**Book Reviews**


This book is a compilation of case studies on innovations in maternal and newborn health from several parts of India. ‘Innovation’ has been defined as ‘doing what is being done differently or doing something new’. The book also states that ‘useful innovations’ are those that create value benefits for people who provide or use healthcare. The innovations pertain to those who face social and geographical barriers in accessing healthcare.

The project of compiling these case studies, undertaken by a team from the Public Health Foundation of India (PHFI), and funded by the MacArthur Foundation, began in 2010. The purpose of the project was to identify and document case studies that could help to fill gaps in the delivery of healthcare, as well as serve as teaching material for health professionals. The methodology followed throughout this project appears to be rigorous. An expert advisory group of 15 individuals guided the project. They set the criteria for the selection of the case studies that finally made it into the collection. The criteria were: the potential impact of the innovation, the feasibility of its implementation, its scalability and sustainability, and acceptance by the community. The case studies, both written and audiovisual, were first reviewed within the PHFI and then peer reviewed by an expert group member.

The book contains 23 case studies, selected after an initial landscaping exercise that identified 218 innovations in maternal and newborn health across India. The case studies are presented under five themes: the health system for maternal and newborn care (access, quality, availability and affordability); direct causes of maternal and newborn mortality; indirect causes of mortality; accountability of programmes; and successful innovation engines.

The case studies under the first category include innovations related to the improvement of the physical accessibility of services (mobile boat clinics in Assam and an outreach model in the Sunderbans, West Bengal), as well as financial accessibility (the Sambhav Voucher Scheme in Uttarakhand). Public–private partnerships (PPPs), such as the Lifespring Hospitals and Merrygold Health Network, are cited as examples of improving the accessibility and quality of care. A case study shows the benefits of improving the quality of maternal and newborn care in hospitals. The detailed chapter on quality assurance programmes in public health facilities includes a useful appendix on conceptual issues in quality of care. This appendix can serve as material for the preparation of teaching faculty. The final two case studies in this section are about emergency referral transport, with a focus on the GVK–EMRI model and the Janani Express in Madhya Pradesh.

The second section, which addresses the direct causes of maternal and newborn mortality, presents case studies on innovations for newborn care (the Embrace baby warmer) and postpartum haemorrhage (the non-pneumatic anti-shock garment of the Raksha Project). Both these innovations use low-cost technologies to prevent mortality that is avoidable. The next set of innovations, which are intended to deal with the indirect causes of mortality, include intersectoral programmes that bring together community-based interventions targeting women, men and adolescents, and aim to create awareness of water and sanitation, nutrition, early marriage, childbirth, and so on (Jamkhed’s Comprehensive Rural Health Project and Community-led Initiatives for Child Survival, Maharashtra). A case study on PRACHAR’s family planning programme has also been included in this section for its contribution to the improvement of maternal health. The third group of innovations that indirectly address maternal mortality are interventions in the area of youth reproductive health. Thus, the section includes case studies on youth-friendly centres/clinics run by Friends Clinic, a nongovernmental organization (NGO), a tertiary care hospital (Sahin) and the government (Anwesha clinics).

The section on accountability includes two case studies on monitoring and evaluation and one on social accountability. The former deal with (i) the collection of evidence (the randomized controlled trials conducted by Ekjut), and (ii) the use of evidence for taking action (the Maternal Death Audit/Reviews of the Unicef-supported MAPEDIR initiative are a part of the second case study). Social accountability tools promoted by the White Ribbon Alliance in India are showcased in an effort to promote rights-based mass movement for safe motherhood.

Finally, the last section of the book holds up two organizations as innovation engines—the Tamil Nadu State Health System, and Action Research and Training for Health, an NGO based in the district of Udaipur. These organizations are considered innovation engines because they have bred many successful innovations in maternal health.

The case studies are written in a simple style, and the text is interspersed with attractive boxes containing the ‘voices’ of multiple stakeholders. An innovative feature of this publication is that the written material is accompanied by a DVD of the audiovisual case studies. The initial films, which deal with the issue of accessibility in difficult terrains, are particularly inspiring, with ordinary men and women coming across as heroes who play extraordinary roles. In addition to the descriptive case studies, the book contains valuable conceptual material in its annexures. The annexure on the case method is useful both for the teaching faculty of public health schools and medical and nursing colleges, as well as health managers.

