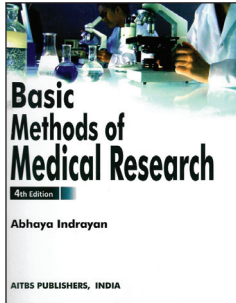


Book Reviews

Basic Methods of Medical Research. Fourth Edition. Abhaya Indrayan. AITBS Publishers, New Delhi, 2018. 394pp, ₹499. ISBN 978–81–7473–335–1.



The fourth edition of this book is an important guide for medical graduates and postgraduates towards the learning of concepts for preparation, conduct and publication of medical research during and after their training. The first edition was published in 2006 and given the vast expansion and evolution of methods in clinical research, the publication of the fourth edition is a testimony that the idea of

keeping up with the latest changes in practice and guidelines for conduct and reporting of medical research was the key idea behind the publication of the book. The fourth edition is also a testimony of the continuous demand by readers and the dedication of the author to fulfil the same. The last edition was published in 2013. The new edition has emphasis on ethical aspects of clinical research.

The book picks up each step of medical research in a separate chapter to complete the journey from the conceptualization of the research question and hypothesis to crystallization of the research idea in the form of a research protocol. There is a dedicated chapter each on review of literature, guide for choosing the proper methods and study design to address the research question and sample size calculation. The latter half of the book provides information on proper data collection and collation, basic biostatistical methods, assessment of results and finally 'how to write an impressive manuscript'. There is a well-deserved chapter on biomedical ethics. Thus, the selection of chapter heads is apt and complete for what a beginner level medical researcher would seek. The author has rightly written in the preface that no special background knowledge is required to understand the text. The book has a narrative flow with ample examples

The book keeps its promise of being 'basic' and has emphasized throughout on the fundamental concepts with illustrative examples and boxes. The summary at the end of each chapter adds to the lucidity and provides the necessary recapitulation of the key messages addressed in each chapter. The special characteristic of this book is to refrain from formidable statistical formulae. Hence, it will be more attractive for undergraduate and postgraduate medical students who are from a non-statistical background. The topics on conduct of multicentric clinical trials and principles of good clinical practice guidelines are not covered specifically in this book. A self-assessment questionnaire with an answer key at the end of chapters would have added value to the students who are the target readers and are accustomed to multiple-choice questions/short answers. Also, exercises with solutions can add value to the chapters.

The typeface is clear, and the illustrations are crisp and informative line diagrams and flowcharts for which the publisher should be complimented. The general appearance of the book is non-bulky, handy, and suited for routine reference. The price

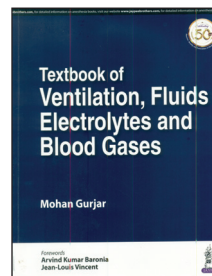
is appropriate keeping in mind the target readers who would be at a preliminary stage of learning and would not prefer buying a bulky and expensive book. The book is a sublimation of the vast experience and teachings of a very experienced biostatistician and therefore is full of pearls of wisdom and examples. The sentences are simple. There is no convoluted statistical jargon, and that would be a welcome feature to a lot of entry-level readers.

DEEPTI VIBHA

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Textbook of Ventilation, Fluids, Electrolytes and Blood Gases.

Mohan Gurjar. Jaypee Brothers Medical Publishers, New Delhi, 2020. 417pp, price not mentioned. ISBN 978–93–89188–05–09.



This textbook is different in that it takes the reader, potentially a critical care resident/practitioner, not only in a systematic way around the pillars of critical care, namely mechanical ventilation, fluid/electrolyte disorders and management, nutrition and arterial blood gas interpretation, but also in minute detail, covering recent understanding and advances. This is particularly true of newer modes of ventilation and entities such as heart–lung interaction, ventilator-induced lung injury and diaphragmatic dysfunction. The latter have gained more importance during the Covid-19 pandemic, which threw up a plethora of mechanical ventilation-related issues and weaning difficulties. The break-up of mechanical ventilation into its numerous facets simplifies understanding even for the relatively new entrant into critical care. The section on prolonged weaning/liberation from mechanical ventilation carries a brief mention of tracheostomy. With the majority of tracheostomies being performed percutaneously by the intensivist in present-day intensive care units (ICUs), a more detailed description on indications, technique, dos and don'ts of percutaneous tracheostomy would have added value to this section. End-of-life issues and decision on withholding escalation of care should find a place in the discussion on prolonged ventilation and difficulty in liberation from mechanical ventilation.

The section on fluid therapy is quite comprehensive. The part on monitoring volume status has been dealt with very well.

A section on assessment of adequacy of oxygenation including monitoring of microcirculation (e.g. direct video microscopic visualization) would have added more value to this

section. Microcirculation plays a pivotal role in delivering oxygen to the cells and maintains tissue perfusion. The loss of haemodynamic coherence between the macrocirculation and microcirculation, as also the various types of microcirculatory alterations in critically ill patients—wherein improvement of haemodynamic variables of the systemic circulation does not cause a parallel improvement of microcirculatory perfusion and oxygenation of the essential organ systems—warrants a mention, to take the reader/student into the depth of tissue oxygenation and utilization.

The management of the potential organ donor is comprehensive. In today's world with increasing medicolegal implications of decisions taken in the ICU, the importance of preparing the family for this step and the importance of family

counselling should be highlighted. This is especially true if the death has been sudden in a young and previously healthy individual. A small paragraph could have been devoted at the beginning of the chapter on this aspect.

All in all, a textbook that will surely be of use to the new entrants to critical care as well as practitioners.

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