

## INTEGRATED COURSE: DISABILITY AND RECOVERY OF FUNCTION

YEAR/SEMESTER: Second year/second semester

ECTS: 3

COURSE COORDINATOR: Prof. Giuseppe Massazza

MODULE	SSD	ECTS	HOURS	MILAN PROFESSORS
Physical medicine and rehabilitation	MED/34	1	15	Massazza Giuseppe
Diseases of the musculoskeletal system	MED/33	1	15	Iacono Francesco
Clinical and paediatric general nursing sciences	MED/45	1	15	Giussani Maria Giovanna

**COURSE OBJECTIVES:** The rehabilitation teaching module, within the Integrated Course on Disability and Recovery of Function, aims to provide knowledge on **medical and non-medical aspects of rehabilitation**.

The course will:

- introduce **the principles and terminology used in the field of Physical Medicine and Rehabilitation**
- describe **rehabilitation settings** and settings that are not exclusively dedicated to rehabilitation (Cod. 56,75,28 and RSA (Residential Care Home)/long term care facilities).
- describe the bases of **rehabilitation prognosis**, the **rehabilitation objectives** included in the **Individual Rehabilitation Project (IRP)**, and the role of **the rehabilitation team**, where the nurse plays an important role in the care of the patient.
- define the roles and competencies of the rehabilitation team, as well as the collaborations necessary to provide quality patient care.
- focus on **diagnosis, differential diagnosis** and possible **complications** and warning signs, which must always be recognised in order to conduct good clinical practice.
- introduce the concept of **clinical care complexity** (frailty, etc.) through classroom discussion of emblematic clinical cases.
- provide practical information, related to professional aspects of the rehabilitation field, useful for the education and continuation of care of the patient in the territory
- describe the tasks of each professional profile and the clinical care 'bridges' necessary for good patient management, through the use films and examples from everyday clinical practice.
- By the end of the course the student should be able to:
- understand the tasks and purpose of their duties towards the patient's care plan while referring to the Individual Rehabilitation Project.

- understand the terminology that will allow him/her to participate in the multi-professional patient care team
- identify the stages of illness: acute, sub-acute and chronic and identify the DTCP/diagnostic and therapeutic care paths in the rehabilitation field.
- recognise areas where to apply nursing competencies and interdisciplinary collaboration with other professionals: physiotherapist, speech therapist, occupational therapist and physiatrist.
- Acquire knowledge and skills necessary for identifying and using clinical indicators that are useful for:
- Recognising dysphagia to prevent complications and ensure adequate nutrition and hydration.
  
- Assessing residual motor functions to prevent immobility syndrome and promote early mobilisation.
- Evaluate residual functional capacity in order to identify the level of autonomy of the patient in performing BADL-IADL and promote the return to the premorbid state.
- Recognise alterations in cognitive status, in particular the presence of delirium, in order to prevent related complications.

The contents of the lectures may vary according to the learning needs and therefore should be considered as provisional.

**TEACHING METHODS:** lectures with integrated, multi-experiential and multi-specialised teaching, exercises on clinical cases, watching video clips.

**ASSESSMENT METHOD:** written exam with multiple-choice answers  
"written exam with 33 questions (11 questions per lesson) with multiple-choice answers (4 items per question). The cut off for passing the examination is 6/10 correct answers per lesson (total 18/30)".

**PREREQUISITES:** none

**MODULE: PHYSICAL MEDICINE AND REHABILITATION MED/43**

**LEARNING OBJECTIVES:** Roles, competencies, tasks and professional profiles from the silo to matrix organisation of nursing: the rehabilitation paradigm

**SUGGESTED READING:** scientific articles, course slides

**CONTENT:**

**1) Introduction to the Module: DISABILITY AND RECOVERY OF FUNCTION**

- Definition of roles and competencies in the rehabilitation team
- The Individual Rehabilitation Project as a tool for dialogue between professionals
- Introduction to Physical Medicine and Rehabilitation paradigm: clinical contexts, roles, aims and clinical care opportunities

**2) 1° Clinical case study in the ORTHOPEDIC-TRAUMATOLOGICAL field**

- Basic concepts of first aid and sports traumatology

- From clinical practice to guidelines
- Role of anamnesis and physical examination
- Diagnosis and differential diagnosis
- Instrumental examinations: who, what, why, when.
- Complications and clinical strategies
- The IRP and essential physiotherapy aspects
- Focus on nursing aspects and clarification of roles, competencies and strategies for good clinical care management of patients.

**3) II° Clinical case Study in the NEUROLOGICAL field**

- Basic concepts of clinical care complexity in the neurological patient.
- From theory to practice with classroom discussion of emblematic clinical cases: ICTUS and cerebral lesions
- The IRP and essential physiotherapy aspects
- Focus on nursing aspects and clarification of roles, competencies and strategies for good clinical care management of patients.

**4) REHABILITATION SETTING**

- Outpatient setting
- Hospital setting
- Code 56: intensive rehabilitation
- Code 28: spinal injury
- Code 75: Brain injury
- Role of the rehabilitation team: competencies and responsibilities

**5) NON-REHABILITATION SETTINGS**

- RSA (Residential Care Home)
- Long-term care

**REHABILITATION (Dr Abati)**

- Defining and describing objectives based on the different patient age groups;
- Brief description of ICF classification: functions, body structures, activities, participation, environmental and personal factors;
- Teamwork;
- Aids, braces, orthoses, prostheses: definition, description, correct use.

