

Subject: Physiotherapy in Neurology

I. General information

Organization unit	Faculty of Rehabilitation Supervisor: Prof. Edyta Smolis-Bąk
Course name	Physiotherapy in Neurology
Subject code	FV-76
Teaching language	English
Type of subject (obligatory/ facultative)	Obligatory
Level of studies	Master (linear)
Study years	4
Semesters	9
ECTS points	2
Teacher/ e-mail	martasidaway@gmail.com
Studies program in which the subject is realized	Physiotherapy
Method of realization (stationary/ distance learning)	Stationary
Prerequisites	Prerequisites. Prior to the module, the student has knowledge of: normal and functional anatomy, kinesitherapy, physiology, pathophysiology, kinesiology, clinical biomechanics, pathomechanics, clinical basics of physiotherapy

II. Detailed Information

Course aims and objectives

A1	To acquaint the student with the clinical consequences of peripheral and central nervous system diseases.
A2	To acquaint students with strategies physiotherapy in various neurological diseases divided into: durable, non-progressive disease, slowly progressive, rapidly progressive and chronic.

A3	To familiarize students with the methods of physiotherapy in neurological diseases in all periods.
A4	Preparing students for cooperation with other medical professions in the treatment of people suffering from diseases of the nervous system, including a neuropsychologist, neurologist, occupational therapist, nurse and doctor.

Learning outcomes

Learning outcome	Subject's learning outcomes
Knowledge	
<p>In terms of knowledge, the graduate knows and understands:</p> <p>D.W6 general principles of subjective and objective examination: cardiological, neurological, orthopaedic and geriatric;</p> <p>D.W13 risks of hospitalization of the elderly;</p> <p>D.W15 principles of patient management: unconscious, in the period of acute circulatory failure, in the period of acute respiratory failure, in shock, with diagnosed sepsis, mechanically ventilated, after craniocerebral trauma and multiple traumas;</p> <p>D.W16 objectives and principles of the International Classification of Functioning Disability and Health (ICF).</p>	<ol style="list-style-type: none"> 1. Describes and explains the process of physiotherapy in neurological diseases. 2. Knows the principles and methods of : - patient examination -conducting the physiotherapy process of people with neurological diseases. 3. Identifies and recognizes the needs of patients in the course of neurological diseases.
Skills	
<p>In terms of skills, the graduate can:</p> <p>D.U7 instruct patients or their caregivers how to perform exercises and medical training at home, how to use medical devices and everyday objects for therapeutic purposes;</p> <p>D.U13 plan, select - depending on the clinical and functional patient condition - and perform physiotherapy procedures in people with symptoms of brain stem, cerebellum and cerebral hemorrhage, with particular emphasis on stroke, parkinsonism, demyelinating diseases and physiotherapy treatments in people after spine fractures and with paralysis, conduct proceedings aimed at alleviating trophic and excretory disorders, verticalization and restore walking ability, instruct people after spinal injuries moving in a wheelchair;</p>	<p>Can:</p> <ol style="list-style-type: none"> 1. Is able to examine the patient; 2. Control the effects of physiotherapy; 3. Choose medical devices according to the type of dysfunction and needs of the patient at each stage of rehabilitation and instruct the patient how to use them; 4. Apply physiotherapy to people in the course of neurological diseases.

<p>D.U14 plan, select - depending on the clinical and functional patient condition - and perform physiotherapy procedures on people after peripheral nerve injuries, in polyneuropathies, neuromuscular diseases, primary muscular diseases and in various pain syndromes;</p> <p>D.U15 position the patient in bed and perform kinesitherapy in bed on patients with damage to the nervous system, perform verticalization and restore walking ability, as well as conduct motor re-education of the upper limb in stroke patients;</p> <p>D.U16 instruct patients with neurological diseases performing exercises at home, using medical devices, and everyday objects for therapeutic purposes;</p> <p>D.U32 instruct the patient with cardiovascular disease performing functional movement exercises at home and physical activity as secondary prevention;</p> <p>D.U39 apply the International Classification of Functioning, Disability and Health (ICF);</p>	
Social Competences	
<p>In terms of social competence, the graduate is ready to:</p> <p>O.K1 establish and maintain respectful contact with the patient, as well as to show understanding of ideological and cultural differences;</p> <p>O.K4 compliance with patients' rights and professional ethics;</p> <p>O.K6 use objective sources of information;</p> <p>O.K7 implement of the principles of professional camaraderie and cooperation in the team of specialists, including representatives of other medical professions, also in a multicultural and multinational environment;</p> <p>O.K9 take responsibility related to decisions taken as part of the professional practice, as well as those of self and other people's safety;</p>	<ol style="list-style-type: none"> 1. Understands the need to cooperate with specialists with different competences in order to treat the patient as completely as possible. 2. Sees the need to secure intimate conditions during patient examination. 3. Can self-assess the level of his knowledge and professional skills in the field of the patient's physiotherapy process, is aware of the need to supplement them throughout his life. 4. He knows the safety rules concerning behavior in clinical settings, affecting their own safety and the patient.

Syllabus contents

No	Title
Classes/ Practical classes	
SC1	Physiotherapy people with central nervous system injury e.g stroke
SC2	Physiotherapy people with peripheral nervous system damage e.g polineuropathy
SC3	Physiotherapy people with degenerative diseases of the brain e.g Parkinson's disease
SC4	Physiotherapy people with demyelinating diseases e.g MS

Assessment criterion

Local grade	Grade	Criteria
5	A	90% of knowledge and skills
4,5	B	85% of knowledge and skills
4	C	80% of knowledge and skills
3,5	D	70% of knowledge and skills
3	E	60% of knowledge and skills
2	F	< 60% of knowledge and skills

1ECTS point = 30 hours students work (contact + self study)

TYPES OF CLASSES	HOURS
Contact hours	22,5
Self study	37,5
Total = 60 hours = 2ECTS	