UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Assessment of The Movement System Impairments

2425-2-I0201D137-I0201D209M

Aims

**Learn the basics of clinical reasoning according to the Pathokinesiological and Kinesiopathological model
Know the Bio-Psycho-Social Model and the role of the Movement System and the gold standards
Learn to carry out a correct medical history - the subjective examination and the objective examination
Know how to manage the patient based on the staging
Be able to carry out a complete evaluation of the patient (alignment - movement tests - joint and strength tests)
Know and be able to identify the main structural alterations affecting the upper and lower quadrant

Contents

The course aims to guide the student through the use of clinical reasoning to systematize all the information relating to the care of the patient with musculoskeletal problems
Clinical reasoning, however, depends on the reference system in which it moves and will be very different if the pathokinesiological or kinesiopathological model is used, as the former seeks the origin of the symptoms (symptomatic tissue) while the latter the cause (movement that causes the symptom).
In the pathokinesiological model, therefore, the anamnestic collection, clinical tests and functional tests will be aimed at identifying the tissue or structure from which the pain originates; the same treatment will be aimed at direct care of the fabric.
In the Kinesiological one, attention will be paid to identifying the dysfunctional movement that causes irritation of the offending tissue, the correction of which will alleviate or cancel the symptoms; it is clear that the taking charge process will be totally different.
The lessons for which will follow these two parallel lines of models, showing the critical issues and peculiar aspects based on the clinical picture in which the patient is taken care of.
The lower and upper quadrant will be examined, showing the functional alignments and movements and their dysfunctions
Much of the time will be spent practicing assessment tests

Detailed program

What is meant by Clinical Reasoning
Pain mechanisms
Muller's theory of stress on tissues
Clinical reasoning according to the Pathokinesiological model: Central nucleus. Way of thinking, Examination and requirements, treatment and evaluation
exercise with clinical case in groups
Clinical reasoning according to the Kinesiopathological model
Symptoms vs cause
Basis of symptoms: Movement system balances - Instant center of rotation
Changes in the components of the system: Muscles (strength-length-rigidity), Articulation (flexibility-degeneration), Skeleton (bone structure), Neural (Recruitment), Biomechanics and dynamic influence
importance of alignment, maintained postures and repeated movements on the tissues: examples of clinical cases
Stages: acute phase 1-sub-acute phase 2-phase 3 in remission
Lower quadrant physical exam: alignment, supine, side, prone, quadrupedal, seated tests, walking demonstration and practical exercises.
Structural alterations of the lower limb - hip: specific tests
Baias in heterometry measurements with tractional and x-ray methods
Structural alterations of the lower limb - knee: specific tests
Structural alterations of the lower limb - foot: specific tests
Problems related to the use of foot orthoses
Role of the abdominals
Specific tests and influence on the rib cage
respiratory mechanics in relation to the abdominals
relationships between thoracic-cervical and shoulder girdle
Upper quadrant: alignment and physiological movements of the scapula and humerus
Clinical cases: dysfunctional movements
Upper quadrant physical exam: alignment, supine, side, prone, quadrupedal, seated test, walking-demonstration and practical exercises-exercise with clinical case in groups

Prerequisites

Teaching form

Teaching (DE) 18 hours
Interactive teaching (TEL-DI) 4 hours (tasks, group work, formative assessments, etc.).
Interactive teaching (DI) 2 hours with the nature of questionnaires or ongoing tests.

Textbook and teaching resource

- Valutazione e trattamento delle Sindromi da Disfunzioni del Movimento Shirley Sahrmann ISBN 880207080-6 Pagine 480 Copertina Cartonata Editore: UTET Anno di edizione: 2005 Skeletal Muscle Structure, Function, and Plasticity Richard L Lieber Lippincott Williams & Wilkins (Sep 2009) Edition: Third ISBN-10: 0-7817-7593-0 ISBN-13: 978-0-7817-7593-9 Pub Date: September 2009 Pages: 336

Semester

2nd semester

Assessment method

Written exam with multiple questions (n° 40), 5 options of which only one is correct
Open question: clinical case
practical exam in presence on a student lasting 10 minutes
The correctness and consistency of the answers will be evaluated with respect to the requested question

Office hours

By appointment

Sustainable Development Goals

GOOD HEALTH AND WELL-BEING