In physiotherapy therapeutic exercises have a special role. The ultimate goal of therapeutic exercises is to achieve symptom free movement and function to meet the physical load in every day life activities. The administration of therapeutic exercises to a client is based upon the therapist's knowledge on the effects of specific exercises and the state of disability, potential rate of recovery, complications, precautions, and contraindications. In the application of tailored therapeutic exercises, one must address also some serious questions of possible interaction between intervention and activities outside the treatment situation. There has been increasing number of analyses of the effectiveness of therapeutic exercises. The quality and classification of those randomised controlled trials are evaluated according to specific criteria like in PEDro or Cochrane rating. But the types of interventions have not reached universally accepted definitions. Especially quality criteria did not meet all exercise program variables to define the intensity and volume of the suitable, sufficient and appropriate dosage. The aim of this presentation is to analyse and to describe methods for measurements of the physical dose in therapeutic studies and give some examples from high rated studies.

The measurements
The physical activity is defined as any bodily movement produced by contraction of skeletal muscles. These movements consume energy. The life areas where those movements can take place are often shared into work (OPA), commuting, leisure time physical activity (LTPA) and miscellaneous activities like home work, gardening etc. The exercises in therapy are added into the pool of all physical activities.

To characterize the dose in different type of activities – resistance or aerobic and in different life areas is based on absolute intensity and volume of activity. This can be expressed by units of metabolic rate, cardiovascular load, or muscular function in intensity and volume and also by psychophysical measures. The time must be recorded accurately for volume and time weighted calculations.

There are a great variety of choices for the measurements. According to ISO 8996 standard the accuracy of metabolic rate calculations most rough information is achieved using questionnaires with classified questions. The observation using validated tables increase the accuracy to +/- 20 %. Heart rate measures can give +/- 10 % accuracy, but with measurements of oxygen consumption, DLW or direct calorimetry can accuracy be increased to +/-5%. The intensity and volume of the muscle function are measured by RM values. These measures can be converted into MET (metabolic equivalent) values which give the possibility to compare interrelated activities like OPA and LTPA.

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