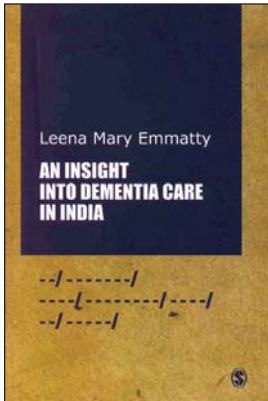


Book Reviews

An Insight into Dementia Care in India. Leena Mary Emmatty. Sage Publications India, New Delhi, 2009. 118 pp, Rs 240. ISBN 978-81-7829-888-7 (PB).



The WHO estimates that 5%–6% of the world's population >65 years is affected by Alzheimer disease. The initial estimate is 1% at the age of 65, doubling about every 5 years until it reaches about 50% at 90 years. Indian figures are less easy to come by and range from 1.3% to 3.4% (>65 years). Nevertheless, as is obvious to any practising neurologist, Alzheimer disease is a growing problem in India and I have been looking out for an Indian take on this subject. This slim book grew

out of the author's personal interest and her research into the issue of caregiving for patients of dementia in India, as part of her training at the National Institute of Mental Health and Neurosciences, Bangalore, and Tata Institute of Social Sciences, Mumbai. Much of the research has been carried out in her native Kerala, which probably has the best public facilities for someone so afflicted. This book aims at giving a comprehensive view of dementia care in India and rather ambitiously claims to be 'a valuable source book for clinicians, students, educators or anyone who is interested in the field', which, one guesses, should include this reviewer.

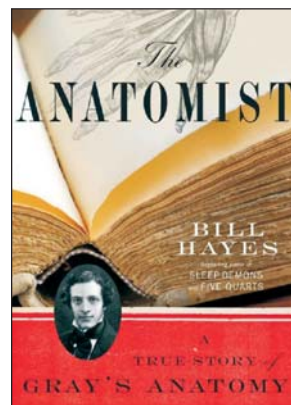
The book's main focus is on the sociological aspects of caregiving. The burden of caregiving seems to fall mainly on women relatives, especially the spouse. The next preferred seems to be a single daughter in residence or a daughter-in-law. Even in the presence of a large family network (which is something I have come across infrequently as a practitioner in Mumbai), the primary caregiver receives little direct support from other family members. Managing the patient's activities of daily living takes up increasing effort and time, unless live-in help can be hired. These, of course, are issues for middle and upper class families. One insight (mine, not the author's) is that lower income families, especially if they are only a generation away from their rural origin, often opt to move the patient to their native village. Caregiver stress is obviously a huge personal issue and the author speaks of types of coping: problem-focused or emotion-focused. Social support is also used to a varying degree. The book contains a short chapter on an intervention toolkit for professionals and the possibilities of psychosocial intervention. Another chapter, understandably short and sketchy, discusses the resources available in India.

Unfortunately, this book falls between rather more than two stools. As the outgrowth of a thesis, it provides little by way of original thought. Rather, it carries much of the standard list that plagues much of what passes for original work even in our premier central institutions. As a source book, it is probably too dated and limited for the readers it is aimed at. It provides hardly any valuable suggestions on 'how-I-do-it' that most readers would look for. The book could definitely have been livened up with case vignettes to illustrate the issues being discussed. As it stands, it is a stodgy read that was a task to plough through. However, this

material needs publication. Maybe the editors of this journal could ask the author to update her material and send it in as a review article to make up for getting panned in the book review!

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The Anatomist: A true story of Gray's anatomy. Bill Hayes. Ballantine Books, New York, 2008. Hardback. 252 pp, US\$ 24.95. ISBN 978-1-921215-89-6.



