INSTITUTO POLITÉCNICO DE BRAGANÇA

Course Unit	Evidence-informed Physiotherapy			Field of study	Physiotherapy		
Bachelor in	Physiotherapy			School	School of Health		
Academic Year	2023/2024	Year of study	1	Level	1-1	ECTS credits	6.0
Type	Semestral	Semester	1	Code	9504-770-1105-00-23		

Workload (hours)	162	Contact hours	T	TP	PL	TC	S	E	OT	O
			-	30	15	-	-	-	20	-

T - Lectures; TP - Lectures and problem-solving; PL - Problem-solving, project or laboratory; TC - Fieldwork; S - Seminar; E - Placement; OT - Tutorial; O - Other

Name(s) of lecturer(s): Telma Filipa Rodrigues Pereira Pires

Learning outcomes and competences

At the end of the course unit the learner is expected to be able to:
1. Identify different sources and types of information, implementing advanced search strategies using booleanoperators and auxiliary characters;
2. Identify and differentiate levels of scientific evidence;
3. Identify, distinguish and understand the relevance of the different psychometric properties of measurement instruments;
4. Understand the concept of physiotherapy informed by evidence and to implement its underlying process;
5. Communicate scientific results through proper formats and to reference literature appropriately;
6. Transfer scientific evidence to the clinical practice of physiotherapy, applying it in the deepening of knowledge andclinical decision-making;
7. Understand the challenges and limitations of physiotherapy informed by evidence.

Prerequisites

Before the course unit the learner is expected to be able to:
Not applicable.

Course contents

The syllabus deal mostly with the concept and process of evidence-informed physiotherapy in order to provide to the student the acquisition of fundamental competencies required for physiotherapy practice, based on current and bestpractices' guidelines. Thus, there are addressed essential themes for achieving the learning outcomes.

Course contents (extended version)

1. Sources and strategies of scientific literature research.
2. Types of publications and levels of evidence.
3. Psychometric properties of measurement instruments.
4. Instruments for assessing the risk of bias and validity of scientific evidence.
5. Concept and process of physiotherapy informed by evidence:
   - formulation of the clinical question using PICO (population, intervention, comparison, outcome);
   - search for evidence;
   - critical appraisal of the evidence;
   - integration of evidence: expertise, preferences/values of the patient, the available resources
   - evaluation of the results of the clinical decision;
   - dissemination of the obtained results.
6. Principles for the preparation of scientific communications (article, abstract or poster).
7. Tools for literature referencing management. Plagiarism.
8. Translation of scientific evidence to the clinical practice.
9. Challenges and limitations of physiotherapy informed by evidence.

Recommended reading

1. Jacobsen, K. H. (2017). Introduction to health research methods, 2nd ed. Jones & Bartlett Learning.
2. Ranganathan, P. , & Aggarwal, R. (2018). Study designs: Part 1 - An overview and classification. Perspectives in Clinical Research, 9(4), 184-186. doi: 10. 4103/picr. picr_124_18.
3. Aggarwal, R. , & Ranganathan, P. (2019). Study designs: Part 2 –Descriptive studies. Perspectives in Clinical Research, 10(1), 34-36. doi: 10. 4103/picr. Essential Evidence Plus. (2020, November 9).
4. Ma, L. L. , Wang, Y. Y. , et al (2020).Methodological quality (risk of bias)assessment tools for primary and secondary medical studies:what are they and which is better?Military MedicalResearch, 7: 7.
5. Shaw, J. A. , & Connelly, D. M. (2013). Phenomenology and physiotherapy: meaning in research and practice. Physical Therapy Reviews, 17(6), 398-408.

Teaching and learning methods

Methodologies: project-based learning, flipped classroom and think-pair-share. The TP evaluation includes a poster and a written test. The PL includes an oral presentation. Both with self and hetero-evaluation by peers and professors.

Assessment methods

1. Theoretical Assessment - (Regular, Student Worker) (Final)
   - Final Written Exam - 35% (Minimum grade will be 8,5 points for Theoretical Assessment.)
   - Presentations - 35%
   - Practical Work - 30%
2. Examination of appeals - (Regular, Student Worker) (Supplementary)
   - Final Written Exam - 100%
3. Special examination - (Regular, Student Worker) (Special)
   - Final Written Exam - 100%

Language of instruction

Portuguese

Electronic validation

Telma Filipa Rodrigues Pereira Pires	Andre Filipe Morais Pinto Novo	Luis Migue Fernandes Nascimento	Adília Maria Pires da Silva Fernandes
19-02-2024	19-02-2024	19-02-2024	19-02-2024