BOOK REVIEWS


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Formal instruction on quality and safety improvement is often lacking in pharmacy education, yet pharmacists play an integral part in optimizing patient outcomes in various practice settings. The editors of Quality & Safety in Pharmacy Practice provide a comprehensive and practical text designed to educate pharmacists and pharmacy students about principles in quality improvement and patient and medication safety. The editors provide examples of key concepts to allow applicability, implementation, and assessment of safety and quality initiatives in different pharmacy settings. The text is divided into 5 major sections, with each section addressed through succinct chapters that start with defined learning outcomes and end with key points.

The first section (chapters 1-4), “Status of Quality Improvement and Reporting in the U.S. Health Care System,” establishes the need for examining quality and safety models in pharmacy settings. The authors introduce quality concepts and discuss the future of health care in establishing the value of rendered medical services. The authors provide an excellent review of drug-related morbidity by discussing the types of drug-related problems, epidemiology of medication errors, and the impact on patient safety. In the final chapters of the section, the authors explain the “business case” intervention for improving quality, and summarize national organizations recognized for leading quality and outcome efforts, such as the Joint Commission and the Agency for Healthcare Research and Quality.

The second section, “Quality Improvement Concepts,” discussed in chapters 5-8, provides a great synopsis on how to identify and solve health care quality-related problems using a “system” level approach (compared to a “person” based approach) to improve medication management systems. Tools to identify risk or causes of failure in systems such as Healthcare Failure Mode and Effects Analysis (HFMEA) and Root Cause Analysis (RCA) are explained and illustrated with flowcharts and worksheets to allow the understanding of these somewhat complicated processes. In addition, chapter 8 provides a summary of “statistical process control tools” that can be used to monitor systems to insure quality and examine new ideas for improvement.

The next section, “Quality Measurement,” chapters 9-11, provides several methodologies for measuring medication safety, such as direct observation, surveillance, and voluntary reporting systems. Models discussed include Lean, FOCUS-PDCA, (Find, Organize, Clarify, Understand, Select - Plan, Do, Check, Act) and continuous quality improvement methods. The authors provided examples for each method to allow the readers to gain a better understanding and appreciation of applicability. A unique aspect of this section is the consumer assessment of pharmacy quality. In this chapter there is a great insight to the value consumers provide for improving safe practices. The authors describe a survey that assesses consumer perceptions of the quality of pharmacy services. The goal is to have widespread use of similar surveys that serve as a motivation for quality improvement efforts. Finally, the last chapter focuses on risk management including identifying and dealing with risks as well as responding to medication errors when they occur. At the end of the chapter, the authors provide an important lesson to the readers: errors will occur because pharmacists are humans; however, pharmacists are committed to providing quality care and are part of a risk management team.

The fourth section “Quality-based Interventions and Incentives” (chapters 12-15), discusses changing pharmacy processes to improve quality and offers guidance on overcoming challenges when implementing those changes. The authors explain the role of technology, not only in dispensing medications but also in monitoring quality electronically. Since transparency is considered one of the roots for value-driven health care, the authors outline different principles for reporting performance and quality. This is important for organizations to adapt as performance data can be used when pursuing government-sponsored programs. Moreover, financial incentives are awarded for providing high levels of quality or for significantly improving the quality of care. In the final section, “Application of Quality Improvement to the Pharmacy Practice Setting,” (chapters 16-17) the authors present additional examples on how to implement changes in response to outside assessment. The authors conclude the section by describing the concept of continuous quality improvement to increase quality in pharmacy practice. This model allows pharmacists to identify causes of problems, intervene to reduce or eliminate such causes, and reassess the process to ensure its effectiveness.

Quality & Safety in Pharmacy Practice is a well-organized, easy to read text, and a great resource for pharmacists, academic clinicians, and students who may be involved in quality improvement initiatives at their clinical or practice settings. The book explains quality and safety concepts and methodologies that can be implemented regardless of setting. We highly recommend this book especially at a time when quality improvement and patient safety awareness is
on the rise. The book should be a resource in libraries (medical and academic), and drug information centers, and a required reading for pharmacists completing postgraduate education programs in medication and patient safety.

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*Pharmaceutical Compounding and Dispensing*, now in its second edition, provides a thorough overview of pharmaceutical compounding, primarily intended for a United Kingdom (UK) based audience. The book is divided into 3 larger sections and 20 chapters, including sections on the history of compounding, pharmaceutical dosage forms, and product formulas. It also includes a series of video demonstrations available online.

The authors, who are all academicians and practitioners in a United Kingdom based pharmacy school, begin the text by providing a significant focus on the historical perspective of the discipline. This emphasis and depth is unique to compounding texts and valuable. This historical section provides an overview of the origins of the profession and the development of organizations and pharmacopoeias, and describes obsolete dosage forms and equipment. Occupying the first 40 pages of the text, this section provides relevant context and appreciation for the art of compounding within the profession. Although the majority of the history is universally relevant, there is particular focus on the United Kingdom (UK)-based legislation, organizations (Royal Pharmaceutical Society of Great Britain), and pharmacopeias (British Pharmacopoeia) that may not be relevant to the non-UK reader.

The majority of the book does, however, focus on various dosage forms and their preparations, as one might expect. This section begins with appropriate general chapters related to calculations and measurements and ingredients, and then focuses more specifically on individual dosage forms. Those covered in the book include 7 primary categories of commonly compounded nonsterile dosage forms: solutions, suspensions, emulsions, creams, ointments and gels, suppositories, and powders and capsules. The text does not discuss sterile dosage forms.

The final section of the text includes additional formulas for various dosage forms. Although useful examples, many of the formulas reference the British Pharmacopoeia (BP). Formulas stated in this section use ointment bases such as “Emulsifying Ointment, BP” and “Simple Ointment, BP” for example, which may be unfamiliar to pharmacists and students outside the UK.

A useful teaching tool attached to this text is a series of 7 online videos, complimenting the chapters on individual dosage forms. These videos would be particularly useful in instructing a laboratory section as the videos provide demonstrations of stepwise preparations of 7 primary dosage forms. The videos are available on the Pharmaceutical Press Web site, accessed with a password included in the book’s introductory pages.

Overall, the book is well received, since there are few textbooks or reference books available devoted specifically to compounding. The authors should be commended for emphasizing the historical content in tandem with the preparation instruction. Although the book remains a good resource for anyone interested in compounding, the book is likely best suited for pharmacists and students within the United Kingdom, due to the numerous references to country-specific guidance and historical content.

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