# European Manual Medicine core curriculum

Methodical recommendations and contents for the european postgraduate training in and qualification for "Manual Medicine"

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#### 1. Introduction

# **Subject of Manual Medicine**

Manual Medicine is the medical discipline of enhanced knowledge and skills, that by the use of theoretic basis, knowledge and conventional medical techniques of further medical specialities, carries out

- on one hand the manual diagnostic examination of the locomotor system, the head, visceral attatchments and connective tissue structures.
- On the <u>other hand</u>, it adds manual techniques to the treatment of functional reversible disorders aiming to prevention, cure and rehabilitation of the latter.

Diagnostic and therapeutic procedures are based on scientific neurophysiological and biomechanical principles.

Manual Medicine is a cross-sectional postgraduate apprenticeship and can be carried out by all medical specialists.

Within the framework of a multimodal therapeutic concept, Manual Medicine encompasses the interdisciplinary application of its diagnostic and therapeutic techniques for the diagnosis and treatment of reversible dysfunctions of the locomotor system and the resulting ailments.

## Additionally, systemic chain-reactions:

- 1. vertebrovisceral,
- 2. viscerovertebral and
- 3. viscerocutaneous -

within the locomotor system as well as psychosomatic influences are also adequately considered ("chain" means interlinked functional symptoms in the locomotor system).

# Prerequisites for learning and doing Manual Medicine

Precondition for the acquirement of the postgradual qualification "Manual Medicine" is the licence to practise medicine (physician, medical doctor). The primary goal of this postgradual training is the acquisition of specialist's competence and skills in Manual Medicine by way of the completion of the time and contents as well as the courses prescribed for the professional training module.

The professional training course "Manual Medicine" should be designed to provide doctors in private practice and in hospitals -who are concerned with the diagnosis and treatment of reversible dysfunctions of the locomotor system- with the best tools to enhance their diagnostic and therapeutic skills with the possibilities offered by the discipline of Manual Medicine.

## Manual Medicine and "Osteopathy"

ESSOMM considers appointed osteopathic ideas and techniques as element and enhancement of Manual Medicine. The major root of Manual Medicine, as it is used in Europe since the second half of the twentieth century, is "Osteopathy".

From its origin "osteopathy" is a medical approach based on the idea to help the human body for self-healing by a diagnosis and treatment "with hands". This origin can be traced back to **1874** when it was introduced by A. T. Still, in Kirksville, USA.

In the course of the time different ideas and techniques were included and different "schools" developed outside the US, for example in France, Great Britain, Belgium, Netherland, Switzerland, Austria, Germany, Scandinavia, Czech Republic or Australia.

Many of the osteopathic techniques can be applied effectively and are based on theoretical models derived from anatomy, biomechanics and neurophysiology. These techniques have been widely incorporated in the european Manual Medicine. Therefore, ESSOMM appreciates substantial components of medical osteopathic ideas and techniques as an integral part of Manual Medicine and therewith of medical sciences. Furthermore, putative <u>osteopathic ideas</u>, <u>approaches and techniques</u> are implemented partially in this european core curriculum of Manual Medicine.

# Principle structure of the professional postgraduate apprenticeship in Manual Medicine

The practice of MM requires theoretical knowledge, competencies and enhanced manual skills which are taught in structured courses by specially qualified teachers. A confirmation of the recognition/acceptance of the course as well as its teacher are to be obtained from the responsible national authority of physicians prior to taking the course. The course sequence should be obligatory.

In Europe, for this higher medical training in Manual Medicine a total volume of 30 ECTS (European Credit Transfer System) is requested. The professional training module should be therefore divided into a

- 1. basic course (10 ECTS, 1 ECTS = 10 lection hours a 45-50 min and 10 min intermission, plus 25 hours self studies) in which the basic knowledge and the basic skills of MM are taught and an
- **2. advanced course (20 ECTS)** which teaches the advanced competencies and skills of Manual Medicine.

In sum **30 ECTS** = **300** lection hours plus **750** hours self study, contigued **1050** hours.

#### 2. Implementation of the course

The professional training facilities for this course have to provide appropriate rooms for the theoretical excurse as well as exercise rooms with height- adjustable treatment tables. A maximum of three students should be planned for per treatment table.

#### The instruction consists of

- 1. theoretical lectures
- 2. practical demonstrations
- 3. and exercise sessions.

Following the theoretical introductions and the clarification of indication and contraindication which set off each section, special emphasis is placed on the practical instructions of the previously taught manual examination and treatment techniques.

