

A painting of hands holding a green candle. The background is a textured, warm-toned surface. The hands are rendered in shades of pink, purple, and blue, with visible brushstrokes. The candle is a vibrant green, held in the center of the hands. The overall mood is one of care and focus.

# From assessment to goalsetting and treatment

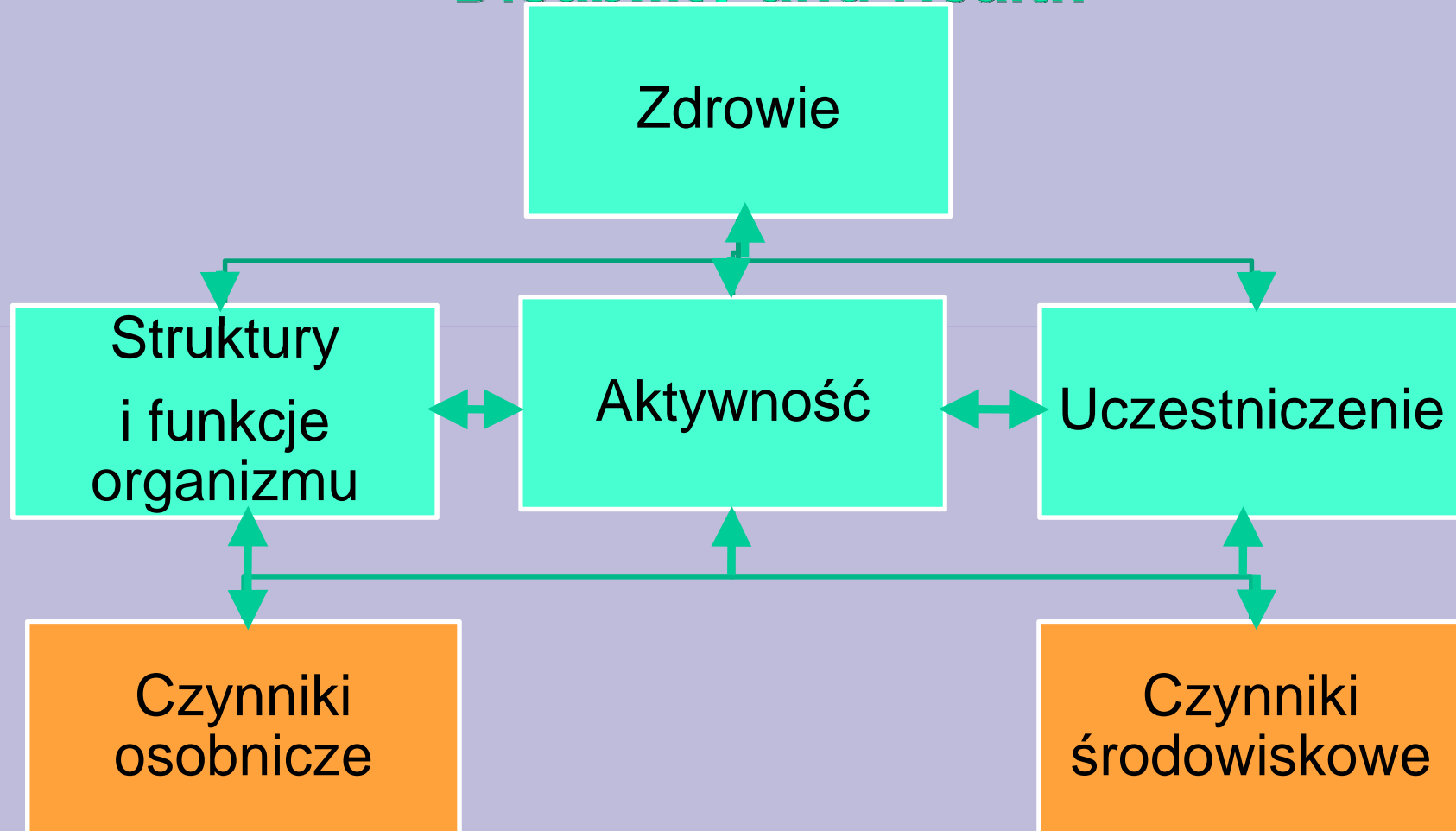
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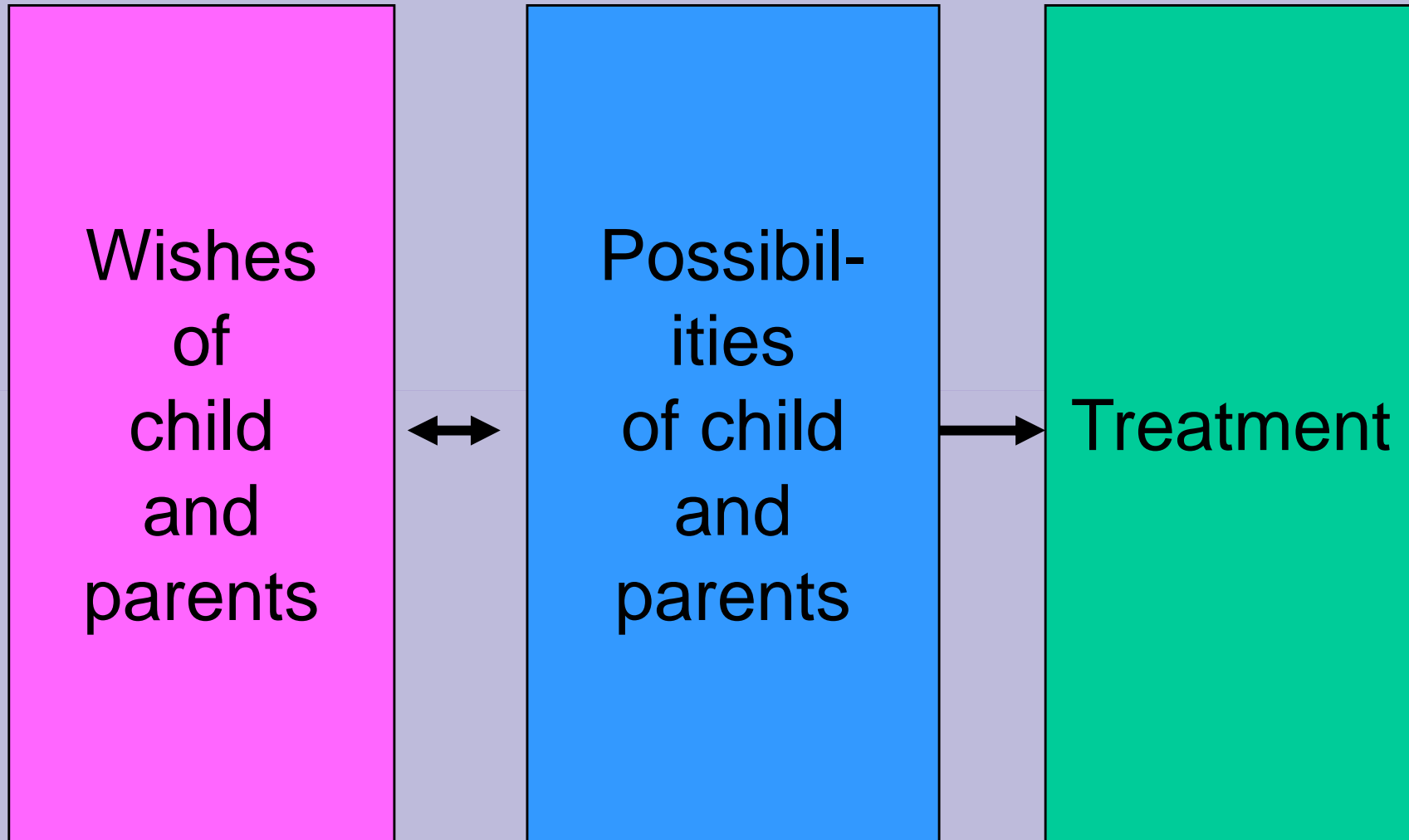
# ICF



