

Book reviews

The safety of blood transfusion services

Hon. Mr. Justice Horace Krever, *Commission of Inquiry on the Blood System in Canada*, 3 volumes, Ministry of Public Works and Government Services, Ottawa, 1977. ISBN 0 660 17230 5.

For the reader who has no particular interest in Canada an advance note: although this extensive official study was undertaken in order to examine the functioning of blood transfusion in that country, it took experiences and structures in other parts of the world as a basis for comparison. As a result, this massive report provides a critical account of the systems which exist (or have existed) not only in Canada but also in the United States, Australia, France, Germany, Japan, The Netherlands and the United Kingdom. As such it assumes the dimensions of a standard work of reference for any body or individual tackling this field in any part of the world, providing a splendid overview of rights and wrongs in transfusion services. The risks posed by transmission of HIV virus and hepatitis naturally dominate the inquiry, but all the other problems which need to be solved are examined.

In various countries this sort of inquiry has been triggered by scandal or disaster. In Canada itself, HIV contaminated the blood supply in the late 1970's and early to mid-1980's; more than a thousand persons were infected with HIV through the blood supply, and some unknowingly infected others. The hepatitis C virus, during a similar period, was passed on by transfusion to tens of thousands of people. In neither case did the system respond sufficiently quickly. In the case of HIV there was delay in introducing both tests for the virus and means of inactivating it. In the case of hepatitis, the system had long been attuned to keeping hepatitis B at bay but hepatitis C continued over a long period to infect the system. In France, the technical and structural problems were compounded by a scandal – "l'affaire du sang contaminé" – involving the sale of factor concentrates which were known to be contaminated with HIV; a series of convictions followed.

Although the ideal structure for a dependable blood transfusion system must depend in part on national traditions – for example, as regards the choice between state, provincial, autonomous and private agencies – a lot of the basic recommendations which Judge Krever distills from his study and presents in his closing chapter are widely applicable. Blood must be a universally accessible public resource. As a rule, donors of blood and plasma should not receive payment. The blood system should be organized on a national basis, and immune from political influences or any other influence not directly related to the needs which the system is supposed to meet. Core functions should be performed by a single operator and not contracted out, with the exception of fractionation which should be entrusted to the most competent and dependable contractor who can be identified. The system must be open to independent audit and maintain close and continuing liaison with consumers and with other bodies working in the field, including foreign agencies; there must also be a dependable regulatory system. Finally, in the expectation that no service can ever exclude risk entirely, statutory no-fault compensation schemes must be in place to cover serious injury resulting from transfusion. A lot of these recommendations and others are applicable to any country, whatever its level of development; the suggestion, for example, that fractionation should if necessary be carried out abroad makes eminent good sense in a country with the ability to collect blood but with insufficient technical and scientific resources to process it.

This is a splendid document. A reviewer can all too easily suggest that a book should be on every bookshelf in its field, but in this instance that conclusion is entirely evident. A complex series of problems has been dealt with humanely, wisely and with an eye for practical realities.

Patents, world markets, and progress

WHO: Globalization, Patents and Drugs: An Annotated Biography. Health Economics and Drugs. EDM Series No. 9. Essential Drugs and Medicines Policy, World Health Organization, Geneva, 1999.

In principle there need be no conflict between globalization of trade and the advancement of medical care – indeed, the two should be able to run in parallel, with vigorous worldwide competition promoting the best in innovation. In reality, things are increasingly going wrong. Particularly where drugs are concerned, the virtually global protection afforded by the patent system has effectively kept prices so high that newer and better drugs remain for the better part of a generation financially out of the reach of most of the world's population. The innovative pharmaceutical industry has found that it is a great deal simpler and more profitable to develop high-priced drugs for the affluent few than low-priced products for the many. It was this concern which was in part responsible for the protests which disrupted the World Trade Conference at Seattle in December 1999. WHO has pulled together and summarized in this very fair and balanced bibliography the complex facts and divergent arguments in this field. The dates alone of the many papers cited here show that the debate is rapidly growing hotter; after a long period of increasing dominance of multinational interests the voices of protest are becoming too loud to be ignored.

