



The Open Microbiology Journal

Content list available at: <https://openmicrobiologyjournal.com>



BOOK REVIEW

Clinical Microbiology Made Ridiculously Simple: A Book Review

Ahtesham A. Shad^{1,*}

¹Institute of Microbiology, University of Agriculture, Faisalabad, Pakistan

Keywords: Book review, Text book, Clinical microbiology, Physician, Medical students, Retroviridae.

Article History

Received: May 25, 2019

Revised: –

Accepted: June 19, 2019

The sixth edition of Clinical Microbiology made ridiculously simple provides basic and easy use of language text format describing the fundamentals and core knowledge about microbiology. This book is very useful in acquiring and empowering the data about the clinical microbiology field. It seems to be more helpful for medical students, physicians and students as at some points in the book it directly called for students and physicians for addressing and highlighting the issues-related necessary information that one should be aware of. The beginners in the field of microbiology, especially undergraduate students who want to know about the world of microbiology can use this book for rapid review. It will be more helpful in understanding, exploring and building their interests.

The authors (three) wrote this in an eye-catching way, as the description of complex microbes in simple words, figures, and tables explicit the information diligently. Once started to look and read, it becomes more pleasurable and enjoyable. The pictures, especially of cartoons drawn as warriors equipped with weapons completely make easier to understand the virulence and pathogenic factors of microbes in story fashion. The specificity towards chapters is highly interesting in terms of defining the important microbes *i.e.* chapter on “Retroviridae, HIV and AIDS”. This book has designed a brief summary in the form of tables at the end of most chapters to further highlight and to easily access the information provided in chapters.

Additionally, there are some drawbacks in this short textbook. The common one is the use of black and white text, tables, and figures throughout the book making some difficulty in distinguishing and understanding. However, the omission of colorful text somehow also gives a concept about the oldest research and understanding of old times in approaching the

microbiological world as microbiologist would be familiar of Antoine van Leeuwenhoek illustration of microbes seen first. Another limitation of the book is that it provides with the oldest and already known concepts to understand microbiology, defining the oldest terms. This book does not cover the aspects of modern microbiological investigations and current issues in clinical settings except touching the core concepts that have previously been described. Lastly, the references provided at the end of chapters are helpful at retrieving to source for further guidance and gaining information.

There is a small change in the organizations of chapters as compared to previous editions. This book used a traditional and classical approach towards chapters as starting with simple to become more detailed and complex. Prior to addressing topics, there is a brief introduction about what the chapter is going to describe in detail that seems convenient and interesting. The book has 6 parts including Bacteria, Fungi, Viruses, Parasites, very strange critters and the concluding section “The End”. The six parts are further divided into 35 chapters.

Part 1 of the book describes bacteria, its introduction, taxonomy, structures, virulence factors, toxins, and bacterial genetics. The basic approaches are applied to illustrate concepts. This part has further divisions like Gram-positive bacteria, Gram-negative bacteria, Acid-fast bacteria, and bacteria without cell walls *i.e.* *mycoplasma* and anti-bacterial medications. The last chapter of part 1 describes the drugs used to combat bacteria causing morbidity and mortality. The antibiotic classes and special mnemonics to keep in fixed to mind are provided, which sounds interesting. Part 1 is comprised of chapters 1-20. Part 2 is relatively shorter than 1st as it contains only 2 chapters, 21-22, about fungi and anti-fungal medications respectively.

Part 3 is dedicated to viruses, covering various families of viruses followed by introduction, structure and classification. The orthomyxo, paramyxo, hepatitis and retroviridae families

* Address correspondence to this author at the Institute of Microbiology, University of Agriculture, Faisalabad, Pakistan;
E-mail: ahtesham.ashad@yahoo.com

are discussed in detail in separate chapters. The major viruses in these families and respected diseases they cause are also discussed, providing with treatment and controlling strategies in the end. Further viruses of DNA and of RNA nature are shortly described in two separate chapters. In the end, the treatment options and classes of antiviral medications are provided which help students and physicians to think about the therapeutic options available. The basic classification tables of DNA and RNA with mnemonics strategies are easy to memorize while researching and further practicing *i.e.* literature studies and practicing as a physician. Moreover, easy to access tables are good tools to revise in short times. This part contains 8 chapters *i.e.*, 23-30 chapters. Part 4 is relatively shorter than part 3, containing 2 chapters *i.e.*, 31-32, giving basic information about the major parasites and their life cycles *i.e.* protozoans and helminths, respectively.

Part 5, chapter 33, is specifically highlighting the special and strange critters “Prions”. The basic properties of prions as infectious proteins and diseases they cause are described. Additionally, references, bibliographic and internet resources as websites links are provided for acquiring further information

on prions. In the end, two chapters 34 and 35 are dedicated to highlight the two major issues related to public health, antimicrobial resistance and bioterrorism, respectively. Additionally, 2 sites are given for further accessing the information regarding “Bioterrorism” and “Atlas of Microbiology”.

To sum up, this book provides adequate knowledge and the addressing way is funny, informal and interesting to let students get involved in the microbial world and their language. It is an interesting book to read without getting bored. In short, placing all the above-described drawbacks aside, this book is really helpful for beginners who want to learn microbiology.

CONFLICT OF INTEREST

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

ACKNOWLEDGEMENTS

Declared none.

© 2019 Ahtesham A. Shad.

This is an open access article distributed under the terms of the Creative Commons Attribution 4.0 International Public License (CC-BY 4.0), a copy of which is available at: (<https://creativecommons.org/licenses/by/4.0/legalcode>). This license permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.