The National Lung Health Education Program: Roots, Mission, Future Directions

Thomas L Petty MD FAARC and Dennis E Doherty MD

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The National Lung Health Education Program (NLHEP), founded in 1997, is a national health care initiative to promote early diagnosis of chronic obstructive pulmonary disease and related disorders. NLHEP creates and provides lung health publications for laypeople and health professionals and develops and conducts workshops for health care professionals, to promote clinician expertise in office spirometry and spirogram interpretation, and to increase everyone's awareness of the effects of smoking and the availability of smoking-cessation programs, support systems, and treatments. The American Association for Respiratory Care (AARC) has been a NLHEP partner from the beginning, and now those 2 organizations are adding another dimension to their partnership: AARC is going to take over all NLHEP administrative functions. *Key words: chronic obstructive pulmonary disease, COPD, diagnosis, spirometry.* [Respir Care 2004;49(6):678–683. © 2004 Daedalus Enterprises]

Introduction

The National Lung Health Education Program (NLHEP) is a national initiative to promote early diagnosis of chronic obstructive pulmonary disease (COPD) and related disorders. This article reviews the origins and purpose of the NLHEP and how the NLHEP intends to reduce the impact of COPD and related disorders.

Roots

The roots of the NLHEP can be traced to the 37th Aspen Lung Conference,[1] which was on the structure and function relationships of bronchial asthma. Peter Pare was the conference's summarizer. Suzanne Hurd, then Director of the Lung Division of the National Heart, Lung, and Blood Institute, was in attendance, and she asked Tom Petty if he would be interested in chairing a planning conference on a new national initiative on COPD. Indeed, Tom was very interested and the planning conference was held in Bethesda, Maryland, in August 1994. All the attendees were enthusiastic about such a new program, which would follow the successful National Asthma Education and Prevention Program. A 2-day workshop called "Building a National Strategy for the Prevention, Management, and Research in COPD" was held in Washington DC, August 29–31, 1995. Experts in all aspects of COPD, both researchers and clinicians from the United States and Can-

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Thomas L Petty MD FAARC and Dennis E Doherty MD are affiliated with the National Lung Health Education Program, Denver, Colorado.

Correspondence: Thomas L Petty MD FAARC, National Lung Health Education Program, 899 Logan Street, Suite 203, Denver CO 80203-3154. E-mail: tlpdoc@aol.com.

ada, made presentations, and small-group workshops developed recommendations for future action. The conference concluded that the early identification of COPD was a high priority for the United States. The Lung Health Study published in 1994 had proven that smoking cessation reduces the rate of decline of forced expiratory volume in the first second (FEV_1).[2] The results of the workshop were published in the *Journal of the American Medical Association* in 1997.[3] Those efforts launched the NLHEP.

Tom Petty was appointed as chair of the NLHEP. Very quickly an executive committee was formed, which represented mostly clinicians and clinician-teachers with extensive experience in COPD. Early funding, including for the workshop, came from the National Heart, Lung, and Blood Institute. Additional financial support was sought and received in the form of unrestricted educational grants from the pharmaceutical manufacturers that are stakeholders in COPD, the National Emphysema Foundation, and later, spirometer manufacturers. NLHEP was incorporated as a 501C3 not-for-profit corporation in 1997. Executive committee meetings were regularly held concurrent with the annual meetings of the American College of Chest Physicians and the American Thoracic Society. Many organizations and societies joined as supporters of the NLHEP and sent representatives to NLHEP executive committee meetings. Appendix 1 shows the current NLHEP executive committee members and affiliated organizations. There are also at-large members appointed.

A resource document about the current status of COPD was published by the NLHEP in 1998 in both *CHEST* and RESPIRATORY CARE.[4–6]

A spirometry subcommittee was formed in October 1996 to develop a consensus statement about office spirometry and its importance in the early diagnosis and monitoring of COPD and related disorders. Its report was published in 2000.[7] The NLHEP consensus statement recommended using FEV_6 as a surrogate for forced vital capacity.[8]

Mission of the NLHEP

The mission of the NLHEP is to reduce the impact of COPD and related disorders, through awareness on the part of primary care physicians and the public. Its further mission is to detect COPD and related disorders early to reduce costly illnesses that impact the quality of life and to minimize premature deaths.