## International Classification of Functioning, Disability and Health

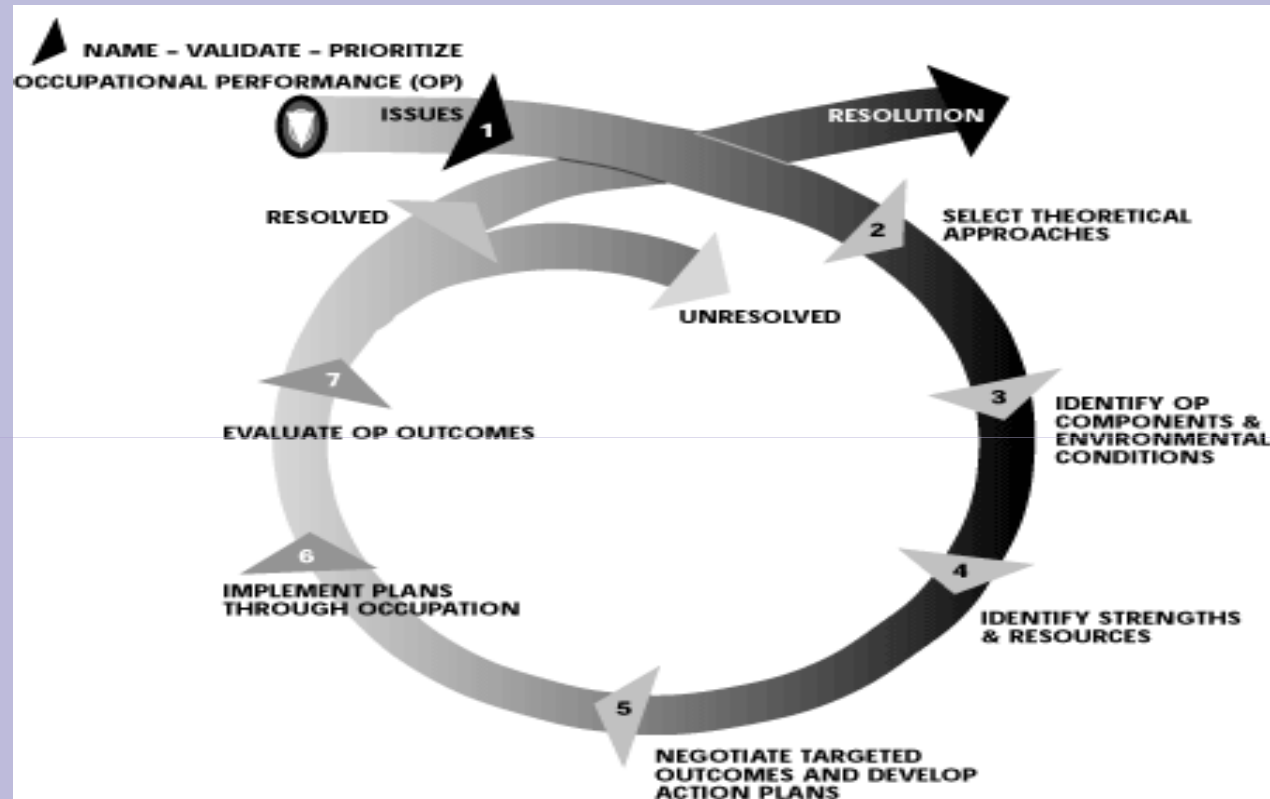


WHO, 2001



# OPPM

VU medisch centrum



Occupational Performance Process Model (OPPM) as presented in Enabling Occupation: An occupational therapy perspective (CAOT, 1997)



# OPPM

1. Inventarisation of problems experienced by child & family (their perspective!!)
2. Analyse the problems; observation & assessment
3. Identify strengths & resources of the child and environment
4. Teamconference; “complete picture”
5. Set the goals
6. Treatment
7. Evaluation of treatment



# Lasse



5 years old, unilateral (right sided) spastic CP

41 wks, caesarean section, 4700 g.

Asymmetric hand function at age of 2 months

Diagnosis at 6th month: MRI brain: venous infarction at left side

Independent walking without aids at 19 month

(GMFCS I, MACS II).



# COPM Lasse



## Activities

1. Putting on and taking off socks and shoes
2. Ability to perform climbing activities (grasp and balance)
3. Putting on and off jacket, including zipper
4. bimanual performance in construction play
5. Independent cycling
6. Walking without stumbling/falling for more than 15 min.



# Functional assessment

- Participation - Activity- and Function level (ICF-model)
- Quantitative and qualitative
- Achievability of the goals
- To evaluate therapy
- Focus in the workshops: COPM,PEDI,GMFM



# OT assessment instruments



<b>Function</b>	<b>Activities</b>	<b>Participation</b>
Physical examination  Capacity Melbourne EMG registration	<b>PEDI</b>  <b>AHA</b>  <b>Toddler Act</b>	<b>COPM</b>  <b>Individual activities &amp; GAS</b>

## Evaluation of toddler activities



Consists of:

- Tearing
- Folding
- Cutting
- Glueing
- Colouring
- Threading beads
- Construction material

# Scoring toddler activities



- Affected hand is used as assisting hand
- Needs physical help in folding and cutting
- Trunk rotation R, flexion elbow, pronated forearm, wrist flexion, ulnar deviation and thumb adduction during performance.
- General observations:
  - Compensates through stabilisation against body or on table
  - Appropriate pace in performance
  - Good planning and execution
  - Appropriate quality related to age
  - Interference of mirror movements during drawing
  - Bimanual coordination is difficult
  - Strength in grip; short in cutting and construction



## PEDI Self care scale

- Using a knife for buttering and cutting;
- Pouring juice from a carton or pitcher;
- Rubs hands together to clean;
- Zips and unzips, buttons and unbuttons;
- Manages clothes before and after toileting;
- Taking off and putting on socks and shoes.

