

## April 17, 2024

# EM327: Basic level IBITA course: Evaluation and treatment of the adult patient with neurological disorder - Bobath concept



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**IBITA ACI** 

The Bobath concept is a problem solving approach aimed at the assessment and treatment of people with movement, postural control and function disorders caused by a lesion of the central nervous system. This approach to rehabilitation of the adult with central neurological impairment originates from the work of Berta and Karel Bobath and has evolved over the past 50 years. The rationale for its current application has its roots in current neuroscientific knowledge relating to motor control, motor learning, neural and muscular plasticity and current biomechanical knowledge. The aim of the course is to deepen the theoretical foundations of the concept and translate them into clinical skills and techniques aimed at dealing with the main rehabilitation problems of adult patients with brain injury. The teaching activity will be divided into theoretical, practical and clinical lessons with demonstration of patient treatment by the teacher in a collective session and by the participants in working pairs. Each activity of the students will take place under the supervision of the teacher for a constant refinement of the techniques: the goal is to make the student increasingly independent in clinical reasoning and competent in the planning and structuring of the specific rehabilitation intervention for each patient. The course is organized according to the IBITA international regulation and the final certification allows access to advanced level Bobath courses.

#### **Specific aims:**

- Acquire specific terminology to describe the rehabilitation approach to the adult neurological patient according to the Bobath Concept
- Update knowledge in the biomechanical and neurophysiological fields especially in relation to postural control, locomotion and reach-to-grasp
- Refine observation skills and acquire models for assessing the problems of the neurological patient
- Implement treatment techniques
- Refine and practice correct dexterity in the treatment of the adult neurological patient
- Support the comparison and discussion between participants to train clinical reasoning
- Promote teamwork
- Promote the evidence-based approach based on updated literature



24 Seats

€2,170.00

**115** Hours

13-17 May 2024 II

Module: 25-29

September 2024

**50** ECM

INTENDED FOR

and Occupational

**Therapists** 

**PAYMENTS** 

Doctors, Physiotherapists Deposit €732.00 within 7 I Module:17-21 April 2024 days from the registration

2<sup>nd</sup> deposit €732.00 by

Balance €706.00 by date August 26, 2024

date April 8, 2024

CALENDAR LANGUAGE

> Italian, English with italian consecutive translation

Total: **€2,170.00** 

Course Location: Brescia @Sala Formazione Edumed

## **SCHEDULE**

## First day

08.30-09.00 Registration of participants and presentation of the objectives of the course

09.00-10.00 Lesson: The Bobath Concept from its origins to today

10.00-11-15 Lesson: Clinical Reasoning and Model of Bobath Clinical Practice (MBCP)

11.15-11.30 Coffee break

11.30- 12.45 Evaluation and treatment of patient A by the teacher in a collective session

12.45-13.00 Summary of evaluation and discussion

13.00-14.00 Lunch



14.00- 15.00 Lesson: Characteristics of efficient movement

15.00-16.00 Practical session: Alignment in an upright position to facilitate the antigravity seal. Orientation of the center of mass on the base of support.

16.00-17.30 Practical session: Analysis and facilitation of efficient movement: Stand-to-sit

## **Second day**

08.30-10.00 Lecture: Neurophysiology of postural control

10.00-11.15 Lesson: Core stability as a multicinetic chain

11.15-11.30 Coffee break

11.30- 12.45 Evaluation and treatment of patient B by the teacher in a collective session

12.45-13.00 Summary of evaluation and discussion

13.00-14.00 Lunch

14.00-15.30 Lesson: Outcome measurement

15.30-17.30 Practice session: Postural control in upright position and ankle strategies

## Third day

08.30-11.15 Lesson: Ascending and descending systems

11.15-11.30 Coffee break

11.30-12.45 Evaluation and treatment of patient C by the teacher in a collective session

12.45-13.00 Summary of evaluation and discussion

13.00-14.00 Lunch

14.00- 15.00 Presentation of a clinical case with video and images using MBCP

15.00-17.30 Linear acceleration and lateral tilt - Brief theory and practice

## Fourth day

08.30-11.00 Lecture: Additional functions in the SNC

11.00-11.15 Coffee break



11.15- 12.45 Practice session: Evaluation and positioning of the scapula in a sitting position. Sit-to-stand transition

12.45-13.00 Preparation of the patient treatment workgroups - Clinical documentation

13.00-14.00 Lunch

14.00- 15.30 Treatment of patients by the participants with supervision of the teacher

15.30-16.00 Review of evaluation and discussion in working pairs

16.00-17.30 Practice session: Seated-supine passage

## Fifth day

08.30-10.00 Lecture: Upper Motor Neurone Syndrome

10.00-11.15 Practice session: Exercise the core-stability in the supine position

11.15-11.30 Coffee break

11.30-13.00 Supine / side-lying transition and work for the hip extension

13.00-14.00 Lunch

14.00- 15.30 Treatment of patients by the participants with supervision of the teacher

15.30-16.30 Practice session: posterior pass and anterior step in lateral decubitus

16.30-17.30 Guidelines for case-reports to be prepared between the first and second module of the course

## Sixth day

08.30-11.00 Lecture: Neurophysiology and biomechanics of locomotion

11.00-11.15 Coffee break

11.15-12.00 Practical session: Alignment from supine and placing response

12.00-13.00 Revaluation of patient A by the teacher in a collective session

13.00-14.00 Lunch

14.00- 15.30 Treatment of patients by the participants with supervision of the teacher

