

## **Introduction in PMR**

1. Medical rehabilitation and physical medicine. Definitions given by the World Health Organization (WHO) and the European Union of Specialist Physicians, Physical Medicine and Rehabilitation section.
2. Purposes of Physical Medicine and Rehabilitation.
3. Principles of Physical Medicine and Rehabilitation
4. Rehabilitation assistance in the health system. Structure of rehabilitation services.
5. Competences of medical specialists in medical rehabilitation and physical medicine
6. Disability and Functioning. Definitions and examples.
7. International Classification of Functioning, Disability, Health (ICF). Model of functioning, disability and health according to the WHO. Example of application of the CIF model.
8. Definitions and examples of structural / functional deficiencies.
9. Definitions and examples of activity limitations and participation restrictions.
10. Environmental and personal factors within the ICF. Definitions, examples.

## **Methods in rehabilitation medicine**

1. Physio-balneotherapy - a component part of medical rehabilitation. Application of physical factors in rehabilitation and the advantages of non-drug treatment.
2. Mechanism / effects of action and effects of action of physical factors.
3. Classifications of physical factors.
4. General principles of application of physical factors. Indications and contraindications for the application of physical factors.
5. Basic balneotherapeutic factors, their origin and classification. Physical properties of the water factor. Mechanisms of action of hydrotherapy on systems and organs. The effects and benefits of hydrotherapy.
6. Means of physiotherapy in medical rehabilitation. Therapeutic exercise.
7. Classification criteria for physical therapy. Therapeutic effects of physical therapy.
8. Principles of application of occupational therapy.

## **MSK rehabilitation**

1. Assessment musculoskeletal system
2. General principles of performing assessment of joints and muscles
3. Functional assessment of posture and alignment disorders
4. General principles of medical rehabilitation treatment in degenerative joint pathology

5. General principles of medical rehabilitation treatment in inflammatory joint pathology
6. General principles of medical rehabilitation treatment in post-traumatic limb injuries
7. General principles of medical rehabilitation treatment in of scoliosis and kyphosis

### **Rehabilitation in pulmonary and cardiac disease**

1. Functional assement of the respiratory system.
2. Pulmonary rehabilitation – indications, methods, breathing tehniques.
3. Rehabilitation in COPD.
4. Cardiovascular rehabilitation. Definition. Objectives of cardiovascular rehabilitation. Indications, contraindications.
5. Assesment in cardiovascular pathology. Functional diagnostic methods. Indications, contraindications.
6. Cardiopulmonary testing.
7. Phases of cardiovascular rehabilitation. Secondary prophylaxis measures in cardiovascular recovery.
8. Medical rehabilitation of patients after myocardial infarction.

### **Neurorehabilitation**

1. Neurorehabilitation: definition, epidemiology, motor impairments after stroke.
2. Indications for neurorehabilitation, functional neurological deficits and the main limitations of activity. Precautions / Contraindications
3. Neuroplasticity: definition, concept, mechanisms, the relationship of interdependence, neuroimaging.
4. Mechanisms and principles of rehabilitation, The International Classification of Functioning, Disability and Health (ICF)
5. Principles of rehabilitation, the role of the doctor and the patient in the rehabilitation model.
6. Types of rehabilitation, multidisciplinary team approach, principles of neurological assessment. Scales.
7. Rehabilitation procedures in the management of spasticity, bowel and bladder incontinence. Coginitive and perception therapy.