In the *Prologue*, Hayes tells us of his childhood fascination with the human body, 'made in God's image' and depicted in the form of crucified Jesus on his wall. His mother was an aspiring painter and her thick tomes on Leonardo da Vinci, Michelangelo and Matisse introduced Hayes to the body as art. Two of his father's best friends were doctors and the top shelves of their bookcases held volumes that showed Hayes the body disfigured by disease. Hayes dreamed of becoming a doctor

but fate decreed otherwise. In the 1980s, passing by a bookshop in San Francisco, Hayes chanced upon a copy of Gray's *Anatomy* priced US\$ 9.95—'a deal I could not pass up' as in his estimation this book ranks alongside such classics as Bullfinch's *Mythology* and Plato's *Republic*.

'Half a life later' as he 'paged through the text of this book ... a new thought surfaced: Who wrote this thing?'

As he probed the life of Henry Gray, 'the unknowns simply outnumber the knowns.' Puzzlement gave way to frustration. 'Fascinating *biographies* have been written about everything from the number zero to the colour mauve, yet there is not one on Gray ... To this day, it is not known where or when exactly Henry Gray was born ...'

He soon learnt that 'Gray did not create any of the book's nearly four hundred signature anatomical drawings.' This led to searches on the other Henry—Vandyke Carter.

He decided to 'come to know Henry Gray' and concluded that this could best be done by 'coming to know human anatomy'.

Hayes' welcome volume, featuring the lives of both Henrys, is the outcome of that decision. To learn anatomy, Hayes enrolled in an anatomical dissection class where he was almost 20 years older than the average student in the batch of 120. Hayes' account alternates his own experiences in this and subsequent dissection

classes with those of the history of anatomy and the lives of his two Henrys.

Lest anatomists, medical students and doctors feel tempted to dismiss Hayes' experiences during dissection, I request them to study these accounts at least as intently as they do the historical segments for there is considerable insight, humour and wisdom in them.

Valuable insights are also to be gained from his interactions with the modern keepers of wisdom—experienced librarians. His act that nearly gave Ms Wheat a coronary artery spasm (p. 13) is an example of such an interaction.

Analysis of extant anatomical texts (especially that by Jones Quain) when Gray conceived his own work, the creation of the book by Gray and illustrations by Vandyke Carter and some later editions where additional illustrations (in garish colour and lacking the qualities that made Carter's illustrations 'perfect... exquisitely wrought and functional') make the special qualities of the 1858 edition of Gray's *Anatomy* stand out for us.

The lives of Henry Gray and Henry Vandyke Carter are unfolded gradually with extensive quotations from Carter's notebooks, diaries (including those with coded language) and letters to his sister, details being progressively fleshed out till we make a fair acquaintance with these two admirable scientists.

The human aspects of both protagonists are well depicted. Henry Gray's series of successes is contrasted with Carter's doubts about his own abilities and future that persisted well after Gray's *Anatomy* had proven a brilliant success. The comments by Carter in his diary—'Must work more.', 'Must work better.', 'Must be more exact.'—and others referring to his perceptions of his actions—'Have acted foolishly, hastily and improperly...'—help us understand his troubled mind as he strove to prove his worth to himself.

Carter's dismay at the manner in which Gray dismissed his contributions in the form of excellent illustrations to Gray's prize-winning essay on the spleen is understandable. Carter confided to his diary, '(Gray) takes no notice of my assistance (in the published essay) though (he) had promised (to do so). Rather feel it.' To Carter's credit, Hayes adds, 'Carter doesn't seem to hold a grudge for more than a sentence; immediately he goes on to praise Gray's book (on the spleen) as "very creditable". And that is where it's left. He never confronts Gray about the matter and Gray never brings it up.'

Carter also never grumbled about the intolerable conditions under which he was asked to dissect at the Royal College of Surgeons. He went on to produce specimens that earned him plaudits for his 'artistic skill and praiseworthy industry'.

Carter's unfortunate relations with the woman who became his first wife brought him untold sorrow. Fortunately, his marriage to Mary Ellen Robison in 1890 brought him 'late-blooming happiness', cut short by his death 7 years later.