The need for the NLHEP is based on the fact that COPD is the only disease in the top ten that is rising in prevalence and mortality. The National Heart, Lung, and Blood Institute estimated that 16 million people in the United States have diagnosed COPD and probably an equal number remain undiagnosed. The mortality of COPD in 1998 was 107,000 and is still rising. The estimated direct and indirect costs of COPD were $30.4 billion in 1998.[9] In 2000 for the first time more women than men died of COPD (59,936 women and 59,118 men).[10]

NLHEP Program Promotional Activities

A brochure was designed and widely distributed, called "Test Your Lungs—Know Your Numbers," and that slogan became NLHEP's motto (Fig. 1). An important component of the brochure is that it answers 20 questions commonly asked by patients. The NLHEP Web site, http://www.nlhep.org, has been very active since its inception. Numerous publications, mostly in peer-reviewed journals (Appendix 2), followed the initial report in the *Journal of the American Medical Association.*

In 1999 a national media campaign was organized and featured actress Loni Anderson, whose parents both suffered from COPD. Dennis Doherty of the Division of Pulmonary and Critical Care Medicine at the University of Kentucky joined Ms Anderson in a yearly media blitz to increase public and professional awareness about COPD. Dennis Doherty became co-chair of the NLHEP in 2000 and has made many contributions to its success.

In 2000 the NLHEP formed a strategic partnership with the AARC and launched a second media campaign featuring actor and comedian Robert Klein and Denver pulmonologist Kelly Greene. Together the 2 public campaigns reached millions of television viewers and radio listeners each year. The AARC provided their administrative facilities and began to accelerate the NLHEP program implementation. Gretchen Lawrence became the official liaison officer between NLHEP and AARC, working directly with Louise Nett, who has provided a great deal of the "heavy lifting" that helped to launch the NLHEP from its inception. Together we now have an army of "foot soldiers" to implement the NLHEP in virtually every hospital or large clinic in the United States. The partnership with the AARC continues to grow and to flourish.

One of the executive committee members, Michael Ader of Hanover, Pennsylvania, began a NLHEP demonstration project in his own community, using NLHEP flyers and other NLHEP instruments as they were developed. The Hanover Hospital has been very successful in offering spirometry to all smokers and anyone with chronic pulmonary symptoms. One insurance company in western Pennsylvania has recommended the NLHEP program to their clients. This is now a self-sustaining program and shows that a community-based program is both practical and sustainable.

The NLHEP has given small grants to support COPD research. One grant helped support the evaluation of a new handheld spirometer suitable for screening.[11] NLHEP is urging a voluntary validation procedure to assure that devices marketed as office spirometers meet NLHEP standards for accuracy and use as an office spirometer.

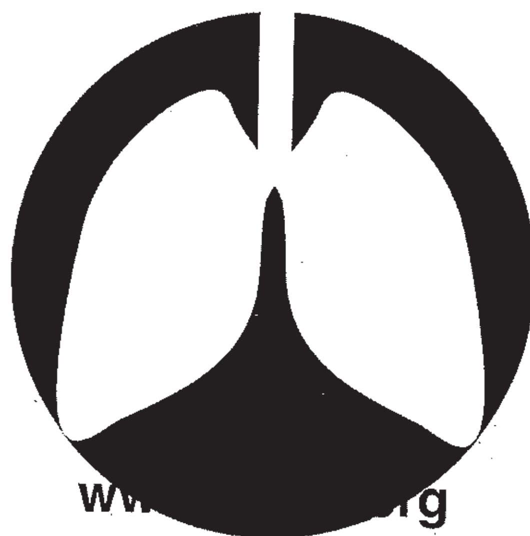
National Lung Health Education Program (NLHEP)

In collaboration with:

Societies
American Association for Respiratory Care
American Academy of Physician Assistants
American Association of Cardiovascular and Pulmonary Rehabilitation
American College of Allergy, Asthma, and Immunology
American College of Chest Physicians
American College of Physicians
American Osteopathic Association
American Thoracic Society
Society of General Internal Medicine

Governmental:
National Cancer Institute
National Heart, Lung, and Blood Institute
National Institute of Occupational Safety and Health

Foundations:
National Emphysema Foundation



TEST YOUR LUNGS- KNOW YOUR NUMBERS

Fig. 1. Cover of National Lung Health Education Program brochure.

