
The Asthma Educator’s Handbook seeks to provide the information educators need to know when asthma education is warranted. The authors present evidence-based medicine as well as the recommendations from the National Asthma Education and Prevention Program’s 1997 Expert Panel Report 2, Guidelines for the Diagnosis and Management of Asthma, and that report’s 2002 update on selected topics. The book is an extension of the workshops that they have presented through the Asthma Educator Institute in the Massachusetts area. Those who plan to take the National Asthma Educator Certification Examination should benefit from this book.

The reading is easy to follow and well organized, into 2 major sections: “The Fundamentals” and “Practical Aspects of Asthma Care.” Following each chapter are questions related to the chapter’s material, with thorough explanations of the correct answers. Key points are highlighted throughout each chapter as well.

Chapter 1, “Understanding and Explaining the Mechanisms of Asthma,” describes what asthma is and is not, as well as the causes and effects of airflow narrowing. The section on allergic asthma was easy to understand, and even those without a medical background will find the role of lymphocytes, immunoglobulin E, and eosinophils not hard to grasp.

Chapter 2, “Diagnosing and Staging the Severity of Asthma,” discusses the symptoms and physical examination of the asthma patient. The 4 stages of asthma severity are reviewed, along with some of the shortcomings that these stages may present. The 3 case studies at the end of this chapter provide the opportunity to begin to answer questions one might face when taking the asthma educator examination. The chapter covers asthma medications, and of note is the discussion on the long-acting bronchodilator salmeterol. The explanation of the findings from the Salmeterol Multicenter Asthma Re-search Trial provides a good rationale for long-acting bronchodilators in asthma care and how they can provide additional relief in conjunction with anti-inflammatory medications. The debate over levalbuterol is addressed briefly. Although some pediatricians and others recommend it, the authors restrict their use to the elderly and those with a cardiac history. This chapter does a good job detailing asthma medications and their use.

The fourth chapter is devoted to asthma treatment in the ambulatory setting. The step approach is reviewed and discussed, and appropriate answers are provided for questions many patients have when starting a new medication. For treating mild persistent asthma, the authors refer to a spring 2005 article in the New England Journal of Medicine, but they do not give specifics of the article’s authorship. I thought a reference in more detail would provide further reading on this subject. The recommendations in the Expert Panel Report 2, Guidelines for the Diagnosis and Management of Asthma, regarding daily inhaled steroids for mild persistent asthma are challenged by the Improving Asthma Control Trial. The rationale of “stepping down therapy” is discussed, and the reader is cautioned against stopping the use of inhaled steroids completely in moderate persistent asthma. The clinician is reminded that with moderate and severe persistent asthma, some minimal treatment of the inflammation caused by allergies is indicated.

The relatively new therapy omalizumab is touched on, and, although it works well for some patients, it has shown only moderate success. Complementary and alternative therapies are briefly examined, and the authors cite their views on such practice. I applaud their openness to alternative therapies and agree with them that the best evidence with clinical trials can provide answers to effective alternative therapies. Cultural differences between patients can be important, and understanding the patient’s belief system can help the health care worker provide optimal care and educate the patient on the goal and rationale for asthma therapy. The case studies at the end of this chapter briefly demonstrate how a person’s experience can affect his or her fears and beliefs.

Chapter 5 focuses on childhood asthma. The prevalence of asthma and current trends are briefly touched on. The case study will help the reader sort through the steps and testing that can be done to diagnose asthma in a child. Sometimes patients are told that they have “reactive airways disease,” which often confuses them. This chapter helps clarify the terminology and offers the alternative term “wheezing-associated respiratory illness,” instead of “reactive airway disease.” I think it is an excellent description. The authors do a good job of examining why asthma therapy might fail, especially because of improper technique in using inhaled medications. Other issues are also covered, such as allergies, sinus infections, and the alternative diagnosis of vocal chord dysfunction, and this discussion sheds light on the saying, “Not all that wheezes is asthma.”

In the second part of the book, on the practical aspects of asthma care, the first section deals with pulmonary function testing and provides a good explanation of what is measured and what constitutes normal and abnormal. The easy-to-understand explanations of the spirometry values will allow the reader to understand airflow obstruction and how it can be measured. The illustrations of the flow-volume curves highlight the text examples. The interpretation of bronchodilator response is discussed, as is the role of the peak flow meter in asthma management. I am impressed with the ease of reading and understanding of pulmonary function testing in this chapter.

The next chapter deals with asthma and allergies. The explanation of the role of allergy testing in the asthmatic patient will provide the reader a better understanding of how allergies can affect the airways. Common allergies (eg, cat, dog, cockroach) are discussed. Although there are ways to improve asthma symptoms through avoidance and control of allergens, many asthmatics are unable to afford such measures as mattress covers, mold removal, or air purifiers. The authors touch on this briefly at the end of this chapter.

