afford private suppliers use them. In the private sector, water claimed to be fit for drinking is sold for a rupee in 250 ml sachets, for Rs 10 in 1 L bottles and at a proportionately lower price per litre in larger containers. Many households which can afford to buy water by the lorry load at Rs 750 or so for 12,000 L, which of course is untreated. One cannot be chooey about the source or the quality, but then we never had quality water from Metrowater either.

Water supply is now a thriving industry in Chennai. The *Indian Express* recently reported that in Chennai we pay Rs 360 million a month for water. A source of concern is that most of this water comes from wells in villages around the city. That water should have been used for agriculture. Owners of wells find it more lucrative to sell their water than to use it to grow rice, with all its uncertainties and the labour involved in growing and marketing it. Will this have repercussions on our food supply in due course of time?

Meanwhile the city continues to grow, and we have more thirsty mouths every year. Neither the government nor the corporation has a workable plan to provide us with more water. Many Gulf countries use desalination plants which make sea water potable. These are said to be very expensive, and we are poor. However, the corporation recently spent huge sums of money on the construction of a large number of flyovers that merely transfer the congestion to the next traffic light. This money could have been better used in the purchase of a desalination plant. Also, if we were to get an assured supply of water from Metrowater, we would not mind spending Rs 360 million on it. The Bay of Bengal is not short of water as yet.

The City Physicians’ Association of Chennai is three years old, and celebrated its birthday recently with a gala award ceremony, joining many other associations in the city which make such awards. A large number of elderly physicians and a couple of surgeons were given a scroll of paper describing them as ‘legendary professors’. The New Shorter Oxford English Dictionary defines legendary as ‘very famous or notorious’, which might be a chastening realization for some of the recipients. While one or two of those so honoured might qualify for this definition, the majority could hardly be classified with the superlative in either direction.

We must realize that we cheapen any award by giving it to too many people and too easily. Samuel Johnson said, ‘He who praises everybody, praises nobody.’ Milkh Singh refused the Arjuna award because it had been presented to so many people whose achievements in sports were nowhere near his own, that he felt it was degrading to accept it. An award is prestigious only if it is exclusive, and if the strictest criteria are used in deciding the recipients. What then makes people give these awards, and what makes people accept them? Byron perhaps had the answer: ‘The reason that adulation is not displeasing is that, though untrue, it shows one to be of consequence enough, in one way or other, to induce people to lie.’

A more meaningful part of the award meeting was a session called ‘Down Memory Lane’ in which some of the recipients were asked to speak for ten minutes each on two memorable patients. None of the speakers adhered either to the time limit or to the subject. This was fortunate, for what they said was more valuable than a thumbnail sketch of a patient would have been. Almost all of them spoke of how they practised medicine in the old days, and the importance of the clinical approach, which is now being lost. Alas, none of them spoke of the erosion of ethical values or of the downgrading of our medical colleges from the centres of excellence they once were.

In my last Letter from Chennai,¹ I commiserated with Mr Nair, who was roughly up by the police. I hereby withdraw the sympathy I expressed. He has actually been honoured, for he received the same treatment as a former chief minister and two serving central ministers.

REFERENCE


M. K. MANI

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**Book Reviews**


The results of medical interventions are spread over a continuum of events that range from the most unacceptable—death—through a variety of unfavourable outcomes that we collectively classify as ‘morbidity’ and finally to those that are viewed as being an improvement from the state in which the patient was first seen. Traditionally, the judgement regarding the outcome of a medical intervention has been left to treating physicians who, by virtue of their training and bent of mind, have always preferred to make their evaluation on the basis of whether some objectively measured parameter has returned to its normal limits. For example, hypertension is detected when certain established values are exceeded; treatment is then initiated, and the decision regarding the success of treatment is made on the basis of whether the elevated figures have returned to their normal values. If they have, the outcome is ‘ favourable’; if not, it is ‘unfavourable’. No attempt is made at any point in time to involve the patient in this decision, since his or her input in this regard is considered ‘subjective’ and thereby unacceptable.

In recent years, there has been increasing awareness of the fact that what the physician deems as being successful may not always coincide with what the patient expects from the process that he or she has been offered. Increasingly, issues of cost-effectiveness also need to be addressed in any assessment of medical outcomes. ‘Outcome Analysis’ and ‘Outcomes Research’ have become tools for health care delivery that are being used with increasing frequency, particularly in systems where there has been an emphasis on ‘managed care’.

This handbook attempts to introduce the newcomer to the
principles and practice of outcome analysis. The editors and almost all the contributors to this book are nurses; not surprising because nurses are inherently more sensitive to the requirements of the patient than physicians. The language of the book is simple and free from complex jargon. The first section of the book takes one through the principles involved in this discipline. Charts and illustrations are liberally used in the entire book. Detailed descriptions are provided of software that is specifically applicable to outcome analysis. The concepts that are outlined should be well within the range of any doctor with a basic understanding of the principles of modern scientific medical publication. The last few chapters of the book deal with specific clinical situations that are commonly seen in practice and provide good quality reading that reinforces the principles involved.