M.L. Millenson, *Demanding Medical Excellence: Doctors and Accountability in the Information Age*, University of Chicago Press, Chicago. ISDN 0226 0 226 52597 2, US\$ 24.95.

The problem of keeping medical practice up to scratch – and the changes in the environment in which the problem has to be tackled – are global matters. Much of what Millenson writes about the repercussions of the Information Age is becoming universally applicable, though more rapidly in some parts of the world than others. Essentially he argues the well-known case that, with information on all matters becoming accessible in all directions, a profession can no longer behave (as medicine has often behaved) as if it were a repository of secret wisdom, to be handed down only selectively and pompously to the patient. For the latter, the facts about illness and its proper treatment are no further away than the computer screen. The physician himself is expected to explain a great deal more, and to be sufficiently well-informed to do so. He can easily find himself on the defensive, as he should be. Viewed in the light of what is scientifically proven (and bearing in mind the many aspects of medical practice which, as Millenson is able to show, have never been subjected to scientific examination) he portrays tomorrow's physician as an expert who assists the patient in locating understanding, interpreting and applying the vast mass of existing (and often confusing) knowledge to which he now has ready access. This portrayal is naturally only part of the picture. A great many patients across the world still want to trust the doctor implicitly, and some of them do not want to know all the facts. The art of medicine, surely, is now more than ever one of dealing with the whole person, not only in a manner which is appropriate, but which the patient wants and appreciates. Millenson's book is well worth reading both as a stimulus to patients in understanding how they can get the best treatment and to doctors in acting both scientifically, humanely and with understanding.

The future of pharmacy

J.W.F. van Mill, *Pharmaceutical Care – The Future of Pharmacy*, Drukkerij De Volharding, Groningen, The Netherlands. University of Groningen; Thesis presented 20 January 2000. ISBN 90-9013367-4.

During the last twenty years, a series of conscientious pharmaceutical authors have each taken a careful look at the future of their profession, often coming up with creative solutions for the twenty-first century. It has been evident for fifty years that pharmacy had to change drastically. The traditional role of the community pharmacist in making up magistral prescriptions all but disappeared with the rise of the modern pharmaceutical industry, providing ready-made packaged medicines in a form which could be handed directly to the patient. The risk was evident that, without a careful redesign of the profession, community pharmacy would become little more than a retail operation, demanding no more than a training in shopkeeping. That this was not mere theory is evident today from those many countries – including much of the developing world – where retail pharmacies have become highly lucrative shops selling expensive drugs uncritically to a relatively wealthy urban population, and where the profession makes little or no contribution to public health as a whole.

The most far-sighted approach to the problem was found in countries such as Scandinavia and The Netherlands where the pharmacy curriculum was entirely rethought during the nineteen sixties. It was realized that, while old-style dispensing had virtually vanished, a series of new challenges had arisen. First and foremost was that of developing high standards in industrial pharmacy, as regards both research and development. Pharmacy research in an industrial setting has resulted in some important innovations in forms of administration, while some pharmaceutical scientists have also taken a central place in developing new diagnostic agents – such as the *in vitro* pregnancy test – in reliable and stable forms suitable for mass production. Production pharmacy has resulted in the introduction and maintenance of much higher standards in the manufacture of drugs old and new, including both quality assurance and quality control. The rise of national drug administrations has created a major demand for the administrative pharmacist, handling questions of drug evaluation and registration. Last but not least, the concept of “information pharmacy” has filled a serious gap by providing both physicians and patients with both the facts about drugs and the advice which they need to prescribe or use them optimally; information pharmacy is called for both at the community or hospital level and, as the facts about drugs continue to accumulate at a bewildering rate, an entire profession is needed to cope with them. At its best, the new structure of pharmaceutical education has accommodated all these demands, providing on the one hand a basic training in the profession and on the other a series of specialist post-graduate qualifications in each of their various fields. It does not matter that pharmacy has in effect branched out into several different sub-professions; the same has happened to many other forms of learning to deal with the ever more complex problems of society. So why has this not happened everywhere in the world? One reason is undoubtedly the persistence of a degree of conservatism; until recently one could still encounter even in Europe elderly professors of pharmacy who dreamt of the day when the pharmaceutical industry would be brought to heel and the apothecary would be restored to his old glory. Another reason is that it is so temptingly comfortable to move in the wrong direction; there is much money to be made in drugs, and one does not have to look very far to find a pharmacy – especially in parts of Africa and Asia – where the patient’s encounter is only with an underpaid pharmacy technician, while the pharmacist himself sits behind a window counting his heaps of banknotes. A final reason is inertia, plain and simple. It takes effort to reform a profession, and where change has indeed occurred it has usually been due to the determined efforts of one or two far-sighted individuals, working over a long period to provide pharmacy

