contractor had a chance to make a bigger profit, perhaps he would take the task seriously.

How much will household measures for harvesting rain water and replenishment of the water table help? Should we be thinking of desalination of sea water, since there seems to be no other source available? Neither the government nor the corporation has any plans to solve our problems.

HUMAN RIGHTS, ANYONE?

Mr Nair set up his tea stall across the road from my bedroom window many years ago. He had a table and a gas stove, and supplies of milk, tea and a few snacks. He would begin his day at 5 a.m., sweeping his little patch of the public road, lighting his stove and clanking his pots and pans vigorously as he prepared his wares. His clients began to assemble a few minutes later and the road was abuzz with activity as they discussed politics and movies, which are inextricably intertwined in Tamil Nadu. Each speaker’s voice climbing a few decibels higher than the other’s. I am an early riser but not that early, and I prefer my mornings quiet. I complained to the police and to the corporation, and would have complained to anyone else if I had thought they could help me. There was sporadic action. I understood from the people I complained to that the stall was illegal and I was promised action, and, indeed, there was action. The police or some inspector from the corporation would come and Mr Nair would cease his activities for the day, but he was always back the next day. Finally, I acknowledged defeat and gave up complaining.

I renewed my protests when the table gave way to a little kiosk. The effect was the same. I gave voice once more when I found he had electricity, which enabled him to illuminate the whole area on a dark morning and added to my difficulty in getting the few extra minutes of slumber which make all the difference. This time I complained to the Tamil Nadu Electricity Board, again to no avail. I gradually had to accept that his voice reached the ears of the powers that be louder and clearer than mine, and I accepted him with good grace. After all, except for the fact that his very presence was illegal, the rest of his activity was honest. He served his customers with food and drink of their liking, and gave them a place to gossip.

I do not know what gave him immunity, but his luck ran out the other day. I was not present but I was told that the police came down heavily on him. They threw his wares out on the road, confiscated the money he had with him, roughed him up and shut his bunk down. It stands there still, minus a shutter or two, forsaken and forlorn. I should be happy that I won my war with him at last, but I am left with a feeling of guilt. Does an illegal activity warrant the culprit being treated with violence, being humiliated, and deprived of his money? Are not the police guilty of a criminal act too and since I made the first complaint against him, am I a party to it? Do not all Indians have a right to be treated with dignity?

Incidentally, during a discussion on medical ethics a few days later, the question came up as to what could be done if a subject refused to provide a blood sample for a test which was made mandatory. One gentleman informed us that the code provided for the use of a ‘reasonable degree of force’. Can you define the word ‘reasonable’?

M. K. MANI

Book Reviews

Substance Use Disorder: A Manual for Physicians. Rajat Ray (ed). Drug Dependence Treatment Centre and Department of Psychiatry, All India Institute of Medical Sciences, New Delhi, 2000. 198 pp, Rs 125.

In the context of increasing drug and alcohol abuse in India, this manual is timely and relevant. The contributors to this book belong to different medical schools in India, and the editor has wide experience with a specialized programme on the treatment of drug dependence in Delhi. The book is targeted at ‘General duty medical officers’, presumably from the government service in India. Yet the style of presentation of this book is more appropriate as a ‘Resource material for trainers’ rather than a quick reference for the general duty doctor. The chapters even give suggestions for the formats of slides and an overhead projector, which are useful for those teaching the subject.

There are 16 chapters in this book; a fair attempt at covering the subject comprehensively. However, this attempt has made many chapters over-inclusive and less reader-friendly, while others retain a crisp presentation of relevant material. The production quality is poor, and the smudged letters, poor quality of paper and desk editing, could have been avoided to make it more presentable and marketable at the quoted price. In spite of all its shortcomings, the book would be useful for those teaching this subject as well as general duty doctors, because much of the information relevant to India presented in the book is not easily accessible.

Many chapters in this book are specific to India, and reflect the views of government programmes, but do not necessarily relate the different practices in the country, especially in areas which have a strong presence of non-governmental organizations and traditional practitioners. This bias has influenced chapters such as ‘National programme’, ‘Community-based treatment’, and so on. However, the information in these chapters is also not easily accessible from other published documents and is thus valuable for policy-makers. The chapter on ‘National laws to control drug abuse’ is useful for physicians, policy-makers, and all others involved in the intervention for substance users, because they are seldom found in an easily understandable format in any of the available documents. The chapters on ‘Epidemiology of drug abuse’ and ‘Aetiology of addictive behaviour’ could have been shorter and restricted to the most useful information relevant to the general duty doctor. The general duty doctor involved in acute institutional care will pay little attention to these chapters as well as those on ‘Monitoring trends of drug abuse’ and ‘Prevention of drug abuse’, which are predominantly theoretical.