An overarching perspective and framework rooted in the political economy of health would have enhanced the contents of the book and provided an additional criterion for judging the innovations. All the case studies, including those on PPPs and technical interventions—which have been dealt with somewhat uncritically—could then have been debated upon and thus aided us in building a perspective on the education of health professionals. The contexts within which the ‘innovations’ were developed and succeeded could make all the difference. Perhaps these could have been elaborated upon some more as we would then get a better idea of the conditions necessary for upscaling the innovations. In addition, a discussion of the many challenges of upscaling micro-level innovations and NGOs’ initiatives would...
have been useful. Finally, ‘product’ innovations need to be contextualized against ‘social’ interventions. Thus, a discussion on market-dependent product innovations and how they relate to the much-needed ‘social’ interventions would have been helpful.

This publication of valuable case studies is a timely one. As India struggles to accelerate the rate of decline of its maternal mortality rate to reach the Millennium Development Goal (MDG) of 109 per 100 000 live births by 2015, there is much that can be learnt from this collection of experiences. Further, the innovations documented in this volume could serve to inspire out-of-the-box thinking.

The intended audience for this book includes faculty and students from public health, medical and nursing schools; those undergoing in-service training and continuing medical education; officials of government and non-government institutions; and public health and development professionals. The book, also available as an e-book, is highly recommended for those studying maternal health and practitioners in this area.

ACKNOWLEDGEMENTS
I would like to thank my CommonHealth colleagues, Drs S. Sundari Ravindran, Subha Sri Balakrishnan and Sharad Iyengar, as well as S. Srinivasan for discussing the contents of this book with me. I drew upon those discussions while writing this review.

RENU KHANNA
SAHAJ – Society for Health Alternatives (Vadodara)
CommonHealth – a Coalition on Maternal Neonatal Health and Safe Abortion
SAHAJ, I Shri Hari Apartment Vadodara Gujarat
sahajbrc@yahoo.com


At the outset, I must make a declaration. Dr Magotra was professor and head of the department of cardiovascular surgery at King Edward Memorial Hospital in Mumbai when I worked in that institution’s department of neurosurgery. I know of her work from that time. I have, since, learnt of her contributions to the Public Concern for Governance Trust in Mumbai and in Gram Seva Foundation in Kharel, Gujarat. I have the privilege of interacting with her off and on.

This book has little in common with the better-known novel by Danielle Steele except for the sharing of the title. Dr Magotra’s subtitle will help readers separate substance from fantasy.

The book under review deals with neither the Trust nor the Foundation. A clue to what lies within the covers is to be found in the dedication ‘…to all my patients and their courageous families…’

Dr Magotra answers the question ‘Why this book?’ in her prefatory note and rapidly focuses our attention. ‘Amidst buzz of technology and commercialized medical practice, it is easy to miss the patient in the exciting wonders of modern medicine.’

She tells us of the difficulties faced by poor rural patients who have come to the impersonal and unfriendly public hospital environment of a huge metropolis (Mumbai). She decided to tell their stories, drawing upon the privilege they offered her of entering their lives. She has delved into the practical difficulties patients and families under her care faced. ‘Some patients left a very deep impression because of their poise and immense inner strength in the face of adversity.’ These are their tales. Even the account of ‘when I almost didn’t become a cardiac surgeon’ is centred around eight-month old Macchindra!

Woven into her descriptions of patients are glimpses of Dr Kersi Dastur, her teacher in cardiovascular surgery at Nair Hospital; Dr C. Walton Lillehei; Dr Denton Cooley and others with whom she has worked. (For a more detailed tribute to Dr Kersi Dastur by Dr B.R. Kalke and Dr Magotra, see Indian J Thorac Cardiovasc Surg 2010; 26:228–32.)

I cannot decide on which of her detailed case histories and observations affects me the most. Priya—with her premonitory statement ‘Tomorrow I shall go sailing in that white boat’; Arvind-Dastur-Lillehei (that was, indeed, the name he chose for himself); details on the patients with Down syndrome and rheumatic disease of the cardiac valves; the emancipation of Saloni (where Dr Magotra spotlights the mother rather than the patient) … each one captures our thoughts and makes us concentrate on a vital issue.

Written in language characteristic of Dr Magotra, each chapter displays her modesty, simplicity, honesty and deep feeling.

