for parents than the loss of a child is the unexpected loss of a child. So much is left undone; the child has undergone suffering that he might have been spared; parents anguish at not having been prepared." And "If the information turns out to be unnecessary, I rejoice with the parents at its uselessness." Hilden and Tobin approach the task with no medical hubris, which is both refreshing and necessary. Some of the greatest insights come not from the authors but from their accounts of parents' and patients' experiences, often written from the patient's perspective—such as Zach, an 8-year-old who knew better than anyone else that he was dying but needed help finding a way to bring his mother up to speed about his condition, or the 16-year-old boy whom they expected to die at any minute but who lived for several weeks, until his college acceptance letter and scholarship arrived; he died the next

The book is organized into 8 digestible chapters, beginning with "Facing Your Child's Life-Threatening Condition" and ending with "Finding Peace." The construct of the book builds on Tobin's previous book, Peaceful Dying: The Step by Step Guide to Preserving Your Dignity, Your Choice, and Your Inner Peace at the End of Life, with its straightforward list of practical instructions organized in A-Z fashion. This format provides just enough information to be helpful. The pithy suggestions are about as much as any parent can absorb amid the stress of the storm. But the greatest comfort of this volume is Hilden's voice. She speaks to the reader as a practical, compassionate physician, one who is competent and full of technical knowledge, but also approachable and tuned in to the child and his family. She is a physician who is still able to learn from her little patients. I do not doubt that many parents, after reading the book, will wish that this very human physician could have treated their child.

Every child and family approach lifethreatening illness in their own way. No book can be expected to prepare a family for every possible eventuality, nor can a book take the place of competent, compassionate care and excellent communication. No book can substitute for the support of other human beings. **Shelter From the Storm** adds value to those essential elements of care by providing families with useful information in a format they can use.

I have offered the book to families during palliative care consultation, and many

families have found it helpful. Some have read it from beginning to end and said, "Thank you." Others could get only so far and had to take a break; they pick it up later, when they can, and use its advice. This is the kind of book that someone in the family should have, whether it is in mother's briefcase, or in that bag that is always ready for an unexpected trip to the hospital, or on the bedside table for sleepless parents to peruse at 3:00 AM. For those families in which the stress level is just too high to allow the parents to concentrate on a book, Shelter from the Storm would be an excellent choice to give to the father's best friend, or to that trusted aunt who knows when to advise and when to be quiet, so that when the moment is right those loved ones can transmit the book's help and advice in a personal way. Truthful, compassionate information presented in a practical way is always helpful. Shelter from the Storm does exactly that.

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## REFERENCE

 Rosof BD. The worst loss: how families heal from the death of a child. New York: Henry Holt; 1995.

Sillwee Wobbert and Wheezing Will in the Big Game. G Robert. (Sillwee Wobbert Picture Book Series on Children's Health). Silver Spring, Maryland: Dream Publishing. 2003. Soft cover, illustrated, 28 pages, \$9.05

This picture book, targeted towards young children, features a kindly child, Sillwee Wobbert, who has a heart-shaped head. Sillwee Wobbert helps his friend Wheezing Will participate in a soccer game despite Will's mid-game asthma attack. The book is part of a series of picture books designed to boost self-image of chronically ill children and to empower them to participate in normal childhood activities. The book also illustrates to healthy children that their peers with chronic illnesses can contribute to team activities.

The book is appealing to children, colorfully illustrated, and with likeable characters. The heart-shaped head of Sillwee Wobbert is particularly endearing. Unfortunately, Wheezing Will appears to not have his asthma under control, and the book does not address the possibility that he has any choice other than to have asthma attacks in the middle of soccer games. Thus, though the book may teach children better acceptance of children who have health problems, the book does not empower the asthmatic child with the knowledge that it is possible to participate in sports without the interference of an asthma attack.

The illustrations, though appealing, contain some inaccuracies. Will says, "I need my spacer so just sit tight." The book goes on to say, "Will breathed it in with deep breaths," and the illustration depicts Will using something resembling a Terbutaline inhaler placed in his mouth without a spacer. On the next page, Wheezing Will is depicted sitting down with an inhaler and his peak flow meter, and the text reads, "My spacer and inhaler are from my doctor, who knows best."

