

## COURSE SYLLABUS

### Respiratory Rehabilitation

2526-2-I0201D138-I0201D216M

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#### Aims

Dublin Descriptor 1 – Knowledge and understanding

Recognize and understand the main patterns of respiratory disability resulting from obstructive and restrictive diseases.

Dublin Descriptor 2 – Applying knowledge and understanding

Appropriately use techniques and tools of respiratory rehabilitation according to the clinical context.

Identify and correctly apply the indications for rehabilitative treatment, following the main shared recommendations and available guidelines.

Contribute to improving the quality of life of patients with chronic respiratory diseases through targeted rehabilitation interventions.

Develop operational skills in the physiotherapeutic assessment and treatment of acute and chronic respiratory dysfunctions resulting from obstructive and/or restrictive diseases.

#### Contents

Description of the main pathophysiological frameworks that form the basis of acute and chronic respiratory disability.

Analysis of clinical and instrumental evaluation.

In-depth analysis of therapeutic strategies for bronchial clearance management, lung parenchyma recruitment (also with support ventilation), improvement of ventilation, education and long-term follow-up

## **Detailed program**

Physiology

Respiratory distress (I - II)

Respiratory distress evaluation

Oxygen therapy

Bronchial disobstruction

CPAP / NIV

## **Prerequisites**

Concepts of Cardiorespiratory Physiology

## **Teaching form**

Lectures (6 hours) and interactive teaching (6 hours), including presentation and discussion of clinical cases

## **Textbook and teaching resource**

1. Lazzeri M. ed all. «Esame clinico e valutazione in riabilitazione respiratoria » Editor: Masson 2006.
2. Bonsignore G., Bellia V. «MALATTIE DELL'APPARATO RESPIRATORIO» Editore: McGraw-Hill
3. Levitzky M. G. «Fisiologia polmonare» Editore: McGraw-Hill

Myocardial function defined by strain rate and strain during alterations in inotropic states and heart rate Frank Weidemann, Fadi Jamal, George R. Sutherland, Piet Claus, Miroslaw Kowalski, Liv Hatle, Ivan De Scheerder, Bart Bijnens, and Frank E. Rademakers Vol. 283, Issue 2, H792-H799, August 2002

Comparison of hospital-based versus home-based exercise training in patients with heart failure: effects on functional capacity, quality of life, psychological symptoms, and hemodynamic parameters Hale Karapolat  $\text{Æ}$  Emre Demir  $\text{Æ}$  Yasemin Turan Bozkaya  $\text{Æ}$  Sibel Eyigor  $\text{Æ}$  Sanem Nalbantgil  $\text{Æ}$  Berrin Durmaz  $\text{Æ}$  Mehdi Zoghi Received: 24 February 2009 / Accepted: 7 July 2009

Why patients after acute coronary syndromes do not participate in an early outpatient rehabilitation programme? Ewa Deskur-Smielecka, Slawomira Borowicz-Bienkowska, Aleksandra Brychcy, Małgorzata Wilk, Izabela Przywarska, Piotr Dylewicz, Kardiol Pol 2009; 67: 632-638

Effects of an inspiratory muscle rehabilitation program in the postoperative period of cardiac surgery FERREIRA, Paulo Eduardo Gomes; RODRIGUES, Alfredo José and EVORA, Paulo Roberto Barboza.. Arq. Bras. Cardiol. [online]. 2009, vol.92, n.4, pp. 275-282.

Remix: Exercise Training and Cardiac Resynchronization Therapy in Heart Failure Stanley A. Rubin MD, aAvailable online 16 June 2009

Changes in cardiorespiratory fitness, psychological wellbeing, quality of life, and vocational status following a 12 month cardiac exercise rehabilitation programme L D Dugmore,<sup>a</sup> R J Tipson,<sup>a</sup> M H Phillips,<sup>a</sup> E J Flint,<sup>b</sup> N H Stentiford,<sup>b</sup> M F Bone,<sup>c</sup> W A Littlerd 10 November 1998

Effects of cardiac rehabilitation in patients with metabolic syndrome after coronary artery bypass grafting Tomo Onishi MS accepted 14 January 2009.

Compatibility of concurrent aerobic and resistance training on maximal aerobic capacity in sedentary males. Shaw BS, Shaw I. Cardiovasc J Afr. 2009 Mar-Apr;20(2):104-6

Effect of guideline based computerised decision support on decision making of multidisciplinary teams: cluster randomised trial in cardiac rehabilitation. Goud R, de Keizer NF, ter Riet G, Wyatt JC, Hasman A, Hellemans IM, Peek N. BMJ. 2009 Apr 27;338:b1440. doi: 10.1136/bmj.b1440. Erratum in: BMJ. 2009;338:b1880

Cardiac rehabilitation programs. A statement for healthcare professionals from the American Heart Association. Balady GJ ,Fletcher BJ , Froelicher ES, et AL: Circulation 1994; 90: 1602-1610

Clinical guidelines part II. Risk stratification after myocardial infarction. Peterson Ed, Shaw Lj, Califf R: Ann Intern Med 1997; 126: 561-582.

Cardiac rehabilitation guidelines and recommendations. Monpere C: Dis Manage Health Outcomes 1998; 4: 143-156

## **Semester**

2nd semester

## **Assessment method**

Described in the subject's syllabus

## **Office hours**

By appointment  
andrea.lanza@unimib.it

## **Sustainable Development Goals**

GOOD HEALTH AND WELL-BEING | QUALITY EDUCATION | GENDER EQUALITY