While Gray's career ended with his death from smallpox in 1861, Carter went on to his path-breaking researches on relapsing fever, mycetoma, leprosy, filariasis and other diseases in India.

Hayes also provides an excellent introduction to the way in which medicine was taught and learnt in the Britain of the 1830s and 1840s. Other personalities we are privileged to meet include Sir Benjamin Brodie, anatomy instructor Prescott Hewett and Lt Joseph Bellot. Hayes reproduces several of Carter's anatomical illustrations, using them to flesh out his own findings at dissection. The ethical manner in which Carter used anatomical illustrations by earlier anatomists such as Friedrich Arnold is described in Chapter 11.

Hayes also reproduces Gray's famous portrait (sitting among his students at St George's Hospital, London in 1860) and a photograph of Gray's grave. Portraits of Carter, his sister Lily, photographs of pages from his diaries and photographs of the Grant Medical College in Bombay (now Mumbai) when Carter worked there are additional historical nuggets.

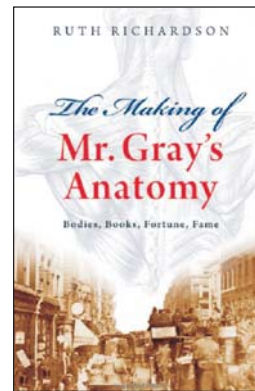
There is a single reference to Ruth Richardson (see the following book review), with a quotation from her introduction to the 39th British edition of Gray's *Anatomy*.

As we study the book, we learn much about Hayes as well for he lays his own thoughts, feelings, inclinations and acts bare.

I closed this book with admiration for Hayes' tenacity in collating facts on Gray and Carter and bringing them to our notice. As for the two principal characters, I must confess to a greater fondness for Carter than for Gray.

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The Making of Mr. Gray's Anatomy. Ruth Richardson. Oxford University Press, Oxford, 2008. 322 pp, £ 16.99. ISBN 978-0199-5529-93.



This is a considerably larger, more detailed and elaborate work. It has the added advantage in that it is the result of researches by a native of the land that produced the two Henrys unlike the earlier book produced by someone from across the pond (as the Atlantic is sometimes referred to).

The paper cover attempts to take you back to the times when Henry Gray walked the streets of London. In fainter print over the scene featuring horse-drawn carriages is the illustration from Gray's classic

book showing the muscles of the back of the neck and trunk. It epitomizes the contents of the volume as Richardson takes us through a detailed tour of the environs in which Henry Gray and Henry Carter studied, lived and worked, and tells us of the book they created. (In fact, the cover shows Fleet Street in 1880. Gray died on 12 June 1861.)

The book stems from the historical introduction Richardson was asked to write for the 39th edition of Gray's *Anatomy* edited by Professor Susan Standring. The seeds for it were probably sown when Richardson worked on *Death, dissection, and the destitute* (published in 1987) though that volume concentrated on the events that led to the passage of The Anatomy Act and depicted vividly the misdeeds of the body-snatchers. Her keen sense of local historical geography is evident in that book as well, the introduction itself featuring the ancient village of St Pancras, the nearby Fleet River that periodically inundated the surrounding land and dwellings and Battle Bridge (now known as King's Cross).

In contrast to the relative informality pervading Bill Hayes' book, here we have evidence of scholarly formality. A list of illustrations guides the reader wishing to return to specific images. A map of London in 1851 (pp. xii–xiii) shows us the locations of Henry Gray's home, Carter's lodgings, Kinnerton Street Medical School, St George's Hospital, the Royal College of Surgeons and other places frequented by the two Henrys. There are excellent portraits of Gray, Carter (that on p. 34 being drawn by himself) John Parker Sr and John Parker Jr. The use of Carter's illustrations of the individual human teeth as markers separating the various sections of each chapter is interesting.