Several chapters dealing with the principles of and issues
regarding the treatment of addictive behaviour are good. These include the ones on 'Interview, assessment and diagnosis of dependence', 'Acute effects of alcohol, opiate and cannabis use', 'Pharmacotherapy of substance use disorder' and 'Treatment principles and issues in management of addictive behaviour' which deal with the acute care of substance users.

Some of the other chapters are of intermediate quality, neither comprehensive nor specific or brief. Yet they are useful for a trainer to elaborate on. The glossary at the end of the book is useful for readers because of the widespread nosological confusion in this field.

On the whole, if you are a general duty doctor looking for a fairly comprehensive undergraduate book or a trainer looking for a trainer's manual specific to India on substance use disorder, this manual fits the bill. It may be a little difficult to read yet there are few other sources from where you can get such information.

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'Head in an oven, feet in a freezer and the person is comfortable, on average!' That average has no meaning without variance, is perhaps too simple a fact to be fully appreciated. With such vagaries at hand, a text that explained the science of statistics with the correct perspective was keenly awaited. The author aroused my hopes when he enumerated the merits of the book in his preface. However, the contents and the handling of the subject left me disappointed on several counts.

The book is written with the explicit hope that it will remove, at least partially, the dread shared by instructors and students when confronted with a course on statistics. It is 'written by a non-statistician for non-statisticians'. A text with such a promise is the most welcome to students. Unfortunately, this text does not delve much on this aspect, though a short but convincing argument illustrating the use of a microscope to discover differences in human height is given to highlight unduly large samples in some cases.

It was annoying to find an inaccurate statement (p. 289) that, 'the sampling distribution of sample means is no longer normal when SD is not known'. Knowledge or no knowledge of SD certainly does not affect the distribution of sample means. Albeit the distribution of (X-µ)/(SD/√n) changes from Gaussian-z to Student's t when SD is not known, provided that x̄s follow Gaussian pattern or n is large. This proviso too is not emphasized sufficiently.

Chapter 15 on 'binomial distribution' does not mention binomial probabilities that characterize binomial distribution. The discussion is on normal approximation to binomial that requires a large n, in fact exceedingly large, if the binomial probability is very small as for HIV positivity in the general population. The text seems to ignore the case of small n all throughout, and does not discuss the question of how large an n is large enough for the validity of various procedures. The assumption of Gaussianity that is implicit in many procedures is also not highlighted.

Among the other methods discussed in Parts 4 and 5 are the two-sample t-test, F-test, rank order tests, Chi-square test for independence and t-test for correlation coefficient. All this makes the book contains 25 chapters divided into six parts. A good account is given in the beginning on conceptualization and operationalization of variables. The tabular and numerical description of data are adequately discussed. But there is some redundancy. For example, skewness and kurtosis are mentioned without an adequate explanation of how these are useful in social or health research. The discussion on graphs is restricted to only the routine types. Special diagrams applicable to social and health research such as lexis diagram and dendrogram are not described.

Part 2 of the book on bivariate descriptive statistics is the most lucidly written. The chapter titles are research oriented instead of statistics oriented and the text is easy to understand. However, the details provided are not internally consistent. For ordinal data, the author goes on to discuss measures such as Somers' d and Kendall's tau that are rarely used in health research. On the other hand, the regression method, used so commonly, is not discussed in adequate detail. Simple regression is discussed in Chapter 10 and multiple in Chapter 25 (Part 6) but curvilinear and non-linear forms are not discussed. The correlation coefficient is discussed at length but fails to emphasize that this measures only the linear component of a relationship.

Sampling techniques are extremely important for social and health research but are mentioned on one page. Part 3 contains chapters on estimation and confidence intervals, and hypothesis testing for one-sample case. It is gratifying to note that a proper explanation is given to the meaning of 'not being able to reject a null hypothesis'. It is like acquitting a suspected criminal because of lack of evidence. Rejecting a null hypothesis of no difference between groups does not necessarily indicate equivalence. Many texts are obscure on this aspect. On the basis of small samples, it is very easy to arrive at the conclusion that the treatment and control groups are 'equivalent' at baseline when actually they are not. As an extreme example, consider a sample size of three each in the treatment and control groups in a trial for a new haematinic formulation. At the baseline, if two are anaemic in the control group and none in the treatment group, the difference is not statistically significant. Can such groups be considered in health research? Unfortunately, this text does not delve much on this aspect, though a short but convincing argument illustrating the use of a microscope to discover differences in human height is given to highlight unduly large samples in some cases.
elementary reading. Topics such as repeated measures, relative risk, logistic regression and discriminant functions are not included. In a text on statistics for social and health research, I also expected a thorough discussion on quality control of data that lays the foundation for a sound inference. This was not part of the text. Statistical fallacies that keep cropping up in health literature also do not find a place.