Chapter 8 deals with inhalers and inhalation aids used in treating asthma. The technique the authors suggest for using a metered-dose inhaler without a spacer or holding chamber is simple and describes the
procedure well. The many incorrect techniques that patients use are amazing! Simpler is better, and repeated review of the patient’s technique is suggested. Although this point was briefly mentioned earlier, its importance could have been better demonstrated with a few case studies, as in the previous chapters. Other inhaler devices, such as the Diskus, Turbuhaler, Twistolhaler, Aerolizer, and HandiHaler, are described in this chapter. Each device’s proper use is discussed, and pictures of the devices help explain what they look like. There is a section on the use of nebulizers, which describes their advantages over metered-dose inhalers. One suggestion is combining medications, such as albuterol and budesonide (Pulmicort). Of note, Pulmicort’s package insert states that Pulmicort should not be mixed with other medications because such combination therapy has not been adequately assessed. I have not mixed the 2 medications in my practice in the hospital setting, and instead have nebulized them separately.

Children can present a major challenge in aerosol delivery. The authors state that the “blow-by” method (directing the aerosol towards the child’s nose and mouth, without placing the mask against the child’s face) is unacceptable in the delivery of an inhaled steroid because of the increased risk of delivering the aerosol to the eyes and facial skin. Unfortunately, the authors do not suggest an alternative method of aerosol delivery for children who fight aerosol therapy. In these situations the respiratory therapist or caregiver is left to do the best he or she can.

Chapter 9 examines treatment of the asthma attack. This chapter will be of most interest to the health care worker in the hospital setting. The use of inhaled bronchodilators via metered-dose inhaler and nebulizer is discussed. The authors suggest the continued use of inhaled steroids during a hospitalization, which reinforces the daily use of an inhaled steroid no matter how you are feeling! I agree wholeheartedly! The care of a severe asthma attack that requires mechanical ventilation is reviewed, as is the use of bi-level positive airway pressure. The end of the chapter highlights what the asthma educator should discuss with the patient and family before discharge. Although not mentioned in the book, a follow-up call within 1–2 weeks by the asthma educator might help answer questions the patient may have after discharge or a physician visit.

Chapter 10 details the asthma action plan, which can provide better outcomes when well-devised and understood by the patient and family. Daily use of a peak flow meter is not recommended, but peak flow should be measured during an attack. The 4 steps of the action plan are explained simply and effectively. The written action plan shows exactly what needs to be done on a daily basis, and during an attack. Forms the authors use in their practice are shown in this chapter. The end of the chapter provides case studies and the actions plans that were developed in a few of the case studies.

The Asthma Educator’s Handbook is easy to read, contains good questions and answers, and will provide those who are interested in becoming asthma educators with a solid foundation. Respiratory therapists and nurses who work in a hospital setting will find this information useful in becoming an asthma educator. Social workers and other who are not directly involved in patient care will find this book very useful in understanding asthma and helping educate patients and their families. I recommend this book to anyone who wishes to prepare for the Asthma Educator Certification Examination.

Tim Conlin MSc RRT AE-C
Respiratory Therapy Department
Exempla Good Samaritan Medical Center
Lafayette, Colorado

REFERENCES

The author of this review reports no conflict of interest.


This is a comprehensive text on the current indications for noninvasive positive-pressure ventilation (NPPV) and practical issues regarding its application. The book is organized into 25 chapters that cover a wide range of NPPV issues, starting with some basics about equipment and setup, and proceeding to acute and long-term applications, patient selection, patient monitoring, and home use. The chapters are concise, readable, well referenced, and up to date. There are numerous helpful pictures, tables, and algorithms. Most of the chapters are authored by Simonds, but there are several other well-known contributors.

This book will be very useful for all practitioners involved in applying NPPV, including pulmonologists, intensivists, respiratory therapists, and critical care nurses.

The first few chapters cover the basics of NPPV, including equipment, ventilators, interfaces and other accessories, ventilation modes, and how to organize an NPPV service. This provides a good general review of the indications and physiologic rationale for NPPV, as well as technological advances in NPPV, including newer masks, ventilators, and ventilation modes. The chapter on setting up an NPPV service is more relevant to European hospitals, and some of the recommendations do not apply to United States hospitals.

The book then discusses the acute application of NPPV. The chapters cover the use of NPPV in chronic obstructive pulmonary disease (COPD) exacerbation, hypoxemic respiratory failure, neuromuscular diseases, chest wall disorders, cystic fibrosis, and bronchiectasis. These sections are well written and thoroughly referenced. Chapters later in the book address NPPV in the emer-