# Assisting Hand Assessment

VU medisch centrum



- Music box
- Bottle with beads
- Pan
- Peek-a-boo puppet
- Fibre animal
- Lego
- Colouring
- Marbles
- Head Prince/princess
- Bracelets and necklaces
- Wooden Cymbals



## AHA Score

- AH most often used to stabilize and hold objects;
- Holds objects that are particularly easy to hold;
- Stabilization is not always reliable;
- Uses AH with a delay, seldom reaches with the AH
- Often uses different positions of upper arm, but not equilaterally
- Small variation in forearm position
- Mostly takes objects from the DH or relaxes grasp so the objects falls to the table.
- Bimanual activities are performed independently, with increased effort and some difficulty

# PT Assessment instruments



<b>Function</b>	<b>Activities</b>	<b>Participation</b>
<p><b>Physical Examination</b></p> <p><b>EMG</b></p> <p><b>Force plate</b></p> <p><b>Energy consumption</b></p>	<p><b>GMFM-66</b></p> <p><b>Gait analysis (video)</b></p>	<p><b>COPM</b></p> <p><b>Individual activities &amp; GAS</b></p>



# Gross Motor Function Measure

- High knee walking
- Rifleman's position right/ getting up
- Standing on one leg right
- Kicking ball left leg
- Hopping on one leg ( problem for both legs)





# Physical examination

- Range Of Motion (active and Passive)
- Spasticity (modified method of Tardieu)
- Selectivity
- Muscle strength only when good selectivity (MRC, dynamometer)





## Physical examination

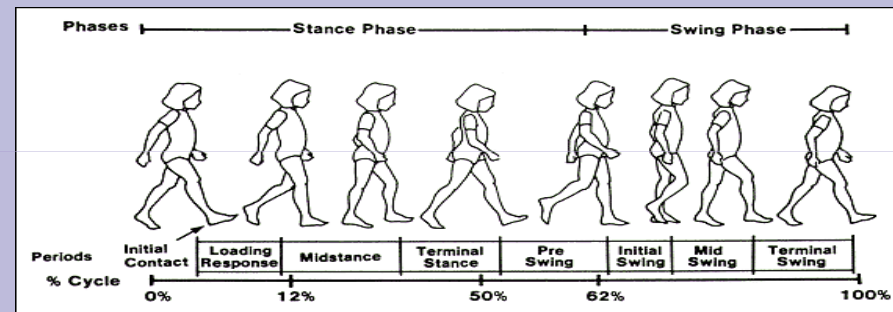
- ROM → limitations in hip extension right (-5 deg.)
- Spasticity → m. gastrocnemius medialis/lateralis
- Strength → m. soleus MRC 3  
mm. glutei MRC 3
- Selectivity → good selectivity



# Analysis of gait

- Initial contact

- midfoot landing
- Knee flexion → progression of flexion in loading response
- weakness of m. soleus



- Mid stance

- extension of the knee, no dorsiflexion, early heelrise
- forward leaning
- Increased homolateral trunk movements
- Weakness mm. glutei
- No limitations in selectivity

# Analysis of gait

- Terminal stance
  - retraction of the pelvis, hip flexion
  - No plantarflexion in terminal stance / preswing
  - Weakness m. gastrocnemius
  - M. psoas : -5 extention limitation
  - No limitations in selectivity





# Teamconference





# Goals

After 3 months:

- Lasse puts on and off his socks independently at home and after gymnastics at school (Grip force and bimanual coordination)
- Lasse zips and unzips his jacket  
(Grip force and bimanual coordination)
- Lasse cycles in his play environment at home  
(integration of peddling steering and increased endurance)
- Lasse walks for 30 minutes without feeling tired or stumbling
  - Increasing strength of m. soleus, mm. glutei, ROM of the hip
  - Decreasing tone of m. gastrocnemius and m. psoas
  - Improving balance (both general as well as focused on right leg)



# Therapy focus

- BTX-A combined with intensive occupational and physiotherapy
- Task specific training based on the goalsetting and task analysis.
- Home therapy program with focus on implementation of the goals in everyday life.
- Parents present during therapy sessions to explain and instruct for home program



**Thank you for the attention**  
**Workshop sessions to**  
**practice and discuss!!!**