The strength of the text comes from two counts. First is the ‘Guide to SPSS’. With appropriate illustrations of the computer screens, the text certainly makes it easier for a novice to use SPSS and carry out the statistical analysis as detailed in the book. SPSS is not the best software in the field but is among the most widely used because of its low price relative to the wide spectrum of methods covered. The second useful feature is the graphs, so profusely used throughout the text. This adds to easy understanding of statistical concepts. These two aspects are indeed positive features for non-statisticians. Another feature that would encourage the classroom adoption of the book is the set of exercises at the end of each chapter. SPSS data files are provided on CD for these exercises. Such exercises are an integral part of teaching in some countries though not much emphasized in Indian universities—particularly in courses on social and health research. In fact, very few universities in India offer courses on social research. Thus, the scope of the book for classroom adoption in India is extremely limited.

The back cover of the book talks of practical examples but I did not find many, certainly not related to the health sciences. Most examples are based on variables such as income and are more hypothetical than real. The present version of the book has grown out of the earlier edition that was restricted to social research. The focus continues to be on social aspects. While I am not in a position to assess the utility of the book for social scientists, I can say with conviction that the book does not offer much to health researchers except for a handle on running SPSS. It also is not a good reference book as the index provided at the end is extremely limited.

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This concise, superbly produced, and richly illustrated volume is an eye opener. It is the result of experience gained by treating over 5000 mine victims over 10 years. It is aimed at the developing countries where first aid and casualty evacuation in a rural setting are logistic problems because of the lack of trained personnel, constraints of terrain and weather, and finances. Yet this manual goes much beyond pre-hospital care. It is a book reflecting actual field experience, intense commitment and above all, the courage and conviction of the authors.

The handbook is divided into nine sections, starting with body response to injury, simple life support, advanced life support, case stories from real life, the ‘chain of survival’ village university, and practical advice on drugs and dosages. The last (practical advice) is unique—not only does it give dosages of commonly used drugs, but also intravenous and oral fluids for volume replacement, preparation of energy-rich oral diets from locally available foods, and improvisation of basic medical equipment for developing one’s own teaching aids to analyse results. The style is simple, direct and lucid, and is aimed as much at the village health care worker (or mine medic, as the authors call him), as at the trained doctor or the trauma surgeon. The book is profusely illustrated with superb, crystal clear, and easy-to-grasp illustrations.

The authors emphasize a holistic approach to the trauma victim. They highlight the concept of ‘chain of survival’ of a trauma victim in a rural, Third-World setting. This consists of: (i) a warning system (the person who first notices the accident); (ii) the first village helper (who should be capable of delivering simple first-aid such as artificial respiration and be able to control bleeding at the injury site); (iii) transportation to the village; (iv) the mine medic (basic or advanced)—the key person who is trained for pre-hospital trauma care; and (v) transportation to the hospital. It is rightly pointed out that unless this entire chain is strong, the patient may not reach the hospital alive. Practical guidelines are offered on how to systematically build and strengthen this chain of survival. The stress is on how to involve and train the local people, including the setting-up of a village university for training these local health workers. Generation of funds for this chain of survival is also discussed (including strategies for extracting funds from the United Nations, non-governmental organizations and developed countries). These suggestions are based on common sense, experience and pragmatism. A host of useful addresses are also appended at the end of the book.

The authors have vehemently criticized the use of tourniquets in the field setting. The issue is controversial, but the balance of evidence suggests that they are right; packing, pressure bandage and manual pressure on a proximal artery would control bleeding in the extremities in almost all cases. I, for one, fully agree with them on this account, because tourniquets usually cause more harm than good. More controversial is their advocacy of some of the advanced life support measures under field conditions. While none would contest the use of venous cut-down, endotracheal intubation, airway cut-down or even fasciotomy, the use of laparotomy in the field for control of damage is a fairly radical suggestion. The authors’ arguments are cogent and they advocate its use only after proper training (including training on live animals, but the suggestion may not find favour with purists active in this field). The suggestion to practice basic and advanced skills on a living animal is indeed excellent, and may be the least expensive and most practical way of teaching advanced life support to the mine medics.

