

# Rehabilitation

**Rehabilitation** (RHB) is an activity whose goal is to optimally restore an individual's physical, psychological, social and work abilities that have been reduced as a result of injury or illness<sup>[1]</sup>. It is an interdisciplinary field.

- RHB is indicated + coordinated by a doctor.
- RHB teamwork – physiotherapist, occupational therapist, speech therapist, psychologist.
- A correctly chosen time for the start of RHB is necessary.
- Outpatient rehabilitation department, rehabilitation centers (at hospitals and LF), specialized institutes, spa treatment.

## Terminology:

- **Impairment** – a disorder of **one** system. Manifested by anatomical, physiological, or psychological changes.
- **Disability** – limited ability, more individual character, inability to perform certain activities that the patient previously performed → room for occupational therapy.
- **Handicap** – disability in relation to society.
- Muscle test – information about the muscle strength of individual muscles / muscle groups, the greatest benefit in peripheral paresis (mainly residual paresis after acute poliomyelitis), 5 levels of muscle strength assessment.

A novelty in the field of rehabilitation is the so-called telerehabilitation, which enables the provision of rehabilitation services via telecommunication networks and the Internet. In which the patient is remotely connected to a doctor or therapist. The advantage of telerehabilitation is the current easy availability, time, and financial savings. In particular, it replaces the often complicated transport for patients to rehabilitation institutions.

## Physiotherapy

The term physiotherapy comes from the Greek word *fysis* - natural force and *therapeiá* - treatment as a service. It uses different forms of energy (including movement) to therapeutically influence pathological conditions. It is divided into **therapeutic physical education (LTV)** and **physical therapy**<sup>[1]</sup>.

### Therapeutic physical education

- Group / individual rehabilitation.
- **Fitness exercise** – Used in an acute or subacute state with the patient in bed. Also used as preventive RHB in risk groups.
- **Exercise according to the muscle test** - the meaning of ch. for peripheral paresis, resistance exercises, use of dumbbells + pulleys.
- In spastic disorders – **the Kabat technique** – is based on specific movement patterns, based on the principle of muscle interplay. Movement is in diagonals.
- Method of Mr. and Mrs. Bobath (Bobath Concept) - Therapy for children with cerebral palsy. It uses a position for starting movement, when spasticity is dampened. It uses the cervical and vestibular reflexes as well as various exercise aids.
- **Vojt's method** - it is based on the phylogeny of movement, in humans there are 2 reflex coded movement units: reflex crawling + reflex turning - they can be equipped only in a certain position and stimulation, indications: Cerebral palsy and spastic hemiparesis.

### Physiotherapy

- **Direct current:** galvanization - accelerates metabolism in tissues;
- **Alternating interference currents** – affecting pain (diadynamic, analgonic, etc.);
- **IR radiation** - "preheating". It allows for spasticity release before subsequent exercise
- **Electromagnetic waves** - alleviation of inflammation and in degenerative diseases of the musculoskeletal system
- US (ultrasound) – disruption of adhesions, alleviation of spasticity, analgesic effects;
- Laser – acceleration of healing of various muscles. and joint injuries, and limiting the formation of keloid scars.
- UV radiation – osteoporosis
- **Paraffin wraps** - alleviation of spasticity before exercise;
- **Hydrotherapy** – whirlpool baths for upper and lower limbs, mud and mire wraps + baths, Scottish sprays, sauna<sup>[1]</sup>
- 

## Occupational Therapy

**Occupational therapy** is a field of rehabilitation. It tries to achieve the highest possible quality of life for a person with a disability (physical or mental) by means of a meaningful activity. Occupational therapy is holistically focused - it tries to understand the client and his environment and respect his wishes when creating a therapy plan. An occupational therapist works as part of a multidisciplinary team (as mentioned above).

The term *occupational therapy* is currently abandoned because it does not correspond to the current concept of occupational therapy.

An occupational therapist can work in:

- hospital – in departments for children and adults (traumatology, ICU, oncology, neonatology, psychiatry, rheumatology) and in spas.
- Social facilities – homes for the elderly, stationary, therapy workshops, sheltered housing;
- Other facilities – rehabilitation medicine clinics, early care, home care.

An occupational therapist can also provide advice on workplace ergonomics or the selection of compensatory aids, but can also work as an assistant for people with disabilities.

## Links

### Related articles

- Medical rehabilitation
- Telerehabilitation

### External Links

- Physical therapy
- Rehabilitation (<https://en.wikipedia.org/wiki/Rehabilitation>)

### References

1. SEIDL, Zdeněk and Jiří OBENBERGER. *Neurology for study and practice*. 2nd edition. Prague: Grada Publishing, 2004. ISBN 80-247-0623-7 .