



Vol. 47, No. 3 – September 2011

The process of pulmonary rehabilitation and program organization

E. F. M. WOUTERS, I. M. L. AUGUSTIN

Pulmonary rehabilitation programs are highly directed to return patients suffering from chronic lung diseases to a state of self-help. These programs are largely organized as temporary interventions in a highly fragmented delivery care system for patients with chronic respiratory conditions. In an optimal health care organizational structure, pulmonary rehabilitation needs to be considered as an essential part of an individualized, integrated care process, organized from the vantage point of the patient and the patients' health continuum. Pulmonary rehabilitation programs need to become organized as patient-centered care, respectful of and responsive to individual patient preferences, needs and values. Partnering and communication skills are considered as drivers for successful rehabilitation. Assessment is considered as the cornerstone to evaluate the individual needs and problems in order to develop an individualized intervention. Pulmonary rehabilitation programs need to move away from a supply-driven functional organizational structure towards integrated structures, including the full range of medical expertise, technical skills and specialized facilities needed to compete on added value in the management of patients with chronic respiratory diseases.

Eur J Phys Rehabil Med 2011;47(3):475-81.

- 1. How many patients affected by chronic obstructive pulmonary disease completing a pulmonary rehabilitation program do achieve a "clinically" meaningful improvement?**
 - A. 10%
 - B. 25%
 - C. 50%
 - D. 75%
 - E. 90%

*Authors' names in alphabetic order

¹Unit of Occupational Rehabilitation and Ergonomics Salvatore Maugeri Foundation, Clinica del Lavoro e della Riabilitazione, IRCCS, Scientific Institute of Veruno, Veruno, Novara, Italy

²Service de Neuropsychologie et de Neuroréhabilitation CHUV, Lausanne, Switzerland

³Spinal Unit Special Medical Rehabilitation Hospital, Varazdinske Toplice, Croatia

⁴Department of Physical Medicine and Rehabilitation, Medical University of Vienna, Vienna, Austria

2. Multidisciplinary approach

- A. Is not necessary for patients with chronic respiratory diseases
- B. Is a prerequisite of every pulmonary rehabilitation program
- C. Is not recommended by guidelines for pulmonary rehabilitation
- D. Offers an interactive cooperation
- E. Is not based on a mutual cooperation

3. In pulmonary rehabilitation

- A. Workforce needs to be organized around the team
- B. The patient is considered as a partner in the program
- C. The patient is considered as a passive recipient of different corrective interventions
- D. Individualized patient centered program is not necessary
- E. The traditional departmentalized organisation structure is the most efficient model

Exercise assessment and training in pulmonary rehabilitation for patients with COPD

S. SINGH, S. HARRISON, L. HOUCHEM, K. WAGG

Chronic obstructive pulmonary disease (COPD) is a common condition with a growing impact on global health services. Patients with COPD frequently complain of dyspnoea and leg fatigue on exertion. Pulmonary rehabilitation (PR) is an established intervention for the management of patients with COPD. There is clear evidence for the benefit in this population. The purpose of this article is to describe the assessment process, exercise intervention and its anticipated benefits, in the context of a rehabilitation programme for individuals with COPD. This has been sub-divided into aerobic, skeletal muscle resistance and inspiratory muscle rationale, assessment and training. The evidence supporting the incorporation of aerobic and skeletal muscle resistance training in PR is well established. The benefit of including inspiratory muscle training (IMT) as an adjunct to PR is less clear.

Eur J Phys Rehabil Med 2011;47(3):483-97.

4. Which one of the following method of measurement is considered as a gold standard for maximal exercise capacity testing?

- A. Incremental shuttle walking test
- B. 6 minutes walking distance
- C. Endurance shuttle walking test
- D. Treadmill test
- E. 12 minutes walking test

5. **In patients affected by chronic obstructive pulmonary disease, inspiratory muscle training added to a general exercise programme produces no additional benefits except in term of**
- A. Quality of live
 - B. Inspiratory muscle strength
 - C. Dyspnea
 - D. Functional exercise capacity
 - E. Domestic physical activity
6. **In patients affected by chronic obstructive pulmonary disease, postexacerbation rehabilitation**
- A. Improves exercise capacity
 - B. Increases the risk of hospital readmission
 - C. Increases hospital days
 - D. Is not effective
 - E. Increases emergency department visits

See answers on page 528.

MINERVA MEDICA
COPYRIGHT®