15.30-17.30 Practice session: Preparation of the seated and supine foot



## Seventh day

08.30-9.30 Lesson - Main characteristics of the path after central injury

10.30 Practice session: From the supine position to the sitting position - Stand-down

10.30-10.45 Coffee break

10.45-12.00 Practice session: Stance phase

12.00-13.00 Presentation of a clinical case with video and images using MBCP

13.00-14.00 Lunch

14.00- 15.30 Treatment of patients by the participants with supervision of the teacher

15.30-16.00 Review of the treatment and discussion in working pairs

16.00-17.30 Practical session: Rear step

### **Eighth day**

08.30-10.30 Lesson: The role of the cerebellum in motor learning

10.30-10.45 Coffee break

10.45-12.00 Practice session: From standing up to standing prone

12.00-13.00 Revaluation of patient B by the teacher in a collective session

13.00-14.00 Lunch

14.00- 15.30 Treatment of patients by the participants with supervision of the teacher

15.30-17.30 Practice session: Working in prone standing for the selective extension of the trunk, for the setting of the scapula, for reaching over the head, for alignment of the pelvis, for the selective extension of the lower limb, for the distal components of the step.

## Ninth day

08.30-10.30 Lesson: Neural and muscular plasticity

10.30-10.45 Coffee break

10.45-12.00 Protraction and retraction of the scapula for abduction

12.00-13.00 Practical session: Functional reaching for the sit-to-booth Practical session:



13.00-14.00 Lunch

14.00- 15.30 Treatment of patients by the participants with supervision of the teacher

15.30-16.00 Review of the treatment and discussion in working pairs

16.00-17.30 Practical session: Preparation of the heel strike

## **Tenth day**

08.30-10.30 Practice session: First step and facilitation of the journey (general aspects)

10.30-10.45 Coffee break

10.45-12.00 Practice session: Easy to walk (guided by the pelvis and the central key point)

12.00-13.00 Practical session: Easy to walk (guided by the shoulder girdle and by the arm)

13.00-14.00 Lunch

14.00-15.30 Treatment of patients by the participants with supervision of the teacher

15.30-16.00 Review of the manual

16.00-16.30 Ecm

16.30 Conclusion of the first module

A work to be prepared between the first and the second module will be required: a case report / case study to be sent to the teacher / assistant within a defined term as scheduled in the fifth day of the course.

#### **Eleventh day**

08.30-10.00 Delivery of the evaluations of the work carried out between the two modules and discussion

10.00-11.15 Practice session - Contactual Hand Orientating Response: short theory and practice

11.15-11.30 Coffee break

11.30- 12.45 Evaluation and treatment of patient F by the teacher in a collective session

12.45-13.00 Summary of evaluation and discussion

13.00-14.00 Lunch

14.00-15.30 Treatment of patients by the participants with supervision of the teacher

15.30-16.00 Review of evaluation and discussion in working pairs

16.00-17.30 Practical session - Trunk constraint for the setting of the scapula: short theory and practice

#### Twelfth day

08.30-11.15 Neurophysiology of reaching and grasping

11.15-11.30 Coffee break

11.30- 12.45 Evaluation and treatment of the patient G by the teacher in a collective session

12.45-13.00 Summary of evaluation and discussion

13.00-14.00 Lunch

14.00-15.30 Treatment of patients by the participants with supervision of the teacher

15.30-16.00 Review of evaluation and discussion in working pairs



16.00-17.30 Practical session - Review of the postural bases for sitting and standing uptake: consideration on the work of the core-stability multicinetic chain.

Preparation of the scapulo-humeral cingulum for sitting while sitting.

## Thirteenth day

08.30-10.00 Lesson: Biomechanics of reaching and grasping and comparison with the pathology

10.00-11.15 Practical session - Alignment and facilitation of the arm and elbow

11.15-11.30 Coffee break

11.30- 12.45 Evaluation and treatment of the patient H by the teacher in a collective session

12.45-13.00 Summary of evaluation and discussion

13.00-14.00 Lunch

14.00-15.30 Treatment of patients by the participants with supervision of the teacher

15.30-17.30 Practical session - Alignment of the radius and ulna, treatment of the tensions of the forearm structures, alignment and facilitation of the wrist extension as a prerequisite to the activation of the hand

#### Fourteenth day

08.30-10.00 Lesson: Hand recovery after central injury

10.00-11.15 Practical session - Assessment of sensitivity

11.15-11.30 Coffee break

11.30-13.00 Practical session: Preparation of the postural component of the hand, realignment of the tenare region and thumb facilitation, biomechanical preparation of the carpal structures

13.00-14.00 Lunch

14.00-15.30 Treatment of patients by the participants with supervision of the teacher

15.30-17.30 Practice session - Strengthening of intrinsic musculature, digitization, sensory stimulation of the hand. Coordinate the shoulder, arm and hand components for functional reach-to-grasp

#### Fifteenth day

08.30-10.00 Practical session - The function of the upper limb in different antigravity contexts: reaching in standing

10.00-11.15 Practice session - The role of the upper limb in locomotion

11.15-11.30 Coffee break

11.30-13.00 Patients' treatment by the participants with teacher supervision and final discussion

13.00-13.30 Lunch

13.30-14.30 Last additions to practical sessions and review of manual skills

14.30-15.00 ECM Test

15.30-16.00 Latest questions, delivery of certificates and conclusion of the course