instance, the chapter on spiritual care is the only one that uses case studies. Keeping the chapters brief and therefore easy to read has its advantages, but the resulting text sometimes lacks the comprehensive detail that readers may require. A couple of section headings are ambiguous: the section entitled “Assessment and Management of ‘Other’ Problems” discusses topics such as hydration, wound care, hope, and counselling, and “Specific Conditions and Situations” covers 13 topics that are mostly unrelated. This makes it difficult for the reader to retrieve the desired information without frequently consulting the index. Another disadvantage of having many contributors is that related information may be scattered and repeated in different chapters. Examples include physical medicine, which is covered in both chapters 15 and 16; episodic pain, which is embedded in a couple chapters within the section on pain; and pediatric concerns, which appear in the sections on pain and interdisciplinary issues. As well, the book could certainly have benefited from sections on psychosocial care, spirituality, and medication management; poor medication adherence in particular is a common problem in palliative care.

In summary, this textbook represents an effort to provide a vast amount of information on palliative medicine. It is successful in offering a global perspective, but for those looking for a “how to” text, this will not be the answer.

Ayesha Hassan, BScPharm, MSc
Pharmacy
Royal Inland Hospital
Kamloops, British Columbia

Palliative Pharmacy Care


By providing a “blending of published literature, unpublished data, and expertise”, the editor intends this book to be “a practical approach to palliative care and the unique role of the pharmacist”. It is a resource for pharmacists who are new to palliative care, as well as those who wish to improve their knowledge and skills in this specialized area of practice.

The first section of the book, “The Palliative Care Spectrum: Providing Care across Settings”, addresses care for patients with a diagnosis of cancer, as well as those with a variety of other disease states that are sometimes overlooked. It also discusses palliation in various settings, including the pediatric and intensive care areas.

Other sections focus on individual symptoms such as anorexia and cachexia, anxiety and depression, agitation and delirium, dyspnea, fatigue, nausea and vomiting, constipation and diarrhea, secretion management, nutrition and hydration issues, and, of course, pain management. The chapters on pain and symptom management are set up in a format whereby the symptoms and pathophysiology are discussed first, followed by discussions of assessment and management. Often included are tables or charts summarizing causes or exacerbators of a particular symptom and treatment options, with recommended dosing. Both pharmacologic and nonpharmacologic treatments are discussed. “Key points” and “clinical pearls” are provided throughout the book; the chapters relating to pain and symptom management include case studies as well.

The final section of the book, “Beyond Drug Therapy: Key Issues for Pharmacists in Palliative Care”, deals with ethical issues, communication, research, establishing a palliative care service, and education.

Although this reviewer did find the book to be a valuable resource, it was somewhat less informative in certain aspects than other references that are now available. The recommendations for the management of symptoms and dosing charts are helpful, but not as comprehensive as those in some other references. In addition, the clinical pearls were a little disappointing; they were not really “clinical pearls” but often more like an introduction to a specific topic. However, the suggestions for networking and listings of other palliative care resources, available trainee- ships, and further education are definitely valuable, and this information is often not readily available from other sources. Other interesting topics discussed were the ethical issues and advance directives. Also, I appreciated the focus on the role of the pharmacist as going beyond that which applies to the pharmaceutical realm. The book continually stresses that in the palliative care setting, the pharmacist has a role that encompasses several capacities, including supporting the family and caregivers, ensuring continuity of care, ensuring informed decision-making, attending to spiritual well-being, and supporting function. These roles are often overlooked by pharmacists but are very important, particularly in the palliative care setting. It should also be mentioned that because this is a US publication, there are some differences in medications, laboratory values, and possibly screening tools.

Gerri Scott, BScPharm, FASCP
Pharmacy
Brandon Regional Health Centre
Brandon, Manitoba

Introduction to Statistics in Pharmaceutical Clinical Trials


Introduction to Statistics in Pharmaceutical Clinical Trials is an introductory statistics textbook intended to teach basic statistical concepts to students in pharmacy, allied health professions, and clinical research. In contrast to the usual format of introductory textbooks on this topic, the authors have presented the basic concepts in the context of clinical trials conducted during devel-
development of pharmaceutical drugs. This textbook explains why and how data are collected in clinical studies, how these data are summarized and analyzed, what the results mean in the context of the clinical research question, and how the results are communicated to regulatory agencies and to the scientific and medical communities.