**6) THE MAJOR NEUROLOGICAL DISABILITIES: paraplegia, tetraplegia and hemiplegia**

- Definitions, etiopathogenesis, clinical manifestations
- The rehabilitation process (IRP Individual Rehabilitation Project and Irp Individual Rehabilitation Programme)
- Correct patient postures according to the disease: in bed and in a wheelchair

**7) Dysphagia (briefly)**

**MODULE: DISEASES OF THE MUSCULOSKELETAL SYSTEM MED/33**

**LEARNING OBJECTIVES:** to know the main pathologies of orthopaedic interest in clinical, treatment and care contexts

**SUGGESTED READING:** provided by the professor

**CONTENT:**

1- **INTRODUCTORY CONCEPTS**

- Anatomy and histology of the musculoskeletal system.
- Bone fractures: epidemiology, aetiology, classification, clinical aspects and treatment.
- Muscle and tendon injuries: epidemiology, aetiology, classifications, clinic aspects and treatment.
- Developmental pathologies.
- Osteoarthritis: epidemiology, aetiology, classification, clinic aspects and possible treatments.

1- **PATHOLOGY OF THE LOWER LIMB**

- Arthrosis of the knee and hip and prosthetic surgery of the lower limb.
- Osteonecrosis of the femoral head.
- Axial knee deformities.
- Knee ligament and cartilage injuries.
- Brief description on ankle pathology.

2- **PATHOLOGY OF THE UPPER LIMB**

- Instability of the glenohumeral joint.
- Rotator cuff and subacromial impingement.

3- **SPINAL PATHOLOGY**

- Lumbago, lumbosciatica and herniated disk
- Spondylolysis and spondylolisthesis
- Scoliosis and other spinal deviations.

4- **INSIGHTS**

- Management of the orthopaedic patient in the operating room (nurse preparation with intra-operative care: from access to the operating room to the Recovery Room)
- Perioperative anaesthetic management of the orthopaedic patient.

**MODULE: CLINICAL AND PAEDIATRIC GENERAL NURSING SCIENCES MED/45**

**LEARNING OBJECTIVES:**

By the end of the course the student will be familiar with the model of chronic care management through the relevant Italian legislation.

He/she will acquire tools for taking care of the patient and the family through a global approach that includes clinical, care, relational and educational aspects, from hospitalisation to discharge, up to home care and rehabilitation.

## SUGGESTED READING:

- Relevant legislations
- Material provided by the professor

## CONTENT

- 1- THE CHRONIC AND FRAIL PATIENT IN THE LOMBARDY HEALTH SYSTEM
  - Care responsibility and continuity of care
- 2- THE LOMBARDY HEALTH SYSTEM:
  - Regional Law No. 23, "Evolution of the Lombardy social and health system...", institution of the Agenzie di Tutela della Salute (ATS) and the Aziende Socio Sanitarie Territoriali (ASST);
- 3- CHRONICITY PLAN:
  - National Plan for Chronic Diseases, State-Regions and Autonomous Provinces of Trento and Bolzano Agreement, 15 September 2016;
  - Relevant regional legislation, and epidemiological and socio-economic reasoning
  - DGR N.X/4662 of 23/12/2015: "Regional guidelines for the management of chronicity and fragility in the Lombardy region 2016-2018".
  - DGR N.X/6164 of 30 January 2017: "Managing demand: launching the care of chronic and frail patients. Implementation of determinations of art. 9 of law no. 23/2015" (defines the guidelines for the management of demand in care pathways, through the identification of five levels to categorise the person's needs, approves the care costs and identifies the tools to ensure the integration of services: the care pact, the individual care plan, the service centre that ensures cross-functional collaboration and communication of the various levels of care, and the method of remuneration per care pathway, which can be modulated on the basis of clinical and care needs);
  - DGR N.X/6551 of 4 May 2017: "Reorganisation of the supply network and modalities for care of chronic and/or frail patients in implementation of art. 9 of law no. 33/2009" (with which the modalities for chronic patient care were defined)
  - DGR n. X/7038 of 3 August 2017: "Additional determinations and operational indications for the evaluation process of eligible patients as per DGR N. X/6551 of 04/05/2017: Reorganisation of the supply network and modalities for care of chronic and/or frail patients in implementation of art. 9 of law N. 33/2009".
  - DGR N.X/7655 of 28 December 2017: "Methods for launching the process of care of chronic and/or frail patient in implementation of DGR N. X/6551 of 04 May 2017
- 4- FROM LEGISLATION TO OPERATIONS
  - Implementation of care: analysis of models and operational tools (the experience of the Asst Bergamo Ovest);
  - The Service Centre and Territorial Multidimensional Assessment Services (Hub and Spoke Model)
  - Process management tools (computer programmes and documentation tools)
  - Case management and the nurse case manager
- 5- CONTINUITY OF HOSPITAL CARE - TERRITORY IN THE PROVINCE OF BERGAMO
  - ATS Directives
  - Implementation at the local health authority level



- The experience of care of the Supported Discharge Centre of the Asst Bergamo Ovest: from the early assessment of patients at risk for "complex discharge" to the development of an individual plan.

**Humanitas University**  
Via Rita Levi Montalcini, 4  
20072 Pieve Emanuele (MI) Italy  
Tel +39 0282241 - Fax +39 0282242394  
info@hunimed.eu  
hunimed.eu  
CF 97692990159

[www.hunimed.eu](http://www.hunimed.eu)