Book Review Open Access

Johnson TJ. Critical Care Pharmacotherapeutics. Burlington, MA: Jones and Bartlett Learning; 2013, 420 pp, \$77.95 (softcover), ISBN 1449604781

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Keywords: Critical care; Book review; Pharmacy; Education

Critical Care Pharmacotherapeutics is an introductory textbook that is primarily intended for pharmacy learners and critical care pharmacists and provides an introduction to the critical care specialty and basic concepts of pharmacotherapy for critically ill patients. The first edition of this paperback textbook was published in 2012 by Dr. Thomas Johnson, who is a Critical Care Pharmacy Specialist, Postgraduate year 2 Critical Care Residency Director, and Director of Pharmacy at Avera McKennan Hospital and University Health Center in Sioux Falls, South Dakota. Dr. Johnson served as the main editor of chapters that were written by pharmacists, physicians, and nurses.

The textbook is comprised of 16 chapters that are systematically structured to contain learning objectives, introduction, body of text, summary, key points, suggested supplemental readings, and references (Table 1). Each chapter is self-contained, which allows educators the opportunity to assign learners specific chapters to complement a critical care learning experience such as a clinical rotation or didactic course. To assist instructors with formal education and assessment, supplemental PowerPoint presentations and test questions for each of the sixteen chapters are available online. However, the presentations do not provide extensive information, and the quiz questions predominately assess recall and do not test critical thinking skills or application to patient cases.

Several features of this textbook are particularly helpful for pharmacy learners and pharmacists that are new to critical care. The first chapter of the book ("The Pharmacists Role in Critical Care") describes the evolution of critical pharmacy over the last 50 years and lists the fundamental, desirable, and optimal services provided by

Critical Care Pharmacotherapeutics Textbook - Chapter Content	
Chapter 1	The Pharmacist's Role in Critical Care
Chapter 2	Acute Illness Scoring Systems
Chapter 3	Tubes and Lines, Invasive Monitoring, and Hemodynamics
Chapter 4	Mechanical Ventilation
Chapter 5	Analgesia, Sedation, and Delirium Management
Chapter 6	Acid-Base Fundamentals
Chapter 7	Fluid and Electrolyte Management
Chapter 8	Pharmacological Management of Blood Pressure
Chapter 9	Management of Cardiac Issues in the Critically III Patient
Chapter 10	Severe Sepsis and Septic Shock Management
Chapter 11	Acute Kidney Injury, Renal Replacement Therapies, and Medication Dose Adjustments
Chapter 12	Nutrition Support in Critical Illness
Chapter 13	Fundamentals of Antimicrobial Therapy in the Critically III
Chapter 14	Hematologic Diseases and Bleeding Complications of Critical Illness
Chapter 15	Pharmacotherapy of Neurotrauma and Neurologic Disease
Chapter 16	Neonatal and Pediatric Intensive Care Basics

Table 1: Critical Care Pharmacotherapeutics Textbook – Chapter Content.

critical care pharmacists (Table 1-1 of the book). The book contains 23 pages of abbreviations and definitions for terminology commonly used in critical care. The authors provide summaries and key points within each chapter, which highlight important concepts of otherwise complex topics. The supplemental suggested reading section identifies relevant guidelines, landmark trials, and additional resources.

While Critical Care Pharmacotherapeutics serves as an excellent resource for pharmacy leaners, it does have a few limitations. This textbook provides a foundation of knowledge and it not intended to be as comprehensive as either the Comprehensive Critical Care: Adult [1] or The ICU Book [2]. Several new critical care guidelines (Sepsis; Pain, Agitation, and Delirium; and Insulin Infusion for Hyperglycemia) have been published since this text was printed, and these guidelines and their new recommendations will need to be provided as supplementary files for learners [3-5]. Additionally, this book does not include patient cases for discussion and does not cover the topics of liver failure or solid organ transplant, which are common in the intensive care unit.

In summary, Dr. Johnson and his co-authors should be applauded for creating this critical care textbook that provides a concise and versatile introductory resource for learners and new practitioners. Critical Care Pharmacotherapeutics filled a much-needed role for the authors of this review and serves as our go-to textbook for teaching pharmacy learners on critical care clinical rotations.

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Received October 09, 2014; Accepted October 28, 2014; Published October 31, 2014

Citation: Wanat MA, Swan JT (2014) Johnson TJ. Critical Care Pharmacotherapeutics. Burlington, MA: Jones and Bartlett Learning; 2013, 420 pp, \$77.95 (softcover), ISBN 1449604781. J Pharma Care Health Sys S1-007. doi:10.4172/jpchs.S1-007

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