Having spent over two years in treating over 2500 victims of this nature in a Level 2 trauma centre in Kashmir, I was always struck by the fact that once a victim reached the hospital, the mortality was extremely low (less than 2%), yet the proportion of victims who died en route to the hospital remained disproportionately high. The answer obviously lies in improving pre-hospital care. Unless this is done, we will continue to lose a large number of potentially salvageable patients. I strongly recommend this book as compulsory reading to all health care professionals in the northern and eastern regions of India, where militancy (mostly mine blasts) claim a large number of victims. Some non-governmental organizations active in these regions could spread the message of this book to these unfortunate communities and help empower them, thus saving a lot of lives. I would also recommend...
this book to all doctors, medical students, and paramedical staff of Third World countries—since trauma and its care involves all of them. The recent earthquake in Gujarat makes the reasons for reading this book even more compelling.

The authors have not only succeeded in producing a manual on pre-hospital trauma care in developing countries, they have achieved much more. They have given us a simple, easy to understand and follow, superbly produced and richly illustrated manual that tells us what can be achieved under the most trying conditions. Their suggestions are pragmatic, and their recommendations achievable; that is reason enough to read this book.

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Lt Col K. M. Rai was awarded the ‘Sena Medal’ by the President of India on 26 January 2000 in recognition of his dedication and devotion in saving hundreds of lives and limbs while serving as a surgeon in a forward hospital in Kashmir during 1997–99.

—EDITOR


This is an extremely comprehensive book, dealing with many of the contemporary issues on the interface between medicine and society. Many scholars have contributed to this well presented, well brought out and informative book.

There is a growing understanding today of the complexities of health and illness, health-related behaviour and the quality of medical care. The handbook contributes to this understanding by showing how health-related issues fall not only in the domain of medical sciences, but also that of the social sciences. Many scholars from disciplines ranging from sociology, anthropology, public health, social medicine, behavioural sciences and health policy have contributed to this multidisciplinary book. The editors have demonstrated the complexities of health and related issues through a vast range of articles dealing with socio-historical perspectives, social theoretical analyses as well as discussions of the forms of contemporary knowledge. Since western authors have contributed to this book, it tends to deal with problems in health and medical systems faced by the developed rather than developing nations.

The editors have divided the book into three parts in order to present it in a lucid form. Each part deals with an area that leads into and supplements the other. The first part deals with a social and cultural framework of analysis, the second deals with the experience of health and illness and the third with health care systems and practices.

The first part considers how medical scientific knowledge is socially and culturally produced. It demonstrates strong cultural, economic and political reasons for the expansion of knowledge.

It begins with an interesting general model of the historical concepts of health and illness and then goes on to detail how the social theories of health and illness have been dominated by the model of biomedicine from the end of the eighteenth century. While the importance of a holistic socio-medical understanding is explained, the chapter dealing with multilevel research fails to consider the significance of single-level research being practiced today. However, the chapter dealing with the social construction of health and medical discourse is excellent, and the following one which traces how spatial distribution of health is affected by the distribution of wealth is also extremely interesting. The chapters dealing with the effect of globalization and commodification of health and on the social causation of health, while being detailed, drift to narrower definitions that exclude the socio-economic reasons for poor health and consider only technical and behavioural changes as solutions. Similarly, the chapter dealing with issues of socio-economic inequalities in health and of gender, in spite of giving detailed information, offer naïve solutions which seem to sidestep the larger issues behind these inequalities. The last two chapters dealing with the impact of globalization and privatization of health care on the health of the disadvantaged (i.e. women) and on the new directions in genetic research are excellent, both in presentation and analyses.

The second part also has a variety of chapters which, though comprehensive, lack in-depth analysis. While the first part tends to use technical terms, this part makes for easier understanding since it is ethnographic and deals with patients’ perceptions.

The second part of the book begins by considering the cultural variations in a patient’s experiences and then moves on to social networks influencing patient behaviour. However, the emphasis of this chapter seems to be on changing patient behaviour using these networks instead of understanding how these networks came into existence and how people use them for social support. The next chapter deals with the importance of understanding cultural, collective and subjective experiences of illness. The chapter on doctor–patient relationships is extremely interesting but neither questions medical socialization nor increasing medicalization. The following chapter is thought-provoking as it draws on how ideas of normality and abnormality are used to hold individuals responsible for their own health. This thought is carried forward by considering chronic illness and disability, though the authors naively assume that the developed world will also have a predominant load of disability as compared to other diseases by 2020. The remaining chapters in this part are very good. They move from an excellent discussion on the increasing medicalization of reproductive health through new technologies and the barriers faced by patients in health care utilization, to measurements of health status. The second part concludes by considering the reasons why community programmes based on behavioural change research often fail.