The major strength of this book is the likeable characters and illustrations. It teaches children tolerance of other children who have health conditions. Unfortunately, the medical inaccuracies regarding asthma weaken the value of the book.

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Pediatric Respiratory Examination (CD-ROM). Chris O'Callaghan DM PhD and Wendy Stannard MB ChB MRCPCH. Produced by Nic Blackwell PhD, OCB Media. London: BMJ Books. 2003. \$27. Requires: 200-megahertz central processing unit, 32 megabytes of random-access memory, CD-ROM drive, 800×600 pixel 16-bit color display, Sound-Blaster-compatible sound card, and Microsoft Windows 95 or higher.

This CD-ROM is a wonderful resource by which to learn or review how to take a pediatric patient's pulmonary history and to learn or review physical examination findings of pediatric patients with common pulmonary disorders. It was designed for medical students, physicians-in-training, nurses, physiotherapists, respiratory therapists, and general practitioners. The video clips of airway pathology and audio clips of auscultation would provide a valuable teaching aid for patients and students.

The program provides a broad, basic overview of history-taking and clinical examination skills. These basic lessons are reinforced with 50 minutes of video and 100 minutes of audio of children with abnormal respiratory examinations. Over 30 clinical cases are reviewed. The user will hear the high-pitched wheeze of a child with acute asthma, look down a bronchoscope to view a peanut lodged in the bronchus of a young child, see radiographic images of pneumonia, watch a tracheotomy being performed, and hear the biphasic stridor of an infant with a subglottic hemangioma. The images are crisp, large, and of excellent quality. The audio clips are well narrated, brief, and informative. Animated graphics help to demonstrate flow-volume curves and airway anatomy while the narrator describes the underlying pathology.

The program is divided into 8 categories: asthma, tracheotomy, pneumonia, bronchiolitis, stridor, bronchiectasis, examination, and neonatal. The first topic, asthma, has the largest and most complete section. It provides a comprehensive review of the best techniques to obtain a thorough history, perform the clinical examination, and formulate a differential diagnosis. With the new trainee in mind this section presents questions to ask when obtaining an asthma history. The audio section cautions the trainee to remember the value of an appropriately focused history and examination of a child in respiratory distress. The presentation, clinical examination, and management of 5 asthmatic patients are presented under the clinical cases subsection. The next subsection describes the use and interpretation of investigations to assess the severity of asthma, such as peak flow, spirometry, and tests of bronchial responsiveness. The final subsection lists conditions that can mimic asthma and tells whether those conditions are rare, common, or frequent in clinical practice. Examples from that list, including gastroesophageal reflux, foreign-body aspiration, and vocal-cord dysfunction, are linked to audio discussions, bronchoscopic images, and/or video of patient cases.

The section on tracheotomy reviews the indications, procedure, case examples, and the possible early and late complications of tracheotomy. The discussion follows a single patient from pre-surgical evaluation to post-surgical tracheostomy care. The program includes several video clips, including

one of a pre-operative patient with stridulous breathing, another showing the tracheotomy surgery, another on post-operative examination, and another on how to change the tracheostomy tube.

The section on pneumonia contains 3 subsections that (1) explore the pathology and clinical features of pneumonia, (2) identify the bacterial and viral pathogens that cause pediatric pneumonia, and (3) detail 4 cases, each accompanied by chest radiographs. This section includes videos of patients showing classic clinical examination findings such as grunting, flaring, and the various types of costal retractions (recession). In addition there are audio clips of fremitus, whispered pectoriloquy, and dullness to percussion during the clinical examination of a young patient with lobar pneumonia.