I put down the book in a pensive mood. The lessons she teaches us—without attempting to do so—will long remain engraved on my consciousness.

SUNIL PANDYA


Nutritional care of preterm infants is as intriguing as it is challenging. It not only requires an understanding of the physiological basis of nutrition per se, but also the theoretical and practical considerations relevant to the comprehensive clinical management of premature infants. Despite all the work that has been done in the field to date, the subject of nutritional care of preterm infants is rife with unresolved issues and
controversies, especially in the context of developing countries. This book is a commendable attempt to summarize the theoretical aspects of the nutrition of preterm infants, and also provides a concise, yet extensive review of the existing evidence in the field.

The authors first describe the concepts essential to the understanding and definition of the nutritional needs of premature infants, and how to set and target the goals of nutritional management, including a note on post-natal growth monitoring. This is followed by a chapter that explains how to practise evidence-based medicine (EBM), including the critical appraisal and grading of evidence. The next few sections deal comprehensively with individual macronutrients, describing the fundamental aspects of each nutrient (structural, biochemical and functional), including its metabolism, distribution, digestion and absorption. The authors then outline the various approaches for determining the preterm infant’s requirements of these nutrients, citing relevant literature and important studies of term infants and preterm animal models. Practical considerations related to the parenteral and enteral supplementation of various nutrients have also been discussed.

The chapter on the energy requirements of and protein–energy metabolism in preterm infants, in particular, deals with this complex topic in a simple, yet comprehensive manner. It highlights the grade of evidence and paucity of literature, where applicable. The chapter on fluids and electrolytes addresses the physiology of postnatal adaptation, as well as the broad aspects of the management of fluids and electrolytes. However, it would be necessary to read additional text to completely understand the nuances of the management of fluids and electrolytes in a preterm infant. The chapter on micro-minerals briefly summarizes the recommendations on specific micronutrients.

An entire chapter has been devoted to vitamin D and minerals (calcium, phosphorus and magnesium) in the context of the bone health of premature infants, as osteopenia is an important concern among these infants. The chapter describes the perinatal physiology of these minerals and vitamin D, along with the rationale for the estimation of the requirements for these in preterm infants. In particular, the authors have summarized and tabulated the recommendations of various bodies and authors, and then proposed their own recommendations. They have also given reasons for their recommendations, though the latter are, at best, only expert recommendations as they are not supported by sufficient, robust data. Other vitamins are discussed in a separate chapter and the recommended intakes have been tabulated in a convenient manner, along with the highest level of evidence that is available for the same. This, however, is only with reference to very-low-birth-weight (VLBW)/extremely-low-birth-weight (ELBW) infants.

There is also a section which essentially deals with the fundamental aspects of probiotics and prebiotics and their present status. Another section, which focuses on parenteral nutrition among VLBW/ELBW infants, describes the basic clinical/practical aspects and also comments on studies on the subject, especially in the context of ‘aggressive parenteral nutrition (PN)’. Suggestions on a practical approach to initiating PN and enteral nutrition have also been provided. The chapter on enteral nutrition of VLBW/ELBW infants describes the principles of enteral feeding and the related evidence; however, no mention is made of the transition from tube feeds to cup-feeding/direct breastfeeding. Though this transition is an important aspect of establishing feeds and determining the hospital stay of a premature infant, the practice/evidence in this area is quite variable.

There are separate sections/chapters on aspects of nutrition that detail the effects of specific nutrients on the brain and pulmonary development, as well as necrotizing enterocolitis. The information contained in these sections/chapters is comprehensive. The other topics dealt with in the book, such as human milk and human milk fortifiers, approaches to infants who falter in growth and post-discharge nutrition, are relevant in any clinical setting. However, it is important to note here that the discussion on post-discharge nutrition is confined to the early infancy period. Issues related to the initiation of complementary food and its implications have not been discussed, even though the initiation of complementary food represents an important transition which can potentially have a significant impact on the nutrition of premature infants. Similarly, there is no mention of the effects of maternal nutrition and the long-term health implications of early postnatal nutrition, though there is a note regarding the long-term adverse health implications of prematurity and postnatal growth velocity.

A separate chapter on the assessment of the body composition of premature infants and issues related to the same would have added value to the book, as the quality of growth in terms of body composition is considered to be more important than anthropometric parameters alone.