The NLHEP has been evolving the concept and studying the practicality of half-day symposia on COPD for primary care practitioners. The first of the new series of NLHEP Saturday Morning Symposia was provided by Tom Petty and Jim Seebass (of the Department of Medicine at Oklahoma State University) in February 2002. It attracted nearly 150 medical and osteopathic primary care practitioners and a few other health care providers. The symposium discussed COPD and its pathogenesis and natural history. A major focus was the importance of office spirometry as the key to early diagnosis and monitoring of therapy.

The COPD symposia is in part based on the consensus statement of the NLHEP, which emphasizes that spirometry should be done selectively on all current and former smokers age 45 and older.[7] Also, persons of any age with chronic cough, dyspnea on exertion, mucus hypersecretion, and wheeze should undergo spirometry. The 3.5-hour symposium concluded with a presentation on smoking cessation and managing advanced, symptomatic COPD. Participants' course evaluations and feedback were sensational. Other versions of the Saturday Morning Symposia, now known as the "Tulsa model," were given in Austin, Texas, during the annual meeting of the Texas Academy of Family Physicians, and in Norfolk, Virginia, with local medical school faculty, and in Kansas City, Kansas. On each occasion the program was exceedingly well received and found useful for necessary changes in office practice. The NLHEP consensus statement on office spirometry was emphasized and hands-on spirometry demonstrations took place at each symposium. A new spirometer, compatible with NLHEP standards,[7] was used in the demonstration.[11]

Most recently, on June 26, 2003, the NLHEP and AARC provided a full-day workshop for 25 nominees from pulmonary and critical care training programs around the country. The morning session reviewed the latest science on the pathogenesis, course, and prognosis of COPD. The afternoon was devoted to demonstrating the NLHEP Saturday Morning Symposia (the "Tulsa model") for a potential new faculty, now knowledgeable and armed with the NLHEP/AARC education instruments that promote early diagnosis and treatment of COPD and related disorders. Dennis Doherty, Tom Petty, and Jim Seebass made the presentations. Several booklets were distributed to participants: *Prevent Emphysema Now* is a 12-page booklet,

written for primary care physicians, on treatment of early-stage COPD. *Save Your Breath, America – Prevent Emphysema Now* is an 18-page booklet for COPD patients; it discusses practical aspects of COPD diagnosis and treatment. *The Early Recognition and Management of COPD* is a comprehensive, fully referenced guide to COPD management, written for primary care practitioners. These and other COPD booklets are available without cost from the AARC.

In many ways the NLHEP is comparable to the National High Blood Pressure Education Program launched in 1972. Like COPD, hypertension affects many millions of Americans and remains asymptomatic until complications occur. Indeed, COPD and hypertension share the common risk factor of smoking. Hypertension may occur as a manifestation of COPD, with acute respiratory failure.[12]

The spirometer is to COPD as the sphygmomanometer is to hypertension. Smoking cessation helps both diseases and a growing armamentarium of drugs can control hypertension. Hopefully, similar drugs will soon be developed for COPD.

The NLHEP and the Global Initiative for Chronic Obstructive Lung Disease

In 2001 the Global Initiative for Chronic Obstructive Lung Disease (GOLD) was launched.[13,14] It was organized along the lines of the Global Initiative on Asthma. GOLD has an international mission that nicely complements the NLHEP. GOLD and NLHEP are mutually supportive and can be synergistic. We need a major effort on COPD throughout the world.

Future Directions of the NLHEP and the Expanded Role of the AARC

The NLHEP has made major progress since its launch, just 7 years ago. Today NLHEP is becoming a household word. FEV_1 and forced vital capacity are no longer foreign terms to physicians, and the public is taking increasing notice. The NLHEP is a primary supporter of a newly launched national patient advocacy group, originally known as the National COPD/Emphysema Association and now known as the COPD Advisory Resource Network. Together the NLHEP and COPD Advisory Resource Network will forward the cause of educating the public and physicians about COPD. These developments may indeed become "the tipping point" where new emphasis on COPD awareness, diagnosis, and treatment will gain momentum.[15]

The partnership between the NLHEP and AARC is growing. Soon the AARC will take over all of the administrative functions of the NLHEP. Executive committee leadership will evolve and change to meet the increasing challenges posed by COPD. Dennis Doherty will replace Tom Petty as chair of the NLHEP in 2004. Tom will assume "emeritus status," but both he and Louise Nett will continue to advise and assist the NLHEP as we move into a new and exciting era.