The section on bronchiolitis is very brief and contains only text slides that give the definition, common causes, and natural history of bronchiolitis. Ten clinical cases are linked to video and audio clips that demonstrate the disease's features. The natural history section introduces the possibility of genetic predisposition to bronchiolitis and the residual acute and chronic respiratory pathology that can remain after even a single episode of bronchiolitis. The information in this section is dated; it states that there is currently no available vaccine for respiratory syncytial virus, but there have been 2 recent vaccines: respiratory syncytial virus immune globulin (RespiGam, which has been available in the United States since 1996) and palivizumab (Synagis).

The section on stridor contains this CD-ROM's most well organized information and its best review of physiology. It presents a list of illnesses organized under subheadings of acute (croup, foreign body) and chronic (laryngomalacia, Pierre Robin syndrome) stridor. Each example is linked to a video and audio illustration. The user can review basic spirometry by viewing flow-volume loops from subjects with normal anatomy, fixed obstruction, and variable intrathoracic and extrathoracic obstruction.

The section on bronchiectasis is essentially a description of the presentation and examination of children with cystic fibrosis, but it also briefly discusses other rarer etiologies, such as primary ciliary dyskinesia. Unfortunately, this section presents only one clinical case. The general presentation, diagnosis, examination, and management of patients with cystic fibrosis are provided through links to text screens.

The section on examination illustrates the basic techniques to obtain a comprehensive history and clinical examination. The user learns the general approach to history-taking from text-based slides. The slides pose questions for each aspect of the pulmonary history: to assess the patients' respiratory symptoms and previous medication history, environmental and social risk factors, and developmental and feeding history. There are even questions especially pertinent to the respiratory examination of patients with genetic syndromes, cystic fibrosis, or chronic lung disease of prematurity. This section offers a very nice overview for the trainee. It emphasizes the features of a good pulmonary examination, including examination of the patient's general appearance, head, face, chest, extremities, and abdomen. Video clips demonstrate the proper way to perform percussion, palpation, and auscultation of the chest and abdomen. There is also an audio clip in which the narrator presents the history and clinical examination of a patient as if on rounds.

The eighth section introduces the inspection and clinical examination of neonates. Four cases demonstrate neonatal auscultation findings. Much of the information in this section is provided by links to inspection and examination skills reviewed in other categories on the CD-ROM. Therefore the information is not specific for neonates.

Together these categories provide a very basic overview of how to obtain a thorough history and perform the clinical examination. Although ideal for those trainees who have had little clinical experience, the information presented may be too basic to be of interest for the more experienced members of the target audience. It should also be noted that this CD-ROM is focused on the pediatric respiratory examination and does not provide much beyond a brief introduction to the pathophysiology of pediatric respiratory disorders.

The program is extremely fast and user-friendly. The audio and video links load very quickly, despite their high resolution. The program begins with a full-sized window, framed at the top and bottom with color-coded menu bars. The top menu bar lists the program's 8 categories, and clicking on a category opens a drop-down menu of 2–5 subcategories. These subcategories allow the user to explore the etiology, patient history, clinical examination of an illness, or to view clinical cases. All of this information is easily accessed via links to

video and audio clips and graphical displays of basic spirometry.

Links for the audio and video clips are located directly after the associated text. Text words representing common clinical signs or examination findings are highlighted (in blue, indicating a clickable link) to allow the user to pursue topics in more depth. The links lead to screens with glossary definitions, specific examples of questions to elicit pertinent history, clinical examination skills, or physiology review.

The user can easily maneuver among the categories, subcategories, links, and glossary, yet still return easily to a prior location. At the bottom of the screen is a navigation bar that retains a history of the current topic and subtopic or highlighted text selected. Clicking on any term listed in the navigation bar returns the screen to that field. A return key also appears on the navigation bar after reviewing a glossary term. Unfortunately, the program's technical ease can be a detriment. Since most of the information for each topic is presented over a series of many screens, retrieved by clicking through multiple links, the process of following links was often more apparent than the concepts presented on the screen. In addition, information is often presented in lists, and clicking an item in one list often generates a new list, and a new set of links. Since the program does not keep track of the links the user has already explored (ie, those terms remain highlighted in blue), it is easy to get lost in the maze of information being presented.

