Book Review

Foundations of Pharmacology: For students of Medicine and Allied Health Sciences


Professor Laal Jayakody has produced an extremely valuable and timely book for medical students (both undergraduate and postgraduate), and students of allied health professions, such as nurses, physiotherapists and pharmacists, on the core scientific basis of pharmacology, and selected applied aspects of the subject.

Professor Jayakody's book is based essentially on the “Foundation Module” introduced into the MBBS curriculum of the Faculty of Medicine, Colombo in 2008, of which one component is pharmacology. The overall intention of the “Foundation Module” is to prepare neophyte medical students for a painless and seamless entry into the enthralling but infinitely complex realm of clinical medicine. And Jayakody has chosen this critically important stage of a medical student’s initial learning curve to impart the basic principles of pharmacology in clear and simple diction, and learner-friendly style.

The book comprises 22 concise chapters and an index. Each chapter begins with the learning objectives pertaining to it formulated as a list of straightforward questions, and the text that follows comprises carefully constructed answers to these questions. The format Jayakody has chosen looks attractive and effective from a student’s perspective, for the text reads almost as though a personal mentor is seated by the side, helping the learner navigate the contents.

The first three chapters deal with introductory aspects of medicinal drugs such as key definitions, drug effects and scientific explanations of the terms efficacy, safety and quality. Chapters 4, 5, 6 and 7 deal with the development of drugs and the nature of controlled clinical trials, including their ethical aspects. Other chapters deal with pharmacodynamics, pharmacokinetics, dose-response relations, how drugs cross biological membranes and related matters. There are also chapters devoted to autacoids, the autonomic nervous system, principles of pain and its management, principles of antimicrobial therapy, and adverse reactions to drugs. There is a chapter each for compliance, drug information, essential medicines, and principles of allergy to medicinal drugs.

If I were compelled by a malevolent tyrant to select the best three chapters from what is a uniformly amiable set of chapters of this book, I would go for the chapters on pharmacokinetics, pharmacodynamics and dose response curves, with the chapter on how drugs cross cell membranes fighting hard to enter the best-three list. They are, all four of them, little classics.

Although Professor Jayakody, who is by nature modest to a fault, prescribes his book only for medical undergraduates and students in the allied health sciences, I am inclined to recommend it confidently to postgraduate students in medicine, surgery, paediatrics, obstetrics and gynaecology, and psychiatry, as being adequate preparation for their examinations in the domain of basic scientific aspects of pharmacology. Particularly the chapters I have chosen as the best of them all.

It must be emphasised that Jayakody’s book is not a standard textbook of clinical pharmacology. Indeed, nowhere has he made or even hinted at such a claim. But as far as the title “Foundations of Pharmacology” proclaims, it has amply fulfilled its promise.

Colvin Goonaratna, Emeritus Professor of Physiology, University of Colombo, Sri Lanka.
Email <si7np5e@gmail.com> I have no conflicts of interest regarding this article.