ACKNOWLEDGMENTS

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Appendix 1
Current Affiliates and Members of the National Lung Health Education Program

Societies

American Academy of Physician Assistants (AAPA)
American Association for Cardiovascular and Pulmonary Rehabilitation (AACVPRY)
American Association for Respiratory Care (AARC)
American College of Allergy, Asthma, and Immunology (ACAAI)
American College of Chest Physicians (ACCP)
American College of Physicians (ACP)
American Thoracic Society (ATS)
American Osteopathic Association (AOA)
Society of General Internal Medicine (SGIM)

Governmental Organizations

National Cancer Institute (NCI)
National Heart, Lung, and Blood Institute (NHLBI)
National Institute for Occupational Safety and Health (NIOSH)

Foundations

National Emphysema Foundation (NEF)

Members

Michael H Ader MD
Medical Director Respiratory Care
Hanover Hospital
Hanover, Pennsylvania
(ad hoc member)

William C Bailey MD
Professor of Medicine
Lung Health Center
Birmingham AL
(ad hoc member)

Brian W Carlin MD
Medical Director of Pulmonary Rehabilitation
American Assn of Cardiovascular and Pulmonary Rehab
Pittsburgh, Pennsylvania
(AACVPR representative)

Gilbert E D'Alonzo Jr DO
Editor-in-Chief of Publications
American Osteopathic Association
Chicago, Illinois
(AOA representative)

Dennis E Doherty MD
Professor of Medicine and Chief
Division of Pulmonary and Critical Care Medicine
University of Kentucky, Chandler Medical Center
Lexington, Kentucky
(Co-chairman of NLHEP)

Paul L Enright MD
Burceton Mills, West Virginia
(ATS representative)

Gary T Ferguson MD
Pulmonary Research Institute of Southeast Michigan
Livonia, Michigan
(ad hoc member)

Sam Giordano MBA RRT
Executive Director
American Association For Respiratory Care
Dallas, Texas
(AARC representative)

Bettina C Hilman MD
University of Texas Health Center at Tyler
Tyler, Texas
(ACAAI representative)

James P Kiley PhD
Director, Division of Lung Diseases
National Heart, Lung and Blood Institute
Bethesda, Maryland
(NHLBI representative)

Marie-Michele Leger MPH PA-C
Director, Professional Education
American Academy of Physician Assistants
Alexandria, Virginia
(AAPA representative)

Barry Lesser MD
Grace Hospital
Detroit, Michigan
(ACP representative)

Ray Masferrer RRT FAARC
Associate Director
American Association For Respiratory Care
Dallas, Texas
(AARC representative)

David M Mannino MD
Medical Epidemiologist
Air Pollution and Respiratory Health Branch
National Center for Environmental Health
Centers for Disease Control
Atlanta, Georgia
(Ex Officio Member)

Sreedhar Nair MD
Clinical Professor of Medicine
Beulah Hinds Center
Norwalk Hospital, Yale University
Norwalk, Connecticut
(National Emphysema Foundation representative)

Louise M Nett RN RRT
Research Associate, Clinical Research Information Specialist, NLHEP
Denver, Colorado
(NLHEP Staff)

Ashok M Patel MD
Assistant Professor of Medicine
Division of Pulmonary and Critical Care Medicine
Mayo Medical School
Rochester, Minnesota
(ad hoc member)

Thomas L Petty MD FAARC
Co-Chairman, NLHEP
Professor of Medicine
University of Colorado Health Sciences Center
Denver, Colorado

Allan V Prochazka MD MSc
Assistant Chief of Residents/Ambulatory Care
Veterans Administration Hospital
Denver, Colorado
(SGIM representative)

Stephen I Rennard MD
Chief, Pulmonary and Critical Care Medicine
University of Nebraska Medical Center
Omaha, Nebraska
(ad hoc member)

Robert M Rogers MD
Professor of Medicine
Pulmonary Division
University of Pittsburgh Medical Center
Pittsburgh, Pennsylvania
(ACCP representative)

Edward C Rosenow III MD
Emeritus Professor of Medicine
Mayo Clinic
Rochester, Minnesota
(ad hoc member)

Frederic D Seifer MD
Pulmonary Associates of East Tennessee
Johnson City, Tennessee
(ad hoc member)

Gregory R Wagner MD
Director, Division of Respiratory Disease Studies
Centers for Disease Control and Prevention
National Institute for Occupational Safety and Health
Morgantown, West Virginia
(NIOSH representative)

Appendix 2
Selected Publications About the National Lung Health Education Program

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