

## The 23rd Annual New Horizons Symposium Pulmonary Rehabilitation: The Expanding Evidence Base

Pulmonary rehabilitation is a process of optimizing functional status, medication regimens, psychosocial coping mechanisms, and self-management strategies in patients with chronic lung disease. Pulmonary rehabilitation is usually accomplished through formal programs of education, exercise, and psychosocial support, provided by a team of physicians, nurses, respiratory therapists, physical therapists, occupational therapists, nutritionists, and psychosocial professionals.

Patients likely to benefit from pulmonary rehabilitation are those with established chronic lung disease that is functionally limiting. Additional selection criteria are patient motivation and the absence of coexisting diseases/disabilities that would preclude exercise and/or education. The benefits of pulmonary rehabilitation are well documented and include improved functional status, less dyspnea, better quality of life, and fewer hospitalizations.

In recent years the evidence base that supports pulmonary rehabilitation has greatly expanded. We now have a better understanding of the mechanisms of functional impairment in these patients and can translate that understanding into better management strategies for exercise, education, and psychosocial support. We are also learning additional support strategies that involve pharmacology and other interventions that enhance pulmonary rehabilitation. And, finally, we are appreciating that outcomes from surgical management of lung disease can be enhanced by “peri-operative” pulmonary rehabilitation.

In the following papers from the 23rd Annual New Horizons Symposium at the 53rd International Respiratory Congress of the American Association for Respiratory Care, held December 1-4, 2007, in Orlando, Florida, authorities in pulmonary rehabilitation discuss a wide range of topics and the expanding evidence base of pulmonary rehabilitation. I began the symposium with a review of respiratory, cardiac, metabolic, and other factors that limit functional performance in patients with chronic lung disease. Richard Casaburi followed with a uniquely personal history of exercise therapy and its benefits for these patients. Richard ZuWallack addressed both “standard” pulmonary rehabilitation support strategies (drugs, oxygen, devices) and strategies that may assist us in the future. Carolyn Rochester then discussed the rapidly emerging role of pulmonary rehabilitation in the peri-operative period. Andrew Ries summarized the rapidly growing outcomes evidence base in support of pulmonary rehabilitation. Finally, Charles Emery discussed the important neuropsychiatric consequences of chronic lung disease and emphasized the importance of pulmonary rehabilitation in addressing them. Taken together, this collection of papers is a state-of-the-art review of the rapidly expanding pulmonary rehabilitation evidence base.

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