Stimulation programs as a part of the intervention approaches in the early care for children with visual impairments

(scientific paper)

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Abstract: *THIS article presents an options and a usage of early intervention approaches to children with visual impairment through stimulation programs. It particularly deals with the possibility of intervention by the Oregon project, the INSITE program, the Hätscher-Rosenbauer program of visual support, the program of basal stimulation. The contribution emphasizes the importance of intervention activities in the natural environment of child. It presents the research findings of the verification program through intensive stimulation based on the basal stimulation of children with visual impairment.*

Keywords: *stimulation activities, intervention, visual impairment, Oregon project, INSITE model.*

This contribution presents partial results of the project KEGA no. 118UK-4/2011 Education of disabled and disadvantaged children of age 0–6 – element of the new system of special education. The study focuses on presentation of the results of research carried out within the KEGA no. 118UK-4/2011 project.

1 Introduction

Integral part of Early Intervention process is stimulation of development of children of age 0–3, including stimulation of visual function. According to Vítková (in Opatřilová, Nováková et all., 2012) if you miss the first three years of life, and you did not provide necessary support in child's development, it is difficult and often impossible to remedy this situation later. These chances, consisting of alleviating and eliminating the beginning disability, and affect on developing children's brains. Speck (1987, s. 350) based on the knowledge that the brain of a young child is able

of regeneration and compensation for damage incurred in a much greater extent and that this development is heavily dependent on the timeliness of interventions, stimulation and educative activities.

Nowadays we have a lot of options to stimulate the development of children in early childhood. For example many developmental, respectively stimulating programs proven by research activities are fully used in special education processes.

Several developmental, pacing, or diagnostic and incentive programs are elaborated and used in special educational theory, but mainly in practice. In this contribution we mention the most frequent programs and the ones, which are in the sense of holistic approach applicable at work with visually impaired or multiple disable child.

The programs used by children with visual impairments can be classified in terms of their applicability to developmental and stimulation programs.

Among the most frequent **developmental programs** for visually impaired are INSITE model, Oregon project, Conversations with parents of blind children by Josef Smýkal, Education of child in the family by Jaroslav Koch, Exercises for early childhood by Strassmeierová, Grow child by Eva Kiedroňová, Overview of child development by Allen-Marotz, Developmental range by Reynell-Zinkin, The range of social maturity for blind children pre-school age by Maxfield-Bucholz, I.C.A.N. – Functional test for deaf blind, PAVII project, Reach out and Teach and other.

The **stimulation programs** are for example: Visual program development by Natalie Barraga, Look at me, Visual perception by Frostig, Visual exercises by Hätscher-Rosenbauer, Kijkdoos and other.

2 Visual and stimulation programs

- **Conversations with parents on the education of blind children in the family (Josef Smýkal)**
  Smýkal wrote an excellent book, which emphasizes the importance of family for raising children with visual impairments. The book contains a lot of information and ideas, how blind child explore the world, importance of move, development orientation in space, the role of the senses in personal development, the development of active search, the importance of toys and games, language development, shaping the child's personality. Smýkal focused on space (creating ideas of his own body), highlights the role of the senses in personal development as well as other sites of education (social education, music, art, etc.).

- **Education of child in the family (Jaroslav Koch)**
  The book written by Jaroslav Koch describes the development of intact children. However, this work can be used for feedback to promote a child development with

visual or multiple disabilities. It discusses not only on the influence of heredity, but also the developmental capabilities of the child early age, meaning the experience gained in the process of early learning and child status (as important conditions for success of education). The book also offers suggestions, how to induce a child in response to any stimulus. It also includes the ideas for the development of motor skills as one of the components of the gross motor development of the child. Koch emphasizes the importance of the senses and their support in the first few months the child's life (and of course later, too). We consider that the book can serve as an excellent thematic material for many of activities not only for intact children, but also for children with visual impairments. The visually and multiply handicapped children have the same sequence of development, but the timing of the onset of a period of learning and different competencies may differ from the norm.

- **Oregon project for children with visual impairment at preschool age**
  Oregon project was originally designed for children at preschool age with visual impairments, without other associated disability. Some parts of the program can be used also to children with multiple disabilities. Oregon project is built on the premise that children with visual impairments can learn, grow and develop like intact children (children without visual impairment). It also assumes that the developmental process may take longer. If the child is blind, it may require changes and modifications in educational environments. Although many procedures that are successful with regular children, may also be appropriate for visually impaired children. The program is designed to investigate the current developmental level of the child and provides a framework "curriculum" for professionals who work with children. Manual is processed by child development in different areas and can serve as a basis for drawing individual educational program. For the effectiveness of the program is essential to work together with parents and other specialists who care for a child. Oregon project includes 640 exercises in eight areas, which are interconnected. Each area is divided into developmental periods, to the approximate age categories – birth, 1.–2. year, 2.–3. year, 2.–3. year, 3.–4. year, 4.–5. year, 5.–6. year. Program includes all the skills necessary to 6 years. It is not expected that all skills are equally important, but each is so important, that we have to pay attention to all of them. The basic areas of program Oregon are THINKING (COGNITIVE FIELD), SPEECH, SOCIALIZATION, VISION, COMPENSATION SKILLS, SELF-SERVICE, MOTOR SKILLS.

