UCLouvain

lknr1206

2025

Nervous system pathologies and physiotherapy

The version you're consulting is not final. This course description may change. The final version will be published on 1st June.

5.00 credits	30.0 h + 37.5 h	Q2

Language :	French
Place of the course	Louvain-la-Neuve
Prerequisites	*The prerequisite(s) for this Teaching Unit (Unité d'enseignement – UE) for the programmes/courses that offer this Teaching Unit are specified at the end of this sheet.*
Main themes	• The pathophysiology, symptomatology of each of the following neurological pathologies: 1. Pyramidal syndromes, 2. Extrapyramidal and cerebellar syndromes, 3. Stroke, 4. Spinal cord injuries, 5. Head trauma, 6. Parkinson disease, 7. Multiple sclerosis, 8. Peripheral neurological lesions, 9. Cerebral palsy (introduction) • Paraclinical examinations in neurology (imaging) • Physiotherapy (theoretical and practical) applied to patients presenting the pathologies or disorders above, including, among others, the following elements: assessments and treatments "evicence-based practice": among others, muscle strengthening, motor learning 'a complex task, placement of functional objectives, physical and sporting activities, transfers for patients suffering from neurological pathologies (non-exhaustive, subject to evolve according to developments in the scientific literature).
Learning outcomes	**At the end of this learning unit, the student is able to :** **Technical knowledge and gestures** *At the end of this teaching unit, specifically for patients (adult, child and elderly) suffering from pathologies of the neurological system studied in this course, according to an EBP approach (1.1) in physiotherapy, the student is able to/d ':* • Describe the epidemiological characteristics, main physiopathological mechanisms and clinical presentations of different pathologies of the neurological system (2.1, 11.2) • Explain the basic principles of clinical tests/tools, their validations/uses and psychometric qualities (2.2, 11.2) • Explain the basic principles of clinical examination and its interpretation (2.3) Explain the key elements for making a diagnosis in physiotherapy and rehabilitation (2.4) • Identify the situations for which the patient must be referred (2.5) • Explain the basic principles of making a prognosis (2.6) • Explain the basic principles of continuous assessment and treatment adaptation (3.2) • Carry out technical acts, prescribe and demonstrate exercises rigorously, justifying them (3.1) • Explain therapeutic interventions and their planning for typical treatment (guidelines): technical procedures, exercises and therapeutic education (patient-centered communication) (2.8, 3.1) **Integrative and reflective skills** *At the end of this teaching unit, in a typical management situation of a patient (adult and elderly) suffering from a pathology/dysfunction of the neurological system (clinical vignette or simulated case; 11.3), according to an EBP approach (1.1) in physiotherapy, the student is able to:* • Describe and interpret relevant medical, psychosocial and contextual information (biopsychosocial approach) from the medical file, history and questionnaires. (2.2) • Identify the relevant clinical tools/tests to carry out a clinical examination by arguing for this choice (validation; psychometric quality, etc.), and apply them rigorously and adapted to the patient (2.3, 4.3) • Make a functional diagnosis by interpreting the information collected during the history and clinical examination (including signs, physical examination, paraclinical examination, subjective evaluation) and justify it (2.4, 1.2) • Identify risk factors, signs and symptoms of specific pathologies or signs of worsening requiring referral of the patient to the ad hoc clinician, specifying the degree of urgency (2.5) • Identify and explain the clinical, personal and contextual elements that can influence the prognosis, establish a prognosis and justify it (2.6)

	• Formulate realistic goals for patient care and plan therapeutic intervention; explain the reasoning (2.7, 2.8, 1.2) • Carry out therapeutic interventions (technical procedures and exercises, therapeutic education) adapted to the patient's profile, using a didactic approach (3.1, 5.4) • Adapt your intervention according to the stage of the pathology and the evolution of the patient (3.2)
Other infos	This course is strictly reserved for FSM students. It is not open to other UCLouvain students.
Faculty or entity in charge	FSM

Programmes containing this learning unit (UE)

Program title	Acronym	Credits	Prerequisite	Learning outcomes
Master [120] in Motor Skills: Physical Education	EDPH2M	5		🔍
Bachelor in Physiotherapy and Rehabilitation	KINE1BA	5	LFSM1102 AND LFSM1003 AND LKNR1105 AND LFSM1109	🔍