It is worth noting that the book also addresses the guidelines specific to preterm infants from developing countries, besides presenting practical recommendations on nutritional management in such settings. The authors would have done well to touch upon some of the important innovations in the developing countries with respect to alternative methods of feeding preterm infants. These include the paladai (a cup with a long spout and a groove at the end), the use of which is a norm in India and which is a safer option than bottle-feeding.

The research needs have been stated at the end of each chapter. However, those relating to the developing countries might not seem appropriate to everybody, e.g. many of us would not endorse ‘comparative studies of cup versus bottle-feeding in low-resource settings’.

To summarize, the book will provide the reader with a practical, working knowledge of the subject, though it would be necessary to do additional reading to gain a comprehensive understanding of the individual topics. Neonatologists and paediatricians involved in neonatal care and follow-up will benefit immensely from this volume. Researchers will find it useful as it summarizes most of the existing literature and is representative of our current state of knowledge of the field.

REFERENCES


SHUCHITA GUPTA  
RAMESH AGARWAL  
Department of Paediatrics  
All India Institute of Medical Sciences  
New Delhi  
ra.aiims@gmail.com

The Preface sets the tone of this book as it answers the question Why? (the book, collection of slides, CD).

The book, CD and stained slides attempt to help the student and practitioner (pathologist, neuro-physician, neurosurgeon, etc.). Tissues were obtained from patients with infections of the nervous system, investigated and treated at the National Institute of Mental Health and Neuro Sciences (NIMHANS), Bengaluru—one of India’s leading centres in the neurosciences. Appropriate acknowledgement is made in the rare instance where the material is sourced from elsewhere (example: p. 23).

Twenty-four common infections included in the book have been classified under bacterial, fungal, parasitic and viral disease. The bacterial infections include pyogenic disease, tuberculosis and actinomycosis. Cryptococcal infections, aspergilloma, mucormycosis, chromoblastomycosis and Pneumocystis carinii are grouped under fungal infections. Parasitic disease includes malaria, toxoplasma, acanthamoeba (of the brain), cysticercosis (of the nervous system) and hydatid disease. Japanese encephalitis, herpes simplex encephalitis, subacture sclerosing panencephalitis, cytomegalovirus, progressive multifocal leukoencephalopathy, rabies, HIV and Creutzfeldt–Jakob disease are included under viral infections (the explanation for including Creutzfeldt–Jakob disease here is given on p. 45).

Each set of slides is preceded by a description of the histological findings and a commentary on the disease that includes details on the causal organism, pathogenesis, clinical and imaging features. Additional information is provided where necessary. The section on tuberculous meningitis, for example, is followed by a table of other causes of chronic meningitis. Under fungal infections, the authors provide a chart that will help in the clinical and laboratory diagnosis of fungal infection and a table of risk factors that enable fungi to reach the nervous system.

The slides are always stained by haematoxylin–eosin but additional slides using other stains (Gram, Masson trichrome, Ziehl–Neelsen, Periodic acid-Shiff [PAS], Gomori methenamine silver [GMS], Leishman, MAT, immunohistochemistry, etc.) are provided where necessary.

The microphotographs are clear. They show the disease in low and high magnification and, at times, with photographs of whole mounts. Where necessary, insets are given to focus attention. An example is seen on p. 52 where the herpes viral antigen is shown within the nucleus. The same illustration also shows an electron microphotograph showing the herpes virus in the neuronal nucleus.

Studying with this atlas is akin to having the authors sitting by your side, offering a running commentary as they show you each slide and focus your attention on notable features.

I found the inclusion of the name of the third author salutary. The names of technicians and photographer under ‘Acknowledgement’ are in keeping with the ethos of the department of neuropathology at the NIMHANS.

We have long envied those able to purchase and study such atlases abroad. The horrendous costs have kept these out of reach of the average Indian student.

We can now proudly turn to an atlas prepared in India that more than matches the quality and excellence of foreign publications of this kind. Even better, this atlas zooms in on diseases common in India!

A word of caution: the CD requires the use of an IBM-PC using Microsoft Windows operating system. Those dependent on the product by Apple-Mac will face problems. I learn from Dr Shankar that this deficiency is being addressed.

I advise you to study the back cover as well. It carries an important message. You might like to bring it to the attention of your patients.

SUNIL PANDYA
Department of Neurosurgery
Jaslok Hospital
Mumbai
Maharashtra