

The State of the Art of Systematic Standing Therapy in Germany

A delphi study

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1 Delphi Process.

Pilot: Questionnaire with two persons (medical and pedagogical background)

Delphi 1: Questionnaire sent out to 14 persons (covering all regions of Germany, all typical professional groups, 2 persons with lived experience)

- putting together the answers
- Building categories (very wide nomenclatur, very divers answers, big variety of systematic use, evidence-based practice, 2 participants related their use of standing with evidence)

Delphi 2: Zoom conference, discussing the results and finding agreement

2 Indications.

- Cerebral Palsy
- Spastic and dyskinetic forms (GMFCS 3, 4 & 5)
- Neurodegenerative Diseases (esp. SMA and muscular dystrophies)
- Genetic Syndromes
- Metabolic Diseases (pompe disease, mitochondriopathy)
- Acquired Disorders (e.g. after TBI, cerebral infarction, brain tumors, cerebral hemorrhage)
- Spinal Cord Injuries (acquired, congenital, MMC)
- General Global Developmental Disorders
- Mental Developmental Delay
- Inadequate support
- Visual impairments

3 Types of standing devices.

- **Inclined lying systems** from prone or supine position 10-70 %
- **Standing trainers** 10-60 %
- **Mobile standing trainer** (self-propelled) 1-30%
- Standing trainer / wheelchair **with stand-up function** 5-30%
- **Dynamic (mobile) standing trainer** 5-10 %

4 Body functions.

- Chapter 1: Mental functions
- Chapter 2: Sensory functions and pain
- Chapter 3: Voice and speech functions
- Chapter 4: Functions of the cardiovascular, haematological, immune and respiratory systems
- Chapter 5: Functions of the digestive, metabolic and endocrine systems
- Chapter 6: Functions of the urogenital and reproductive systems
- Chapter 7: Neuromusculoskeletal and movement-related functions
- Chapter 8: Functions of the skin and skin appendages)

5 Body structures.

Structures related to movement

6 Activities & Participation.

- Chapter 1: Learning and application of knowledge
- Chapter 2: General tasks and requirements
- Chapter 3: Communication
- Chapter 4: Mobility
- Chapter 5: Self-care
- Chapter 6: Domestic life
- Chapter 7: Interpersonal interactions and relationships
- Chapter 8: Important areas of life
- Chapter 9: Community, social and civic life.

7 Recommendation.

We recommend using the standing trainer

- **5 times a week**
- **for 90 minutes (fractionated, cumulative)**
- **in everyday situations and depending on the indication and situation.**