



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## COURSE SYLLABUS

### Respiratory Rehabilitation

2122-2-I0201D138-I0201D216M

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#### Aims

Increase skills in assessment and physiotherapy treatment of acute and chronic respiratory dysfunctions in obstructive and / or restrictive diseases.

Knowing how to use the techniques and technical tools of pulmonary rehabilitation.

Understand the indications for rehabilitation treatment following the most reliable information shared and guidelines, if any.

Improving the chronic patient quality of life.

#### 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

## Teaching form

Lessons in attendance, clinical case discussion, subject to any changes following the pandemic.

## 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, Mirosław Kowalski, Liv Hatle, Ivan De Scheerder, Bart Bijmens, 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 Æ Emre Demir Æ Yasemin Turan Bozkaya Æ Sibel Eyigor Æ Sanem Nalbantgil Æ Berrin Durmaz 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, Sławomira Borowicz-Bienkowska, Aleksandra Brychcy, Małgorzata Wilk, Izabela Przywarska, Piotr Dylewicz, Kardiologia 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 Littler<sup>d</sup> 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

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