In the early chapters of this book, Richardson walks us along paths trodden by Gray and describes historic structures as they were in his time, comparing them to what can be seen along these very streets today. The atmosphere of London in the 1850s, the conditions in the wards and anatomical dissection halls (at Kinnerton Street and in the Royal College of Surgeons), the composing room and printer's offices are successfully recreated.

Like Hayes, Richardson laments the lack of information on Gray, the human being. 'We have no inside knowledge of Gray's spiritual or ethical certainties or dilemmas, his likes and dislikes, his humour or the textures of his personality and upbringing...' Gray's ambitions for professional success and need for recognition and high status are described in detail here. Richardson adds a poignant note: '...After his funeral, his hospital colleagues were most curiously silent. There was no portrait painted or bust erected and no memorial volume apart from Gray's *Anatomy* itself. It was as if by writing the book, Mr Gray had been taken to have commemorated himself.'

In a note on page 289, Richardson describes a sad experience: 'One would have thought that the creation of a major textbook could not have gone along unnoticed by students, senior students and other staff but so far no memoir of anyone using the dissection room at Kinnerton Street at that time has come to light which discusses it. I have traced the names of contemporary students and staff, and checked them out, but sadly so far have drawn a blank...'

Expectedly, there are several features common to the two books. References to earlier anatomical texts, the contrast between Gray's successes and Carter's halting progress amidst tormenting self-doubts, the support provided to Gray by Sir Benjamin Brodie, the manner in which Gray and Carter collaborated on the production of the classic text and Carter's subsequent very productive medical career and personal tragedy in India are examples.

Where this text differs remarkably from that by Hayes is in the consideration of the technical aspects of the production of Gray's *Anatomy*. Herself an enthusiast of the various aspects of the publication of books, Richardson provides details on J.W. Parker and Son, publishers; bindings; end-papers; and casings. Most interesting is her study of fillets made from waste paper and cut either by children or women and glued to the gauze over the sewn pages between the cardboard surfaces of the covers. Chapter 3 contains a wealth of such information that most readers of this journal will not find easily elsewhere. In Chapter 4, she tells us of Parker Senior's interest in anatomical works ever since he had published *The house I live in*—a little book for children describing the human body as a habitation for the soul. (The frontispiece and title page from the tenth edition of this book are reproduced on p. 94.)

Richardson also provides considerable detail on the dissection of human bodies by Gray and Carter, tracing individual bodies from the hospital bed to the dissection hall through the study of

registers. As she points out, we will never know the names of the persons from whose bodies the various illustrations used in Gray's *Anatomy* were made but the process of dissection and the preparation of illustrations is dealt with in chapters 5 ('Raw material') and 6 ('Creation'). We can only wonder how many of them had hoped, as did the anonymous donor quoted on page 256, that 'someone, somewhere, a student, a surgeon, perhaps a group working on a problem, may improve their skill or find an answer to a problem in their study of the body that once contained—and served—the person that was me'.

Richardson's scholarly analysis of Carter's anatomical illustrations and how they excelled those in all earlier treatises is instructive (see pp. 218–228 and also her notes no. 27 and 28 on pp. 296–7).

Chapter 7, logically, is entitled 'Production' and describes the period 1857–8 when the book took shape and was ready for release. The hiccups inherent in the process of setting type and aligning illustrations are noteworthy. I was especially fascinated by the description of how Carter's magnificent drawings were accommodated in pages of a size smaller than that actually required for them and must confess that I had thus far never noted how some illustrations in our favourite textbook on anatomy extended beyond the margins of the text that ran alongside them.

Hayes stated in his book that 'to this day it is not known ... when exactly Henry Gray was born. The year 1825 has been suggested but 1827 is generally more agreed upon.' Richardson resolves this by reproducing a memorial card published on Gray's death (p. 251). It clearly states that Henry Gray died on 13 June 1861 aged 34 years.

