June 25, 2021

EM180: VERBANIA - Persistent Low Back Pain: Integrating Neuroscience and Mechanotherapy

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The topic of the course is "Persistent Low Back Pain". The course aims to translate the latest scientific evidence in ordinary everyday clinical practice. Neuroscience and Mechanotherapy (which is properly applied Exercise Physiology to promote positive tissue adaptation) will be integrated into a simple patient-centre biopsychosocial approach.

Furthermore, the course will give Physiotherapists information regarding the latest clinical trials and the current research on LBP and Chronic Pain. Specific Load Management and Exercise Prescription as well as Manual Therapy will be presented for different LBP profiles

👥	€	🕐	★
28 Seats	**€550.22**	**24** Hours	**30,4** ECM

INTENDED FOR	PAYMENTS	CALENDAR	LANGUAGE
Doctors and Physiotherapists	Deposit €306.22 within 7 days from the registration	25-26-27 June 2021	Italian

Balance €244.00 by date May 21, 2021

Total: €550.22

COURSE LOCATION: VERBANIA

Centro Eventi "Al Centro" - Via alle fabbriche, 8 - 28922 - Verbania (VB)

https://www.alcentro.it/

SCHEDULE

PHYSIOTHERAPY: APPLIED SCIENCE – PERSISTENT LOW BACK PAIN

-Explanation, recognition and clinical meaning of pain types (inflammatory, nociceptive, neuropathic, disfunctional)

-Explanation and practical application of different pain mechanism (peripheral vs central- can you separate them?)

-Principles of Strength and Conditioning/(Mechanotherapy)

-persistent low back pain – Which factors perpetuate pain?:

1) pathoanatomical

2) genetic

3) descending pain inhibitory system regulation

4) cognitive and psychological

5) lifestyle

6) physical –understanding the difference between "adaptive" e "maladaptive" behaviour:

a) which are the features that current scientific research is suggesting to analyse in regards to "motor control"? Better using the term "maladaptive neuroplastic features"!

b) how to quantify and measure them? (e.g. Biering Sorensen test, lower limb performance tests, Hand Held Dynamometer, use of Rep Max, etc.)

- patient as profile not as single dimension (presentation of different clinical models)

- practical use of the biopsychosocial approach

-therapeutic neuroscience education applied on low back pain (imaging + tissue loading tolerance + metaphors)

- semplification of persistent LBP in subgroups (O'Sullivan classification):

1) flexion pattern

2) active extensor pattern

3) passive extensor pattern

4) lateral shift pattern + lower limb spring model introduction

5) loading disorder

6) pain disorder/multidirectional/deconditioning

- subjective examination (use of questionnaires/outcome measures and clinical implications)

- objective examination (interpretation of PPIVM and PAIVM for a correct sub-classification)

-physical tests and symptoms modification

-Musculoskeletal Framework use

- explanation and demonstration together (conditio sine qua non for enhanced compliance)

- revision of current research + presentation of future research

TREATMENT AND MANAGEMENT:

"Motor control" is an old term – moving from an internal focus to an external focus

Use of Graded Exposure combined with Mechanotherapy

1) flexion pattern

2) active extensor pattern

3) passive extensor pattern

4) lateral shift pattern

5) loading disorder

6) pain disorder/multidirectional/deconditioning

Sports Rehabilitation in persistent low back pain: use of Strength and Conditioning principles combined with Neuroscience for full Performance/Efficiency:

1. Criteria for exercise selection
2. Periodization in Rehabilitation
3. Load Management (RPE)
4. Progression: endurance à strength à power/speed

-KPI in persistent low back pain: how to know when to move to the next step with safety/precision

- presentation of different **PROFILES** (clinical cases)

- discussion about eventual doubts /clinical cases

SCHEDULE:

Day 1

09:00 –09:30 Introduction

09:30 –11:00 Pain revision **(T-P)**

11:00 –11:15 Coffee

11.15 – 13.00 Persistent low back pain definition, Red Flags, Differential Diagnosis **(T-P)**

13.00 – 14:00 Lunch

14.00 – 16.30 Spring model + Exercise Physiology **(T-P)**

16.30 – 16.45 Coffee

16.45-19.00 Low back pain myths **(T)**

Day 2

9:00 – 10.30 Evidence on LBP **(T)**

10.30 - 10.45 Coffe

10.45 - 13.00 Presentation of different profiles and Subjective Examination as well as Outcome Measures/Questionnaires **(T-P)**

13.00 - 14.00 Lunch

14.00 - 16:30 Objective Examination **(P)**

16:30 –16:45 Coffee

16:45 – 19.00 Treatment Flexors **(P)**

Day 3

09.00 –10:30 Treatment Active Extensor **(P)**

10:30 –10:45 Coffee

10:45 –12:00 Treatment Frontal Disorder **(P)**

12:00 - 13:00 Lunch

13:00 –15:00 Treatment Other Profiles **(P)**

15:00 –19:00 Clinical Cases/Questions/ Summary **(P)**

P= PRACTICAL

T=THEORY