Before the students begin to practice these techniques, they are being demonstrated by the course manager or the teacher who will then also supervise them during the exercises.

The course contents should leading from the simplest to the most complicated subject matter.

No more than **fifteen (15)** course participants per teacher should be placed in a course, and, as a matter of principle, each course should be evaluated by its participants.

The course manager and the teacher must have advanced experience in manual medicine practices.

They are obliged to regularly participate in especially designated continuing education courses for teachers. If available, corresponding recommendations for the continuing medical education of physicians by the local or national authorities have to be respected.

## 3. Main emphasis of the course's contents

The following content is being emphasised in the course:

- 1) Functional analysis of the locomotor system
- 2) Manual techniques for the diagnosis of the locomotor system and other tissues involved in the patient's pathology:
  - I. joint play examination
  - II. examination of muscular tension
  - III. evaluation of the connective tissue tension
  - IV. evaluation of visceral attachment restriction
- 3) Function and interlinked function (chain-reactions) as well as the dyfunction within and between the organs of the locomotor system (spine, extremity joints, muscles, ligaments, fascia) as well as with dysfunctions of the mobility of visceral organs

- 4) Neurophysiology of pain
- 5) Pain as consequence and as cause of dysfunction
- 5) Manual and functional diagnostics of the locomotor system with special consideration of pain reactive signs
- 6) Evaluation of the results of diagnostic radiological imaging
- 7) Psychosocial influences
- 8) Manual techniques for the treatment of the locomotor system and other tissues involved in the patient's pathology:
  - Joint play repetition
  - Neuromuscular techniques ("mobilisation")
  - "high velocity low amplitude" (HVLA) techniques ("manipulation")
  - Techniques for the soft tissue
  - Techniques for visceral attachments
  - Positioning techniques
  - · Directly and non directly barrier-techniques
- 9) Diagnostical re-evaluation
- 10) Instruction in self exercises
- 11) Integration of manual medicine techniques in a multimodal therapy concept
- 12) Documentation and quality management.

# 4. Diagnostic and therapeutic principles

In designing the course, the following diagnostic and therapeutic principles are to be considered.

## **Diagnostic principles:**

- 1) Anamnesis
- 2) Examination of normal locomotor functions and their disturbance
- 3) Painless examination of the functionality of the joint (joint play), muscles and other tissues
- 4) Holistic approach in the framework of medical diagnostic methods
- 5) The course of the examination is guided by starting from global orientation leading to regional orientation, than locally concentrated, specialised manual examination
- 6) Dysfunctions are to be identified in consideration of anatomy, physiology, structure, function and complaints

# Therapeutic principles:

- 1. Therapeutic strategy: reduction of irritation or placement of stimuli
- 2. Treatment of dysfunctions within the concept of parietal and visceral components

- 3. Mobilisation, HVLA- techniques (manipulation), neuromuscular and myofascial techniques as well as soft tissue techniques and treatment techniques for visceral attachments in accordance to the type and degree of the dysfunction and the complaints of the patient
- 4. Application of a concept of multimodal intervention
- 5. Self exercises
- 6. Diagnostical re-evaluation
- 7. Quality management

#### 5. Structure of the course

Both the basic and the advanced course are administered in blocks. The blocks' contents and order are to be determined by the institution/society/association offering the training.

The length of the individual blocks may be between **24 and 60** lection hours.

For didactic reasons, no more than **10 teaching units (of 45-50 minutes each)** should be conducted per day. The emphasis is focused on the teaching of practical competencies, skills and knowledge.

The theoretical course units can be integrated into the practical instruction. The individual blocks should be scheduled at least three months apart from each other so that the time between the blocks can be used to exercise and solidify the learned competencies and skills.

## 10 ECTS or 100 lection hours of the basic course should be organised in:

- **30** hours theory
- 70 hours practical experience
- 20 ECTS or 200 lection hours of the advanced course are organised in:
  - **40** hours theory
  - **160** hours practical experience.

This professional training course is completed with a final examination at the providing medical association, acknowledged by the national authority.

#### 6. Contents of the course

(The term ,hour' is designating a course unit of **45-50 minutes**.)