- **INSITE model**
  Model of home intervention for children with multiple handicap and sensory impairments in age of infants, toddlers and preschoolers

The program contains information for counselors. INSITE model includes communication program, auditory program, visual program, cognitive program, development program and motor developmental program, such as motor skills, self-service skills and social-emotional development.
Multiple disabilities are one of the least explored and the most traumatic disability. Individuals with multiple disabilities have problems in several areas. In practice, in our opinion they miss a holistic approach to clients and transdisciplinary collaboration of experts. Subsequently, pressure on the family is very intense and stressful. Parents need time to adapt after the birth of a disabled child. Therefore, parents need guidance and support, which is the aim of the INSITE program.

The model meets these requirements by Makovičová (1998):
1. *The need of early intervention at home.*
2. *The need for intervention focused on family*
3. *The need of services that cover all aspects of child development – model includes diagnostics and home programs*
4. *The needs of the child transition from home program to school program*
5. *Economically effective early intervention.*

The main components of the model consist of three basic parts:
- **administration** (identification, diagnostic of child, diagnostic of family, leading of program – design a service model, training of personnel, cooperation between different organizations, transition from home services to services in educational facility);
- **direct services** (arrange regular assessment status and needs of the child and family, collaboration with other professionals and parents as a team to achieve goals; facilitation of ongoing support to the family;
- **support services** – audiological, ophthalmological, therapeutic, psychological, developmental, speech therapy services and so forth.

❖ **PAVII Project – Parents and young visually impaired child**
The program is elaborated for the age group of children from birth to 3 years. The basic requirements are:
1. Parent's ability to observe and interpret the child's behavior.
2. The child learns about a material and social environment through interaction with adults.
3. The primary factor acting on a child less than 3 years old is a parent.
4. Initial experience with the world based on "teaching loops" and "supporting strategies".

5. For early care advisory is in all respects the most suitable home environment of the child.
6. Cognitive, communication and social gaps in child development are associated with visual impairment in infancy and may have adverse consequences for subsequent development.

The basic material reflects two **basic goals**:

a) supporting and anchoring the role of parents as the primary providers of early care
b) developing techniques, suitable for the environment and in chronological order by age appropriateness.

1. *Parental assessment of needs infants and toddlers* is a set of tests, which helps parents identify goals and priorities (move, interaction with objects and people, daily routine, family life, in the wider community, communication). There are questions about activities that parents prefer. How to understand disability of the child. The way distinguishes and identifies priorities of early childhood care.
2. *Normal family life* – video and their structure. The point is that parents observe themselves and child with normal daily activities. Curriculum consists of written instructions to record and review records, questionnaire and objective scoring scale.
3. *Input information on functional tests* (Initial test of functional vision, Initial test of functional hearing, Communication test, Test of interaction with objects, Test of development)
4. *Visits of families* (a guide for counselors, exercises and practical suggestions, solutions of problems).
5. *Preparing for pre-primary education* – for visually impaired preschoolers, their parents and the professionals. Instructions in selecting the most appropriate educational program.
6. *We are learning together* – Instructions to social coexistence.

❖ **Program of visual stimulation by Matthias Zeschitz and Marianna Strothmann**
The program consists of a series of 159 slides, of which 104 are black and white and the rest are colored. The program has some images of different subjects, which may – or may not – be familiar to children, scheme of human faces, hands, eyes and mouth and finally "hidden objects".
It contains much more simple designs as well as their combination and continued to progressively more complex objects. Most black-and-white slides are available in the form of positive and negative, and should be showed as a couple. The cur-

rent range of series allows systematic variation, as well as updates to offer incentives for improving children's ability of perceptions.

Simple slides – provides some easily organizing information to vision context. Even relatively simple visual information, such as banding – dark stripe – light stripe, brain must recognize as an organized pattern. Formal properties are mediated by different neural areas of the optic center.

Comprehensive slides – are the broader patterns of information for visual cortex, for example differently wide stripes of different colors in different directions, without a recognizable "good form" or pattern, therefore irregular. This activates a large number of neutral areas. When the brain is not able to absorb the number of information, that leads to the rejection of information, a child's lost of interest.

Color slides – in previous series there were few color images, color images have too little contrast resolution of brightness. Color perception is much more than just an analysis of wavelengths. A child with a high degree of visual impairment may be fascinated by color. Therefore, color plays an important role in the stimulation. For most of the slides are the colors chosen so, that the light between the two bordering color has different tones.

"Good Pictures" – series includes a number of images that are regular and symmetric. They have varying degrees of difficulty.

Special motives – These images are focusing on active attention. Incompletely shown images provoke the curiosity of a child.