The third part begins by looking at the changes in health care systems from the nineteenth century till the present form of health care—a part of the medical market. It then considers the uncertainties in medical knowledge and practice and the re-emergence of alternative medical systems. It also attempts to see whether health systems in the era of globalization are gradually converging. However, here the authors do not discuss the impact of health sector reforms on the health systems of debt-ridden nations. The following chapters are extremely interesting as they demonstrate how a patient’s views are often regarded as threatening to medical autonomy, and are often appropriated to legalize administrative moves. Subsequent papers look at how equity can be improved in the health care system, and then reveal a very interesting develop-
ment in the last decade—that of rationing of health care. The concluding chapter explains that while health policy needs to be reconfigured, this is very difficult, since health determinants have both social and political dimensions.

The occasional lack of critical analysis does not detract from the usefulness of the book. There are many excellent chapters and even those which do not analyse data adequately are extremely informative. Since the book reflects many contemporary western medical issues, it is not always relevant to the conditions in the developing world. However, it is very comprehensive and would make an excellent reference book. It is definitely a must for medical professionals, despite its high price.

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**Obituary**

**Bhagwandas P. Shah**
(24 December 1927–4 February 2001)

The death of Dr Bhagwandas P. Shah brings to an end an important chapter in the development of paediatrics in Mumbai. He introduced child psychiatry to the city and pursued its practice with a missionary zeal.

Dr Shah graduated from the Seth G.S. Medical College, Mumbai and went to the Maudsley Institute of Mental Health for training as a psychiatrist. He then joined the Worcester Child Guidance Clinic in USA for approved training in child psychiatry. He returned to India in 1958.

Bhagwandas arrived in Mumbai where a psychiatrist specializing in children was a new concept. Having worked with child psychiatrists in Worcester (Massachusetts) and realizing the scope of their work, he was determined to develop the specialty in Mumbai. Since none of the teaching hospitals had any place for a child psychiatrist Dr Shah started a private clinic.

It did not take long for another pioneering institution—the Tata Institute of Social Sciences (TISS)—to realize Dr Shah’s worth. They decided to start a Child Guidance Clinic (CGC) and B.J. Wadia Hospital for children offered them accommodation. This started a new era in the development of paediatrics as well as psychiatry. Dr Shah worked with the CGC from its inception in 1961 until 1990. When the Institute of Child Health was established in 1967, he was appointed Consultant Psychiatrist. He developed another CGC at the J.J. Hospital.

Among the various activities he developed in the CGCs were play therapy, working out an Indian model for development quotient study of children of problem parents, study of educationally backward and slow learners, and educational therapy for dyslexic children. His interest in the psychiatric problems of mentally retarded children resulted in his lifelong attachment to the Shashi Mangalyam School for mentally subnormal children at Juhu. He also started a special class for children with multiple handicaps at the Dadar School for Blind Children. His interest in the problems of the blind had a personal background. Even as a medical student, he only had ‘tubular vision’. He knew that progressively his vision would diminish and for many years he had only ‘macular vision’. For the last 15 years he was totally blind. The breadth of his vision for child psychiatry and the width of its scope that he developed during his lifetime are all the more remarkable when viewed against the background of his handicap. His progressive blindness forced him to slowly withdraw from his multifarious activities, beginning with the CGC at the J.J. Hospital in 1984. He continued to work at Wadia Hospital till 1990; nearly 30 years of fruitful association. His appointment with the Juhu school was the last that he relinquished, although whenever possible he would make a visit. It is truly amazing how he continued to travel to these different institutions in distant parts of Mumbai often using public transport.

He was always in demand as a teacher for students of psychiatry, social work, nursing, special education, child development and psychology, as well as paediatrics. His case demonstrations at the weekly paediatric meetings were always instructive. He also taught candidates undergoing training to teach the deaf and mute at the EAR centre. TISS published the case records he had collected over the years. Apart from articles in scientific journals, he also wrote in English and Gujarati for lay readers.

In Dr Bhagwandas Shah’s death, Mumbai has lost a stalwart in the field of psychiatry. It is true to say that the void created will not be filled, as no other psychiatrist has chosen to take up child psychiatry. Paediatricians concerned with children’s welfare will miss him the most.

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