A single niggling doubt assailed me as I neared the end of the book. On page 215, the extract quoted by Richardson from the first edition of Gray's *Anatomy* asks the student to place the body to be dissected in the prone position when dissecting 'parts concerned in inguinal hernia'. Even after exercising my imagination to the utmost I cannot see how one can study the inguinal rings and the canal, leave alone their contents with the body positioned thus. In a copy of the first edition of Gray's *Anatomy* available to me, I note on page 708: 'The body should be placed in the supine position.' Perhaps Richardson too may, once in a way, suffer a Homeric nod!

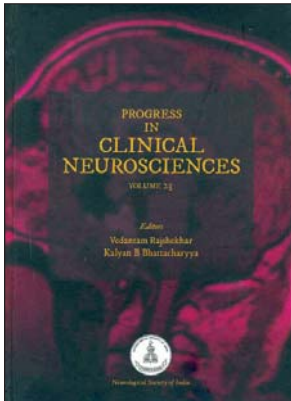
Towards the end of her book, Richardson voices a plea that needs to be made again and again, especially in India: 'As a historian, I often speak to doctors' groups, urging them to record their lives and experience for future historians. Too few realize that what they see as everyday and ordinary will in a hundred years' time be perceived as extraordinary, compellingly interesting and specific to them, and if that is not recorded now it will die with them...'

A question may arise in the mind of the reader as he comes to the end of these two reviews: 'So which is the better of the two books?' Alas! There is no easy answer. Hayes is easier to read, provides more information on Henry Carter and is the shorter of the two books. Richardson is more scholarly, evokes the London of the two Henrys more effectively and provides many insights that are otherwise denied to us.

If possible, try and get a copy of each!

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Progress in Clinical Neurosciences. Vol. 23. Vedantam Rajshekhar, Kalyan B. Bhattacharyya (eds). Byword Books, Delhi, 2009. 238 pp, Rs 595. ISBN 978-81-8193-044-6.



Rapid strides are being made in the neurological sciences and our ability to help patients with neurological disorders has increased considerably. Magnetic resonance imaging has the capability to demonstrate the anatomical substrate of neurological involvement with such clarity that the 'art of neurology' is changing. In that context, I find in this text a refreshing review of subjects of common interest for both the trainee and practising neurologist in need of a quick review.

This is a multi-authored text published under the auspices of the Neurological Society of India. Most of the authors are Indian neurologists and neurosurgeons. There are some contributions by reputed international authors as well. The book is divided into subsections, which include infections of the nervous system, conditions of the spine, parkinsonism and epilepsy.

The chapters on neurocysticercosis and bacterial meningitis are very well written and provide a good review of the current practice guidelines in the management of these disorders. The former highlights the pathogenesis of neurocysticercosis, and discusses the various modes of presentation and the treatment options, which are still controversial. The aetiopathogenesis however, needs to be clarified further. It may be pointed out that man is a secondary host and that consumption of uncooked pork leads only to *Taenia solium* infestation in the gut and not neurocysticercosis.

The two articles on parkinsonism deal with the current approach to treatment, the complications of advanced parkinsonism and the long-term side-effects of drugs. The chapter on the current treatment options is very well written and will serve as a great resource for neurosurgical residents looking for a good review of the subject. The series presented by Doshi discusses his clinical experience with bilateral implantation of deep brain stimulators in subthalamic nuclei. The author should have supplemented the text with illustrations of microelectrode recordings from the subthalamic nucleus and clarified whether this technology has improved their results.

The chapters in the section on the spine focus on craniovertebral anomalies and the surgical options for the treatment of the degenerative cervical spine. Goel provides a brief introduction to craniovertebral anomalies and basilar invagination, then goes on to discuss the management of this problem using the technique of lateral mass fixation, with distraction and fusion of the atlantoaxial joint, to achieve reduction of the odontoid. The chapter is well illustrated. The chapter on artificial discs for the management of cervical disc disease provides a very comprehensive review of the indications for the use of such discs, the technology available and the methodology. This chapter should be very useful to all spine surgeons.

