SENSORY SWIMMING for special needs kids



"All together" Strategic partnership 2019-2021



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SENSORY SWIMMING

- is a working method that aimes simultaneous and successive stimulation of all analysers (multisensory stimulation) but also of the muscular and bone system, in a different environment (water)
- offers the possibility of children with different types of disabilities to enjoy learning activities in a pleasant environment.

Main Goal

- Sensory and motor exploration of the surrounding world in a different environment (water) in order to form orientation, knowledge and adaptative behaviors
- Strengthening, stimulating the development of the adult-child therapeutic relationship

Target group

- preschoolers and small schoolers with different types of disabilities from CSEI Cristal Oradea:
- Cerebral palsy
- Deafblind children
- Multisensory impairments
- Blind children
- Down syndrome

Reasons to choose water as a way of performing a therapy for impaired children

•in the pool child will keep the intervenient close, which favors the creation of an emotional bond and development of communication.

- •less effort for muscles and wrists;
- relaxing tight muscles,
- movements are eased
- proprioceptive inputs from the pressure of the water
- orientation
- increases the muscular force
- focus on movement, balance and coordination









The therapeutic mechanism of this method is based on four properties of this liquid:

- Floating
- Hydrostatic pressure
 - Specific heat
 - Viscosity

ASSESSEMENT Graph of recording the stages of the children's interaction with sensory swimming program

Resist int.	Tolerates int.	Passive coop.	Answer to the int.	Leads int.	Imitate int.	Initiate Int.

CHILD — TEACHER RELATIONSHIP

- 1. The child opposes the interaction
- 2. The child will tolerate the interaction, in co-action with the intervener
- 3. The child will cooperate passively with the intervener
- 4. The child will accept the action due to the intervener
- 5. The child will respond cooperatively to the intervener's request
- 6. The child will lead the intervener after having received explanations in advance
- 7. The child will imitate the action of the intervener upon request
- 8. The child will initiate the action independently

Study case

- Numele și prenumele copilului: B. A. (sex F.)
- **Data nașterii:** 21.10.2012
- Diagnostic oftalmologic:
- **Diagnostic audiologic:** Deep bilateral neurosensory hearing loss
- Diagnostic medical:
- Staturo-weight hypotrophy
- Heart failure
- Atrial septal defect
- Pulmonary stenosis
- Tricuspidian insufficiency
- Third degree dystrophy
- Anamneza cazului / Date asupra familiei:
- Child born prematurely, at 32 weeks (GN 2000 g, Apgar score 8/9), second child of very young parents (mother 15 years old, father 17 years old in cohabitation relationship), with poor socio-economic and cultural conditions, he is abandoned in the hospital for a few days. It was taken into place by B.I and wife B.F. who then completed the adoption process

Initial evaluation of the child's interaction with the proposed program:

- + At the first session, Ana behaves naturally, accepts contact with the water, with the equipment, with the intervener (which is new), lets herself be driven through the pool, continues a simple action started by the intervener even if she does not have very good coordination (eg: the adult moves her legs alternately, she continues).
- Ana does not imitate the movements performed by the intervener, she cries when she sees that the father is leaving (until at one point being present on the edge of the pool), she needs an adult to be permanently near her (she does not feel safe in the pool).

Relationship / communication / personality development

- strengthening, stimulating the development of the adult-child therapeutic relationship
- developing self-confidence
- developing trust in the other
- creation of a basic context of knowledge of the child by the adult and vice versa
- experiencing a communication in a situation of basal stimulation (somatic-vestibular-emotional)
- offering positive emotional experiences / experiences shared in a new, unusual environment

Gross motor goals

- increased muscle tone in children with muscle hypotonia
- decreased muscle spasticity in hypertonic children
- performing an active movement with resistance due to the mechanical factor
- increasing the amplitude of the movement
- improvement of postural tone
- improving circulation
- learning elemetary swimming movements

Increased muscle tone in children with muscle hypotonia









Decreased muscle spasticity in hypertonic children







Improvement of postural tone



Learning elemetary swimming movements







Other objectives

- relaxation
- experiencing different sensory sensations
- acquiring new experiences in an unfamiliar environment
- experiencing the movement of the whole body in an environment with low gravitational force
- new space exploration
- developing self-confidence and trust in other (itervenient/therapist)

experiencing different sensory

sensations





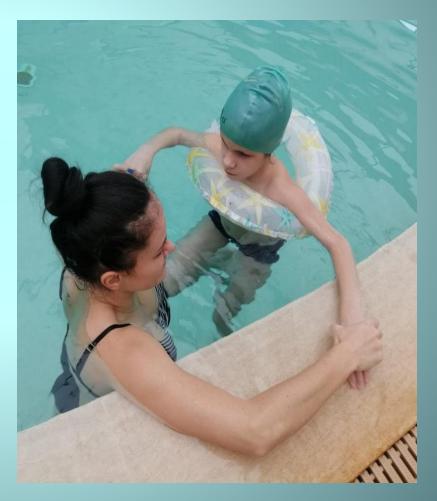






new space exploration,





Developing self-confidence and trust in other (itervenient/therapist)





relaxation





How we do it?

- Preparation
- Shower
- Entering the pool
- Steps of practicing swimming
- After swimming (it is a time when the child is usually relaxed and more cooperative, which is why it is a good time for the activities described in the moment of "preparation": daily life skills, cognitive stimulation, sensory stimulation, etc.)

What have we learned until now?

- Video 1
- Video 2
- Video 3
- Video 4
- Video 5

THANK YOU!

• And in the end is all about...



BIBLIOGRAPHY

- Dura, A., Szabolcs, H., Todea, S., Vesa, R. (2017), Sensory swimming program C.Ṣ.E.I. Cristal Oradea
- McInnes, J.M. and Treffry, J.A. (1982) Copilul cu surdocecitate – ghid de dezvoltare, London, University of Toronto Press
- https://www.hydroworx.com/researcheducation/additional-resources/aquatic-therapy-guide
- https://sensoryswim.com/swimming-benefits-specialneeds
- http://helpsaramaria.ro/hidroterapie-beneficii/
- http://www.wonderbaby.org/articles/aquatherapy