with a meaningful future. They have sometimes had to combat not only the apathy or frank opposition of their colleagues in pharmacy, but sometimes also the contempt of physicians. One recalls a prominent academic centre on the American West Coast where the pharmacy staff have published widely on the extent of their innovation in disseminating information and exercising bedside pharmacy, yet where staff clinicians still assure the visitor that they and they alone know everything about drugs and that they have no need for apothecaries to meddle in their affairs. A recent mission to the Balkans encountered a similar situation, in which the faculties of medicine and pharmacy were in fierce conflict on issues of competence, funding and the provision of information.

J.W.F. (Foppe) van Mill, whose extensive Ph.D. study of Pharmaceutical Care was published in January of this year, comes to this field with the best possible qualifications. Educated in The Netherlands he has been one of the driving forces in reforming that country's pharmacy tradition; he has worked both in community pharmacy and at the university level, and has been prominent in the provision of impartial drug information to the health professions through the establishment of the bulletin *Pharma Selecta*, which contrives to present objective data in a deliciously entertaining manner, just as does *Revue Prescrire* in France. His book provides on the one hand an excellent overview of pharmacy care projects around the world, and on the other a helpful account of how pharmacy in The Netherlands restructured itself and created a positive relationship to the profession of medicine. The Dutch model in which the travelling propagandists from industry are in many cases today received, not by the individual practitioner who is entirely at their mercy, but by a well-prepared forum of doctors and pharmacists, is worthy of wider emulation. Van Mill's book also presents the results of two extensive studies into the practice and acceptance of pharmacy care in The Netherlands, the one in asthma patients and the other involving the elderly.

The best of all reasons for the development of pharmaceutical care is a negative one: the medical curriculum (and the medical practitioner's timetable) are grossly overloaded, and it is simply not realistic to believe that a physician will in fact be able to provide the best therapeutic services to his patient without the support of a specialist. In some cases he will need the assistance and advice of the (medically qualified) clinical pharmacologist but from day to day he should be able rely continuously upon the input of an appropriately trained pharmacist. The "appropriate training" which is called for must extend well beyond that of traditional compounding; it will demand a sound insight into pharmacology, toxicology, and the various specialized skills related to communication, documentation, management and patient psychology.

Van Mill himself has identified only a small number of countries where progress in pharmaceutical care has to date been satisfactory, and a further few where the circumstances seem to favour such progress, and all these lie within the industrialized world. It must be a source of concern that so little has yet happened elsewhere, despite the efforts of the International Pharmaceutical Federation to catalyse the process. In one country after another, bilateral and international organizations concerned with drug supply have found in practice that they cannot rely on any useful nationwide input from the pharmacy profession and that community drug supply will for the foreseeable future have to be entrusted largely to pharmacy technicians, dispensers, nurses and even entirely unqualified shopkeepers. We all need pharmacy, developed to its fullest potential; it is sad that, looking at the world as a whole, the realization of that fact is still largely limited to all too small a group within the profession itself.