One of the biggest improvements this tutorial program could make would be to include a self-test at the end of each topic section. For the intended audience a selftest would provide a great motivational tool to process and retain key concepts.

Two technical design issues become apparent when operating this CD-ROM program. The first problem arises anytime the audio icon is selected; the CD-ROM drive runs for the entire duration of the audio clip, and the noise generated from the CD-ROM drive can compete with the narrator's voice and with faint audio segments, such as heartbeats. This problem can be overcome by raising the volume on the speakers attached to a desktop computer, but it would remain problematic for laptop computers. Unfortunately, because the program will not operate without the CD-ROM in the drive you cannot avoid this problem by installing the program to your hard drive.

The second technical issue is that some audio and video links are not able to play simultaneously. This problem is especially noticeable when viewing clinical cases. For example, when viewing the cases in the bronchiolitis and neonatal sections, it is not possible to watch the video while listening to the narrator describe the important features of the examination. In fact, when the audio clip is selected, the video screen shows a still image of an entirely different case.

Overall, the Pediatric Respiratory Examination CD-ROM program is a fun, easyto-use, informative tutorial to explore physical examination sights and sounds. This program would make a useful adjunct to a physical diagnosis text and a guide to the art of good history-taking and clinical examination skills. The videos and narrated audios of patient examinations are a good way to reinforce the essential clinical skills of obtaining a good pediatric respiratory examination. It is like having teaching rounds in your own home. The program is also affordable, listed at \$27. I would recommend it as a good resource to prepare the trainee for clinical rotations.

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Pediatric Respiratory Emergencies. An on-line education module at the Pediatric Education for Prehospital Professionals Web site, http://www.PEPPsite.com. Developed by the American Academy of Pediatrics. Published by Jones and Bartlett, Sudbury, Massachusetts. 2003. \$14.95.

This module is part of an on-line education program designed to improve the prehospital care of critically ill children. Oriented toward first-responders (emergency medical technicians, paramedics, and others), the course was developed under the sponsorship of the American Academy of Pediatrics, with input from emergency physicians, nurses, and paramedics. Respiratory care and nursing professionals who work in emergency care should also find the module useful. It is designed to prepare participants for a hands-on workshop in which respiratory care techniques are demonstrated and practiced in a laboratory setting. Participants who successfully complete this and related modules in pediatric care are eligible for a certificate from the American Academy of Pediatrics. Although designed for continuing education of experienced professionals, it also seems appropriate for students in emergency medical technician or paramedic programs

The module covers respiratory physiology and pathophysiology, assessment, and basic and advanced life support techniques appropriate for the pre-hospital care of sick children. The module consists of a series of highly visual presentations of various topics, followed by interactive self-assessment tools. A series of case studies integrate the content of the sections, and then there is a self-assessment test.

The program ran smoothly with a highspeed cable Internet connection and a Compag Presario computer with Windows XP and 265 megabytes of random access memory. The publisher warns that those who access the Internet via AOL or MSN Explorer will not be able to use the module's full-screen format. The publisher recommends accessing the Web site via Netscape or Internet Explorer. I was unable to access the module when my pop-up-window blocker (Pop-up Stopper, Panicware, Seattle, Washington) was activated. Once the module is up and running, however, the pop-up blocker can be reactivated without any problem.

The format closely resembles a slide show with sound. The user navigates through the presentation by clicking a "forward" button on the screen. The educational content includes mostly well designed graphics and tables. Animations, illustrations, and photographs accompany the written material. The sound portion of the module consists mostly of a narrator reading, verbatim, the text that appears with the graphics, but there are also samples of abnormal breath sounds. The user can view the module with or without sound. Also readily available are links to a thorough glossary of medical terms used in the presentation. Additional links to a help section and a frequently-asked-questions section took me to an unrelated safety training program also produced by the American Academy of Pediatrics.

Each section is followed by a group of "interactivities" that consist of multiplechoice questions, matching exercises, and similar assessment tools that highlight the essentials of the material covered. Each assessment portion is linked to a review slide.

The first section reviews basic respiratory physiology and compares pediatric and adult respiratory structure and function.