

OUR LECTURER



Photo: private

Renata Horst (right) is a physiotherapist MSc and owner of the N.A.P. Academy in Ingelheim. Among other things, she teaches PNF and NAP courses at the VPT.

Britta Gebhardt is a physiotherapist and wrote this report on the neurotraining course in Eckernförde.

INFO

Why train in small groups?

"Most people lack stamina," says course instructor Renata Horst. "When it comes to endurance training, the battle against the inner bastard begins. Neurological patients have a particularly difficult time here due to their compensatory stiffness. Hands-on individual therapy is certainly still important in order to promote the elasticity of the body structures. However, this alone is not enough. Equipment-supported training in small groups enables patients to experience rhythmic repetitive movements that lead to the automation of their movement sequences."

Neurotraining in a circuit

Our lecturer Renata Horst explored the question of how patients with neurological conditions can effectively train motor skills outside of individual therapy. She developed a training circuit based on the ICF. Its stations make it possible to achieve the training goals at the structural and functional level as well as at the activity and participation level.

People with neurological conditions who have largely regained their independence in self-care thanks to targeted neurorehabilitation often still feel restricted in their everyday activities. This can be caused by residual muscular weaknesses, balance problems and often a lack of stamina. Incorrect strain when standing and walking, for example, can lead to long-term joint problems, which can be painful and also impair everyday activities. During therapy, these clients often express a desire for further training opportunities to improve their motor and coordination skills independently. For them, every little bit of progress means more independence and an improved quality of life. Modern rehabilitation must meet this justified wish of those affected.

Let them train independently

In addition to individual therapy, patients should learn to train independently as early as possible, ideally in groups. The role of the therapist is changing more and more - especially in late rehabilitation - from therapist to trainer. Therapists are required to develop individual training programs together with clients that are geared towards their resources, wishes and needs. Knowledge from the training sciences is therefore also required for therapists who treat patients after a stroke, for example. Small groups

offer an ideal setting for training sessions. Participants can support and encourage each other, give feedback and consciously experience training successes together.

Training at all levels

The training circuit, which was specially developed for neurotraining and oriented on the ICF, enables the achievement of training goals at all levels of the ICF with its stations:

Training **at the structural and functional level** should address the musculoskeletal system as well as all relevant functions. The individual stations of the circuit training can focus on the following goals:

- Improve neuromusculoskeletal and movement-related functions as well as the structures of the nervous system, z. e.g. gliding ability of neural structures
- Improve the structures and functions of the cardiovascular system, the respiratory system and the immune system.
- Promoting sensory functions, e.g. eye control, but also improving proprioception
- Reduce pain
- Challenging and promoting mental functions, the improvement of which contributes greatly to a positive therapeutic outcome.

At the **activity level**, activities relevant to everyday life such as handling the affected extremities can be trained at a circuit station, e.g. when practising with the rower (Fig. 1) or therapy band (Fig. 2) or climbing stairs (Fig. 5).

COURSE DATES

NAP course

Next date:

29.09. - 01.10 2017 Module
110.11. - 12.11 2017 Module
2

Class location:

BerlinBrandenburg

Registration and info:

www.vptberlinbrb.de

TO READ MORE

Book tip

Renata Horst:
N.A.PTherapies in
neuroorthopaedics
(EBook), Thieme,
2011We are giving away
three copies.
Write to
VPTMAGAZIN with
your return address:
EMail: vptmagazin@vpt.de

Photo: Renata Horst

Fig. 1:



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Rowing exercise Fig. 2: Exercise with the therapy band



Photo: Renata Horst

Fig. 3: Motivation from the group



Photo: Renata Horst

Fig. 4: Equipment training



Photo: Renata Horst

Fig. 5: Everyday training



Photo: Renata Horst

Fig. 6: Partner exercise: transfer from seat to seat

Goals at the **participation level** are already achieved through the group situation (Fig. 3): Participants support each other, experience togetherness and self-efficacy. Psychosocial elements are also addressed during joint exercises, e.g. seat-to-seat transfer (Fig. 6), where one patient helps the other. Ideally, patients with comparable resources train together in small groups.

Using assessments and documenting progress

Physiotherapeutic examinations help with the selection of suitable equipment, monitoring the training progress and documenting it. Suitable assessments are, for example

The **CTSIB test** measures the ability to maintain balance under different sensory conditions. This *Clinical Test for Sensory Interaction in Balance* must be carried out before selecting the training equipment with which patients are to exercise and which must be suitable for their condition. A severely impaired vestibular system can

For example, this means that training on unstable support surfaces (treadmill, Postuomed, Spacecurl) is not suitable. These patients must learn to use their proprioceptive system as a potential to be able to move and propel themselves on the stable floor.

With the **6-minute walking test**, patients can find out whether they can cover a greater distance after training than before. It makes sense to carry out the test at the beginning and again after a longer training period (e.g. 4 weeks) before starting training to determine whether endurance performance improves over a longer period of time.

Patient feedback

Group training can complement individual therapy in a meaningful way and be tailored to the patient's condition. Initial feedback confirms that it is fun and motivating for patients: "Exercise is important and I don't do anything on my own. When there's another opportunity like this, I'm in!" ◀