This book provides a useful starting point for someone who is looking to make a preliminary foray into this emerging and very important aspect of health care delivery. The price of the book, however, could be a deterrent to the individual Indian user.

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The inclusion of macroscopic anatomy in the medical curriculum is controversial, yet it cannot be denied that it is one of the fundamental branches of medicine on which the edifice of paraclinical and clinical disciplines is established. Macroscopic anatomy is important for understanding many clinical facts. With the advent of new diagnostic imaging technologies, details of various structures of the body can now be visualized in vivo. The interpretation and diagnosis of pathological alterations in structure from the normal, seen in two-dimensional images requires precise anatomical knowledge. Recent developments in minimally invasive and robotic surgical techniques put additional demands on a well-founded knowledge of topographical and sectional anatomy.

In the last century, there has been enormous progress in the understanding of the molecular basis of function and pathological alteration in disease together with its impact on clinical therapeutics. Time management in the imparting of medical education has thus become necessary. It is in such a scenario that a need is increasingly felt for learning aids, to provide comprehensive yet detailed information to the undergraduate medical student. This atlas is one such monumental effort.

The atlas has been organized into two volumes—the first covers the systemic anatomy, body wall, and upper and lower limbs while the second deals with the head and neck, thorax, abdomen, pelvis, central nervous system, eye and ear. There is extensive coverage of anatomical facts—arrangement and relations—of different parts of the body. These have been demonstrated through dissection and cross-sections, and depicted by illustrations imparting an almost natural three-dimensional concept. These have been adequately supplemented with X-rays, and magnetic resonance (MR), computerized tomographic (CT) and ultrasound (US) scans. However, the quality of CT and MR scans leaves some scope for improvement.

A remarkable feature of this atlas is the incredible quality of the illustrations which present as true and exact a picture of the human body as possible. These are coloured with pleasing hues and labelled sufficiently without being obtrusive. The jena nomina anatomica terminology has been used. No descriptive text has been added which keeps the two volumes of the atlas at a reasonable size.

This atlas would be an extremely useful companion for graduate students, physicians and surgeons who wish to hurriedly refresh and revise their knowledge of anatomy.

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The 1990s have seen a paradigm shift from the relatively narrow fields of maternal and child health and family planning to the wider area of reproductive health. In September 1998, the Ford Foundation hosted a meeting of activists and researchers in women's health in India. Among the many activities planned in promoting research in reproductive health in India was the preparation of annotated bibliographies of research in various aspects of the subject.

As a part of this process, Sunita Bandewar and Shelley Saha have prepared an annotated bibliography of selected studies carried out on reproductive health services in India. The authors have used Fathalla's broad definition of reproductive health which is 'a state in which people have the ability to reproduce and regulate their fertility; women are able to go through pregnancy and childbirth safely; the outcome of pregnancy has been successful in terms of maternal and infant survival and well-being; and couples are able to have sexual relations free from fear of pregnancy and contracting disease'. This tome is one of a series of annotated bibliographies on various aspects of reproductive health. Other areas in which similar bibliographies exist or are under preparation include selected aspects of reproductive health including maternal health, general morbidity in women, sexual health and HIV–AIDS.

The introductory section describes the methods used in the compilation of the literature. Though research papers published in 35 journals were reviewed, material from only 22 journals was included. The National Medical Journal of India was one of the


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The authors have made a good attempt to gather and catalogue information and practices followed with respect to street food vending habits in a number of countries such as Greece in Europe, in parts of the USA, Australia, Latin America, Asian countries and Israel. On a subject wherein the information is scarce, the authors have made special efforts to collect and collate the available data from various sources and bring them together in a cogent form for public consumption. The authors have certainly been ambitious in spreading a wide net. They have attempted to cover preparation and processing of street foods; preservation of the needed nutrients; contamination and re-contamination; and so on.

Yet another area where the book has thrown some light is the varying degree of regulatory measures in different countries for licensing and monitoring of street food. This is important from the point of view of hygiene in the handling of food, contamination and re-contamination. In most cases, there is no price control or regulation and these are left to the market forces such as supply and demand.

The authors' claim that 'this volume should be of interest to scientists and policy-makers in the area of international health; nutrition, food and trade; and to physicians, nutritionists, dieticians, food scientists, anthropologists, sociologists and directors of public health departments' is perfectly valid.

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35 journals reviewed but interestingly no paper from this journal was included. Most studies analysed in this volume were carried out and reported in the 1990s. Some studies report work done in the 1980s.