The chapter on degenerative lumbar spine discusses the merits and demerits of routine fusion for degenerative spondylolisthesis in the elderly. The authors have tackled a subject that has generated immense controversy.

The section on epilepsy provides a comprehensive review of subjects of great importance. The chapter on myoclonic epilepsy discusses the various aetiologies by age and presentation. The effect of epilepsy in women has attracted increasing attention in recent years. Anticonvulsants may not only affect the development of the foetus, but also have an important effect on the health of women. They have effects on pregnancy and bone health, and affect the functioning of hormonal contraceptives. It is important for practising clinicians to be well informed about these issues, and this chapter, which provides a comprehensive review on the subject, should be of use to them. The chapter on the use of anticonvulsant medication highlights the factors to be considered when determining the choice of medication.

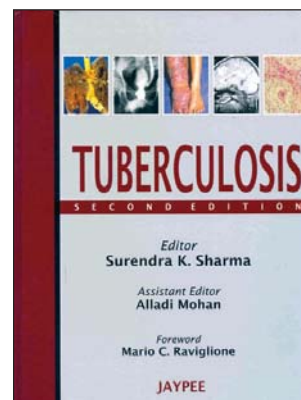
The chapters on epilepsy surgery are well compiled and provide a good introduction to the subject, which is gaining in importance. They clearly set out the issues involved in evaluating patients with intractable epilepsy and discuss the value of intraoperative electrocorticography. These are aspects of epilepsy surgery which are important in day-to-day management.

Overall, I am very impressed with this book and the subject material that has been tackled. The book will be of great help to all residents in the neurosciences. All the articles are well presented and to the point. The subject matter is arranged very well, and the typefaces used and the binding of the book are attractive. Overall a very impressive compilation!

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Tuberculosis (second edition). Surendra K. Sharma, Alladi Mohan (eds). Jaypee Brothers Medical Publishers, New Delhi, 2009. 1052 pp, price not mentioned. ISBN 978-81-8448-514-1.



Tuberculosis (TB), a disease that has afflicted mankind since antiquity, remains a major public health problem worldwide. It infects a third of the world's population. Two million individuals die of TB each year, more than 90% of the infections and deaths occurring in developing countries. More than half of the deaths and cases are concentrated in 5 countries—Bangladesh, China, India, Indonesia and Nigeria. Almost

75% of patients with TB in these countries are in the economically productive age group (15–50 years). TB is a major public health problem in India, which accounts for one-fifth of the global incident cases of TB. Each year, about 1.8 million people in India develop TB. Of these, 0.8 million are infectious cases. About

370 000 Indians die due to TB annually. Despite advances in diagnosis and control, the problem persists, and a new challenge has emerged in the shape of multidrug-resistant (MDR) and extensively drug-resistant (XDR) forms of the disease. Though much of the morbidity caused by TB is due to pulmonary involvement, which is also the most relevant in terms of transmission of the disease, TB can involve almost any organ of the body. Considering the immense social and economic burden posed by TB, any resource that will arm the medical fraternity to better understand and control this deadly scourge is always welcome.

This book is a continuation of the task initiated by the editors 8 years ago, when they brought out the first edition of the book. The hugely popular first edition dealt with the changing clinical presentation of TB, advances in laboratory and imaging diagnostic modalities and therapeutic measures, such as directly observed treatment, short-course (DOTS) therapy. It had contributions from experts with vast experience in the management of TB in the Indian setting. The first edition thus provided readers with a much-needed, well-referenced, standard textbook of TB that documented the Indian experience. The second edition has logically moved on from an 'Indian' to a 'global perspective'. The editors have roped in several new contributors, all of them leading authorities, from various parts of the world. Even the earlier chapters have been rewritten.

