UCLouvain

lknr1305

2026

Additional pathology and physiotherapy of the nervous system

5.00 credits	37.5 h + 30.0 h	Q2

Teacher(s)	Bleyenheuft Yannick ;Nassogne Marie-Cécile ;Renders Anne (coordinator) ;
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 following pathophysiological mechanisms: • Spasticity • Dystonia • Neurodegeneration • Metabolic disorders The major pathologies and syndromes of the neurological system (children and adults) at neurological level: • Cerebral palsy • Learning disabilities and intellectual impairment • Brachial plexus • Congenital torticollis • Neuromuscular pathologies • Brain tumours (child + adult) • Central nervous system infections: meningitis and encephalitis • Neurodegenerative and metabolic pathology • Epilepsy Aspects of therapeutic communication in a given situation Emergency situations : • Malaise • Syncope
Learning outcomes	**At the end of this learning unit, the student is able to :** <u>Knowledge and techniques</u> At the end of this teaching unit, specifically for patients (adults, children and the elderly) suffering from the neurological system pathologies studied in this course, according to an EBP (1.1) approach to physiotherapy, the student will be able to : • Describe the epidemiological characteristics, the main physiopathological mechanisms and the clinical presentations of the different pathologies of the neurological system as well as the particularities of this system in children. (2.1, 11.2) • Explain the basic principles of clinical tests/tools, their validation/use and psychometric qualities (2.2, 11.2) • Explain the basic principles of the clinical examination and its interpretation (2.3) • Explain the key elements in 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 prognosis (2.6) • Explain the basic principles of ongoing assessment and adaptation of treatment (3.2) • Design and carry out treatments, prescribe and demonstrate exercises rigorously and justify them (2.8, 3.1) • Explain therapeutic interventions and their planning for standard care (guidelines) that empower patients: definition of functional objectives, task analysis, treatment planning based on assessment and objectives, technical procedures if necessary, exercises and therapeutic education (patient-centred communication) (2.8, 3.1) • Explain the initial responses to take in emergency situations involving syncope or epileptic seizures (8.3) <u>Integrative and reflective skills</u> At the end of this teaching unit, in a typical management situation of a patient (adult, child and elderly person) suffering from a pathology/dysfunction of the neurological system (clinical vignett or simulated case; 11.3), according to an EBP approach (1.1) in physiotherapy, the student will be able to : • Describe and interpret relevant medical, psychosocial and contextual information (biopsychosocial approach) from the medical record, history and questionnaires (2.2). • identify the relevant clinical tools/tests for carrying out a clinical examination, giving reasons for the choice (validation; psychometric quality, etc.), and apply them rigorously and appropriately to the patient (2.3, 4.3)

	• make a functional diagnosis by interpreting the information gathered during the history-taking and clinical examination (including signs, physical examination, paraclinical examination, subjective assessment) and justify it (2.4, 1.2) • Identify the risk factors, signs and symptoms of specific pathologies or signs of aggravation requiring referral to the appropriate clinician, specifying the degree of urgency (2.5) • Identify and explain the clinical, personal and contextual factors which may influence prognosis, establish a prognosis and justify it (2.6) • Formulate functional objectives for patient care and plan therapeutic interventions that promote patient empowerment based on task analysis; explain reasoning (2.7 and 2.8, 1.2) • Carry out therapeutic interventions (design of exercises, any technical procedures, therapeutic education) adapted to the patient's profile, using a didactic approach (3.1, 5.4) • Adapt his/her treatment according to the stage of the pathology and the patient's progress (3.2) • Explaining, justifying and discussing therapeutic options and their consequences with a patient and/or his/her family, in a respectful and personalised manner, using accessible language (9.1)
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
Bachelor in Physiotherapy and Rehabilitation	KINE1BA	5	LFSM1203 AND LKNR1206 AND LKNR1200	