The book is divided into 13 chapters, beginning with an introduction to the discipline of statistics and its application in confirmatory clinical trials. Chapter 2 outlines the process of developing a new drug. The formulation of research questions and hypotheses is discussed in chapter 3. Chapter 4 provides an overview of study designs and experimental methodologies. Essential statistical topics, including data types, central tendency, variation, probability, and hypothesis-testing, are taught in chapters 5 and 6. Using the development of a new antihypertensive medication as the common example throughout chapters 7 to 11, the authors discuss the various statistical methods used to analyze the safety and efficacy data generated by confirmatory clinical trials. Additional statistical considerations, including the estimation of sample size, multicentre trials, population analysis methods, missing data, multiple objectives, equivalence and non-inferiority study designs, and interim and adaptive analyses, are highlighted in chapter 12. In the final chapter, the authors emphasize the usefulness of statistics in drug development, with the ultimate goal of offering a new biologically active pharmacological agent that will benefit patients. Each chapter includes relevant examples, a list of key references, and exercise questions for students, with solutions at the end of the textbook. Standard statistical tables are included in the appendices. The index is comprehensive and will be helpful for busy practitioners who are using the book as a basic statistics reference.

The authors are highly qualified individuals who have working experience in the statistical aspects of clinical trials and in teaching graduate students in statistics. The book is written in clear language, with detailed explanations of statistical terms. The appropriate use of graphs and tables throughout the text helps the reader to understand important concepts. The rationale for and advantages and limitations of common statistical tests are discussed. Both authors acknowledge their lack of clinical experience, but they overcome this limitation with their excellent communication skills and pragmatic approach to integrating statistical concepts in the context of different types of clinical trials.

The book might have benefited from a few improvements in organization. The important concepts highlighted in chapter 12, such as sample-size estimation and methods for population analysis, could have been integrated into earlier chapters. These key issues could have been presented in greater detail to allow for more logical flow and better understanding on the part of readers. Information about the application of statistical knowledge in the critical appraisal of published clinical trials would also have been useful.

Overall, the authors achieved their objective of providing students of pharmaceutical sciences and clinical research with a textbook that introduces the methods and application of statistics in clinical trials. This well-written textbook will also serve as a basic statistical resource for allied health professionals in the clinical setting.

Winnie Seto, BScPhm, PharmD, MSc
Pharmacy
Hospital for Sick Children
Toronto, Ontario

Safe and Effective Medication Use in the Emergency Department


This first edition of Safe and Effective Medication Use in the Emergency Department is the first text to examine pharmacy practice within the emergency department. It is aimed at pharmacy directors, clinical coordinators, pharmacists, emergency physicians, nurses, and administrators who are seeking to improve medication safety in the emergency department. The book underwent prepublication review by a multidisciplinary team of reviewers, primarily from the author’s place of work, the Maimonides Medical Center in Brooklyn, New York.

The stated goals of the book are to “improve deployment of technology . . . or show how to modify technology to achieve regulatory goals and . . . continuity”, to “describe pharmacy leadership and management and introduce the PharmER pyramid model as a means to . . . achieve The Joint Commission’s Medication Management Standards”, and to explain “how to respond to public health emergencies and explain current issues associated with the care of specific patient populations”. The book highlights evidence-based practice, where evidence is available, and offers experience or observations where no evidence exists.

The first part of the book is dedicated to reviewing the history, unique challenges, and characteristics of emergency medicine and the history of pharmacy practice within the emergency department. The author also introduces the “PharmER pyramid”, a model developed by the Maimonides Medical Center to help avoid medication errors in the emergency department. The second part of the book looks at the “anatomy” of a safe medication-use system. The next portion focuses on quality measures and assuring the quality of high-risk, high-cost medications and response to medical emergencies. The final section looks at the postgraduate specialty residency and undergraduate PharmD rotations offered at Maimonides Medical Center, the role of the pharmacy technician, and the future of clinical pharmacy services in the emergency department.

An obvious strength of this reference is the absence to date of any other texts focusing on issues related to pharmacotherapy in the emergency department; as such, it is a welcome development for emergency practice. It proves to be a good reference for a new practitioner within the area and would be of assistance.