and allocation of resources. The ICF assesses functioning and disability at three levels: the impairments occurring in the functions and structures of the body as a deviation or loss; the individual’s activities and limitations; and the person’s functioning in society (handicaps).

To determine the health impact and economic burden of musculoskeletal conditions on the population there is a range of possible indicators of risk factors (e.g. alcohol, BMI), impact (e.g. independence/disability, quality of life, work loss, mortality), resource utilization (e.g. hospitalization, laboratory tests, drugs), and others (e.g. education, SES). The relevance of each indicator varies between condition and its impact may differ from developed to developing countries.

At the individual level the existing instruments to assess health status and the consequences of a particular illness or injury, in terms of personal well-being, are quite different in