The book is multi-authored and contains 67 chapters, which cover practically the A to Z of TB. The chapters follow a logical sequence, starting from an introduction and history and going on to epidemiology, pathology and microbiology. The chapters on the clinical aspects of the disease extensively cover pulmonary and extra-pulmonary manifestations, and there are separate chapters on all major organ involvements, as well as on TB in special conditions, such as pregnancy, chronic renal failure, and TB among children and the elderly. Common problems, such as antituberculosis therapy (ATT)-induced hepatitis and tubercular pleural effusions, have also been dealt with separately and extensively. Even though each chapter is nearly complete in itself, the chapters do have some degree of overlap and repetition, which is inevitable in any multi-author book. Also, some aspects may be less extensively covered, one such aspect being the pharmacology of antituberculosis drugs.

New editions of a book necessarily have to incorporate recent advances in the field. This edition fulfils this commitment very well. There are new chapters dealing with immunology, immunogenetics, vaccine development, public-private mix, building partnerships, the Revised National Tuberculosis Control Programme (RNTCP) of the Government of India, and global efforts at TB control (STOP TB). Pages are also devoted to several other spectacular advances in TB research. Our understanding of the host-pathogen interaction at the molecular level, especially the immunology and immune-pathogenesis of TB, interferon-gamma release assays (IGRAs) for latent TB infection, the use of liquid culture and the molecular method of diagnosis is well covered. A comprehensive list of useful web links is provided for those who want to keep up to date with the latest information on TB. The book ends aptly with a reproduction of the International Standards for Tuberculosis Care (ISTC).

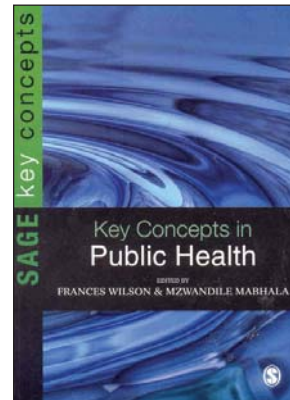
The quality of publication and the quality of paper are excellent, and the font size is ideal. With its full colour illustrations, tables and host of good-quality clinical/radiological photographs, this publication matches the best in the world. In summary, this is a comprehensive book on TB that is referenced, illustrated and

presented very well. No doubt the book will benefit not only physicians, students and researchers, but also everyone involved in the care of TB patients or the control of the deadly disease.

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Key Concepts in Public Health. Frances Wilson and Mzwandile Mabhala. Sage Publications, New Delhi, 2009. 312 pp, price not mentioned. ISBN 978-1-4129-4880-7.



Public health, like any other branch of medicine, is a dynamic subject, the knowledge base of which changes quite rapidly. However, the basic concepts remain unaltered and form the foundation of the practice of public health. This book focuses on these very concepts. It is divided into 3 parts: 'Theoretical concepts', 'Practical concepts' and 'Population and public health practice'. The chapters are structured and have sections containing definitions, the key points and a discussion, followed by a case study, the conclusions and suggestions for further reading. The topics covered are varied and exhaustive. Beginners will benefit by reading this book as it brings out some of the very basic concepts quite clearly. The book makes for smooth reading, and steers clear of complex terms or intimidating the reader with technical jargon. However, precisely for this reason, it is likely to attract a limited readership. Its stated target readership is 'undergraduate students, new entrants to the public health field, public health practitioners and teachers of public health'. While the book can be useful in introducing beginners to the key concepts in public health, it is doubtful that it can serve as a resource book for teachers of public health. The book will be of greater use when read in conjunction with a standard textbook of public health.

From an Indian reader's perspective, all the case studies are 'alien' and may not allow her/him to relate effectively to the concepts explained. The book would have a wider appeal if it included case studies from at least all continents, if not from a large number of countries. Also, a few more explanatory illustrations and diagrams would enrich the book and can hopefully be added in the next edition. Overall, a good support book for select groups of the stated readership.

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