Reports of research published by institutions and some unpublished papers were reviewed. The replies from some non-governmental organizations to the researchers' queries were reportedly not encouraging. Since many of the journals reviewed are not indexed, the review must have involved extensive hand-searching of journals. The authors should be complimented on their efforts. However, given the search strategy adopted, it is unlikely that all information in this field was reviewed. This highlights the need to set up databases for all research done in this area, irrespective of whether or not these are published.

The annotated bibliographies have been included under five categories: health care service providers; quality of health care services; women's health care needs; health care: access, utilization and expenditure; and policies: analysis, critique and alternative perspectives. Each of these categories has an overview of the annotation—objectives, study period, study area, types of study and method of data collection. It allows the reader to quickly identify studies that may be of particular interest.

A reviewer's note, included in some annotations, is a critical evaluation of the paper and may help the reader to judge the validity of the conclusions reported. However, it would have been useful if these notes had been included in all the annotations. It is also difficult to comment on the accuracy of the annotation as many of the journals reviewed are not readily available.

This annotated bibliography indirectly brings out some of the changes which have taken place in the past decade. The shift in focus from maternal and child health (MCH) to reproductive and child health (RCH) can be observed. Some areas of research and funding interests in the late 1980s and early 1990s (e.g. training of traditional birth attendants as an intervention to reduce maternal deaths and 'at risk approach' in maternal care) have now been discredited. There are, however, some references to the importance of midwives as reproductive health care providers in the later years.

This volume of under 200 pages in A4 size has coloured dividers for the different categories. The layout is good and the few typographical errors may be ignored. At the 'suggested contribution' of Rs 90, this is certainly a worthwhile reference for anyone interested in a broad overview of reproductive health services in India at the end of the last millennium.

The typeface is good and so is the language used. The figures and tables in the book contribute to its utility. The book contains references for further reading and research.

The authors' claim that 'this volume should be of interest to scientists and policy-makers in the area of international health, nutrition, food and trade; and to physicians, nutritionists, dieticians, food scientists, anthropologists, sociologists and directors of public health departments' is perfectly valid.
Most people are aware that the pharmaceutical business is profitable, but just how profitable would be a matter of conjecture. The first incredible fact that you learn from this book is that it is one of the most profitable businesses in the world, with earnings better than the international arms trade. The next equally mind-boggling fact is that it is as murky a business as the arms business, and intrigue and skullduggery are an intimate part of the trade. Weaving fact and the results of extensive research skilfully with fiction, Le Carré gives us a glimpse of how some pharmaceutical companies promote and market even dubious drugs.

The book is set mainly in Kenya, where a new drug, effective against multidrug-resistant tuberculosis, is undergoing field trials. The problem is that although the drug is effective and probably represents a major breakthrough, it has severe adverse effects. The company in its eagerness to get the drug into the market fudges the trials, with the connivance of everyone involved—one of the two co-developers of the drug, the company officials, government officials and professionals involved in the trials. The wife of a British diplomat in Kenya (the constant gardener of the title), who does social work among the poor of Kenya, and an African doctor who works for a Belgian non-governmental organization stumble upon the unethical trials and the fudging of data. What happens when they try to expose the multinational pharmaceutical company forms the substance of the book.

In an interesting afterword, Le Carré hastens to emphasize that the book is a work of fiction. But what is noteworthy is the statement: ‘As my journey through the pharmaceutical jungle progressed, I came to realize that, by comparison with the reality, my story was as tame as a holiday postcard’ (p. 490). Since the story is by no means tame, with murder and intrigue as essential components, it is a horrific comment on the international pharmaceutical industry.

Ivan Illich, in his book Medical Nemesis, describes how Parke-Davis promoted chloramphenicol in the 1950s and early 1960s despite being aware that it could cause fatal aplastic anaemia in some people. They were so successful in promoting the drug that it was prescribed for such minor conditions as acne, sore throat and the common cold (p. 63 of Medical Nemesis). Similar is the story of clioquinol and its manufacturers, especially Ciba-Geigy. Although the companies were aware that the drug could cause subacute myelo-optic neuropathy, they continued to market it for all sorts of conditions. The story of how a Swedish neurologist, Olle Hansson, struggled almost single-handedly and was ultimately successful in proving the link is echoed in Le Carré’s work. Unfortunately, such voices are few and far between, and they are lost in the cacophony of the hubris that the success of modern drug treatment generally evokes. Few doctors worry about the rationale of so-called proven therapies. Quite a few do not hesitate to prescribe the modern equivalent of snake oil.

The modern pharmaceutical industry has great potential for good. However, in its quest for amassing profits, it can be a force of evil. It is therefore necessary to regulate the industry and for doctors and others to be vigilant.

Le Carré delivers the message in his engrossing style: understated and oblique with an ineffable sadness for the frailties of humankind.