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# **Basic course** (10 ECTS, 100 lection hours):

# Acquisition of basic knowledge and basic skills (30 lection hours)

| I Theoretical principles of the  | 7 |
|--|---|
| 1. Functionality, neuronal control and functional pathology of the locomotor system      |   |
| 2. vertebrovisceral interactions   | h |
| 3. Nociception, pain and nocireaction  | О |
| 4. Biomechanical principles of the locomotor system as well as of dysfunction of the     | u |
| locomotor system general effects of the different manual medicine techniques, also       | r |
| regarding vertebrovisceral and viscerovertebral interactions and functional chain-       | s |
| reactions  |   |
| II Functional anatomy of the peripheral joints, the spine and the joints of the head     | 5 |
| III Structure of fascia, physiological and neurophysiological features of the connective | 5 |
| tissue and visceral attachments  |   |
| IV Fundamental knowledge of imaging diagnostics and lab findings in special              | 5 |
| consideration of Manual Medicine   |   |
| V Pain in the locomotor system   | 2 |
| VI Psyche and locomotor system   | 1 |
| VII Phenomenology of muscle tension and its significance in MM                           | 1 |
| VIII Specific Manual Medicine anamnesis  | 1 |
| IX Clinical signs that can be influenced by Manual Medicine                              | 1 |
| X Indication and contraindication for Manual Medicine treatment                          | 1 |
| XI Guidelines for documentation and patient's information                                | 1 |

# **Practical experience (70 lection hours)**

| Examination in Manual Medicine  | 30    |
|---|-------|
| <ol> <li>of the peripheral joints</li> <li>scanning examination of the spine</li> <li>of the articular connections of the head</li> <li>of the muscles of the extremities, the torso, the spine and the head</li> <li>of the connective tissue</li> </ol> | hours |
| Evaluation of the results of examination  | 10    |
| Basic techniques of manual medicine for the treatment of  | 30    |
| dysfunctions of the joints, the muscles and of other tissues  |       |
| of the spine  |       |
| • of the head   |       |
| • of the extremities  |       |
| of the connective tissue  |       |

# **Advanced course** (20 ECTS, 200 lection hours):

Acquisition of specific competencies and skills

# Theory (40 lection hours):

| Differential diagnosis   | 20    |
|--|-------|
| of dysfunctions und diseases (locomotor system / internal disease) | (4)   |
| 2. of radicular und pseudo- radicular pain syndromes               | (4)   |
| 3. of lumbar and pelvic-leg pain                                   | (4)   |
| 4. of cervicocranial and cervicobrachial pain, headache included   | (4)   |
| 5. of balance dysfunctions and vertigo                             | (4)   |
| Evaluation of examinations with imaging techniques, especially     | 4     |
| functional radiology   | hours |
| Functional control of the locomotor system: motor patterns, their  | 6     |
| composition and plasticity   | hours |
| interlinked dysfunctions (chain-reactions) in the locomotor system | 10    |

# **Practical experience (160 lection hours):**

| Segmental specific manipulation techniques of the spine and the joints of the | 45 |
|---|----|
| extremities   |    |
| Enhancement of mobilisation techniques in consideration of specific           | 50 |
| techniques for muscle inhibition or muscle relaxing (muscle energy            |    |
| techniques, techniques based on post isometric relaxation, positioning        |    |
| techniques)   |    |
| Fundamentals of myofascial and visceral techniques                            | 30 |
| Treatment strategies for interlinked functional (chain-reaction) syndromes    | 10 |
| Differential diagnosis and treatment of dysfunctions of motor pattern at      | 10 |
| different control levels  |    |
| Indications for physiotherapy and training for rehabilitation                 | 5  |
| Integration of the manual medical treatment in a multimodal treatment         | 10 |
| concept   |    |

# Certification

ESSOMM accepts national certificates in Manual Medicine for accreditation of an european diploma. Prerequisite is the structured curriculum of Manual Medicine as mentioned above. The executive board of ESSOMM is eligible to substantive examination of the national curricula and to refuse the european certification (diploma).

# **Final Appointments**

Time course and contents of this core curriculum of Manual Medicine have to be accepted as legally binding for all members of the European Society of Manual Medicine.

A transition period of **5 years** is offered by the ESSOMM for adapting national particularities in implementation, application and apprenticing Manual Medicine (regaring time course and content of the national curricula) to the european core curriculum of Manual Medicine.

In this transition period, a privileged membership without entitlement to vote of all interested associations not fulfilling the criteria of the european curriculum of Manual Medicine is possible.

The transition period is terminated 5 years after proposal submission on membership.

ESSOMM offers support in development or enhancement of curricula in Manual Medicine for all interested national companies/societies.