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This multi-author volume describes the major operations in surgical gastroenterology. It is intended for the surgeon in training and the junior surgeon. The list of operations is comprehensive and includes what should be within the repertoire of a surgeon who has trained in surgical gastroenterology. It is also intended for the general surgeon who may be called upon to perform these operations. The description of each operation includes the preoperative preparation, the operative procedure itself and the postoperative care of these patients. The last chapter in this book is entitled ‘For the residents’, but much of the advice here is perhaps equally applicable to practising surgeons.

This book has been sourced entirely from the considerable talent available in our country, and getting this group of surgeons together to produce such a volume has been no mean task. It should prove conclusively that surgical gastroenterology, as a specialty within general surgery, is relevant and here to stay (if such proof were deemed necessary). The selection of the authors also underlines the fact that the practices described herein are possible in India.

Each chapter has a standard format and the descriptions are by and large personal experiences of the author(s) with a brief section at the end on the results of the treatment. Where there is a debate (e.g. pyloroplasty along with total oesophagectomy and gastric pull-up), the authors have been allowed the freedom to be dogmatic in reflecting on what has been useful in their experience. The typeface and print are of good quality and easy to read, and the line diagrams are well laid out. The absence of colour photographs in a manual on operative surgery is not felt. The size of the volume is handy and it should easily fit into the pocket of a clinical coat.

However, surgeons who like to perform all abdominal operations laparoscopically will be disappointed with this book. Except for a passing reference to diagnostic laparoscopy, laparoscopic vagotomy and laparoscopic pancreateicjejunostomy, the editor has stayed clear of minimally invasive surgery. Considering that one-third of the topics pertain to malignant disease, it was perhaps a wise decision.

Descriptions of the operations also include practices followed by the authors in routine matters such as skin preparation before operations, antibiotic prophylaxis, choice of suture materials and techniques of abdominal closure. It was surprising to find such a wide variation in these practices across India. In today’s world, where the mantra seems to be ‘evidence-based medicine’, one wonders if some of our practices such as preoperative shaving and layered closure of the abdomen will stand up to scrutiny.
I was pleasantly surprised to see that highly selective vagotomy was included. I had begun to think that the indications for this operation (gastric outlet obstruction not being one of them) had largely disappeared. In the chapter on benign bile duct stricture, magnetic resonance cholangiography as a diagnostic procedure is missing. Wherever available, it has replaced percutaneous transhepatic cholangiography. The non-inclusion of radical gastrectomy for benign diseases may also be an oversight that has slipped through the editorial net. In the chapter on anterior resection of the rectum, greater stress could have been placed on washing out the rectal stump distal to the line of transection in order to eliminate luminal cancer cells.

Professor Kaushik has done the surgical community proud in bringing out this book. Priced at Rs 300, the reader is assured of good value for money.

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Pandits (priests) as links in improving the reproductive health of women: An alternative strategy

The health care infrastructure existing in the Himalayan region of India is far from satisfactory. Despite the provision of primary health care with the principle of equitable distribution, as pronounced in the National Health Policy of India,¹ there are only skeletal services in the Uttarakhand state of north India. The problems that plague the health services in this region include inadequately trained health manpower (doctors, health workers, laboratory technicians), inaccessibility of the existing health care centres due to the difficult terrain, underdevelopment of communication facilities including lack of vehicles for transporting patients in an emergency, as well as inadequate life-saving and essential drugs in the primary health care centres and sub-centres. Other factors such as illiteracy, poor socio-economic conditions and cultural taboos hamper the process of achieving a satisfactory health status of the people, especially women in the reproductive age group.

A study conducted among 300 ever-married mothers aged 20–34 years in 5 villages each from 6 districts of the region (Pauri, Almora, Pithoragarh, Chamoli, Tehri and Dehradun) revealed a high morbidity; anaemia (77.3%), leucorrhoea (55%), pain in the lower abdomen (42.7%) and dysmenorrhoea (42%).² The study also found that 49% of women were illiterate, the mean age at marriage was 17.3 years, and only 13.3% received complete antenatal care. The majority of deliveries were conducted by untrained dais (traditional birth attendants) or family members who cut the cord with unsterilized blades, sickles, bamboo slivers, knives, etc. Deliveries in a cowshed were widely prevalent and 57% of women did not have access to health care services.

In December 1999, a workshop was organized jointly by the Sri Bhuvaneshwari Mahila Ashram and Research, Advocacy and Communication in the Himalayan Areas (SBMA–RACHNA) to address the reproductive health problems of women in Uttarakhand and discuss strategies to improve their health status, and find out the possibility of involving pandits for the same. Thirty pandits representing all areas of the Uttarakhand region participated in the workshop.

Pandits are a group of educated, respected, religious leaders who propagate the Hindu religious doctrines by reciting verses from ancient scriptures, performing religious rites and ceremo-