The program was redesigned to our conditions in Slovakia (2009) by Lopúchová and Poláková. All principles of this program, including shapes, colors and contrast are maintained, but slides due to the fact that they need outdated technical support, were transformed to present possibilities of ICT. All slides were transmitted into computer using Power Point and then projector, to keep showing patterns on the wall.

- **Development of visual perception for children 3–5 years (How mole Barbora saw the world, 1. part)**
- **Development of visual perception for children 4–6 years (How mole Barbora found its way to home, 2. part)**

Jiřina Bednářová, creator of program (2005) offers activities which are aimed at developing visual perception. Exercises focused on visual differentiation, differentiation of figure and background, exploring color, visual analysis and synthesis, surface spatial perception, visual memory, coordination eye-hand or eye-foot or eye-body, concentration and attention.

❖ **Hätscher-Rosenbauer visual exercises**

One of the other, and I would argue that the innovative possibilities of developing visual perception is an exercise to color tables. Color tables compiled by Wolfgang Hätscher-Rosenbauer in the early 90s of last century (1983–1984). He combined therapy system by Theo Gimbel, which used mainly light irradiation with the system by Rudolf Steiner so-called eye-strengthening-chart. By looking at the color-sensitive image, placed on a contrasting background, it prompts the eye to create the follow-contrast images, the so-called afterimages (Rosenbauer, 1999). Rosenbauer used apperception to support visual of eyes. Apperception includes visual impressions of light and dark contrasts, colors, forms, movements and figures in the field of view. Process of apperception creates an order in visible world by immediately matching what we see with all experiences already gained through our senses and it also integrates it into existing, created by ourselves and more or less firm image of world. Perception is a function and apperception is the process.

Table 1: The effects of chromatic (color) tables to improve vision. From Rosenbauer, 1999.

	Perception	**Apperception**
Visual acuity	Pointing recording in centre of perception, selection of points and signs	Attention concentrated on one point
Peripheral vision The entire scope of eye view	Long bounded sight on whole visual field, long focus, recording everything	Open view in all directions, released integrating attention
Perception of color	Perception of signal effect or meaning of colors, we can see colors separately and in bright shades	The perception of the colors, subtle differences, the perception of alternating colors
Perception of shapes	Perception of separate details and given schematic points	Details to be considered in relation to the whole, shapes and groupings we imagine associative and intuitive
Spatial vision	Perception of objects on their space dimension in isolation from itself	Relation between man and object that is perceived
The ability to create plastic ideas	Perception supports this ability very little and it is almost absent	This ability is very active in apperception
Other senses	Perception inspires just slightly, does not have any impact on them or have some impact unintentionally	Strongly interested in, all percept are present on sight
Thinking	Nonobjective	Objective
Feeling	Less attendance	Full attendance
Attitude	Prejudice because of memories, ideology and self-evaluation	Open to unknown, without prejudice

The special importance of color therapy tables is by Rosenbauer (1999) to stimulate energy processes that are involved in vision using complementary colors, shapes and contrasting background. Intensive observation of a colored object on a contrasting background encourages the creation of afterimages on the retina (we call them contrasting images or colors). Training strengthens each part of the eye, which taking part in the adoption and transformation light power of vision and ability to further its transmission and storage. This increases the ability of visual cells to produce and to maintain visual pigment. It increases the intensity of vision.

Colours

In chromatotherapic (colour) charts there are stated polychromatic colours that consist of pigments of brighter and darker shades of wider wave range. Unintentional so-called saccadic activity happens in relaxed watching. This activity is concerned of very rapid micro-motion which eye uses to observe an object of interest and can also perceive slight shades of colour. Various visual cells perceive them and this shifting urges them constant activity.

Shapes

As well shapes as colours incite eye in visual perception to observe contrast outlines, contours and to copy them by slight motions that we are not usually aware of. Cells in retina, where the reflection shapes, are activated and create visual pigment that is transformed into a visual energy and relay the message of shapes into brain. In retina some visual cells are special arranged and connected just to recognize shapes. They are stimulated only if in retina certain forms reflect or if these forms can be found on exact position or motion.

There are content (tank) and diverging (stellar) shapes in colour tables. Tank shape lead the sight from centre of figure to outlines and then back to the centre. This form incites the sight to centre, to unify ad to find the centre. The stellar form instigate the sight from centre to toe.

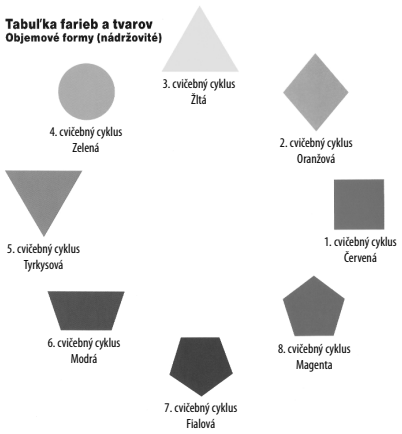
Background

In tables (or any bright background) white background induces the visual cells on the periphery of retina to transform accumulated pigment into visual energy. Black background incites peripheral visual cells to stop their activity. Grey background creates a balance between regenerating and transforming cells.

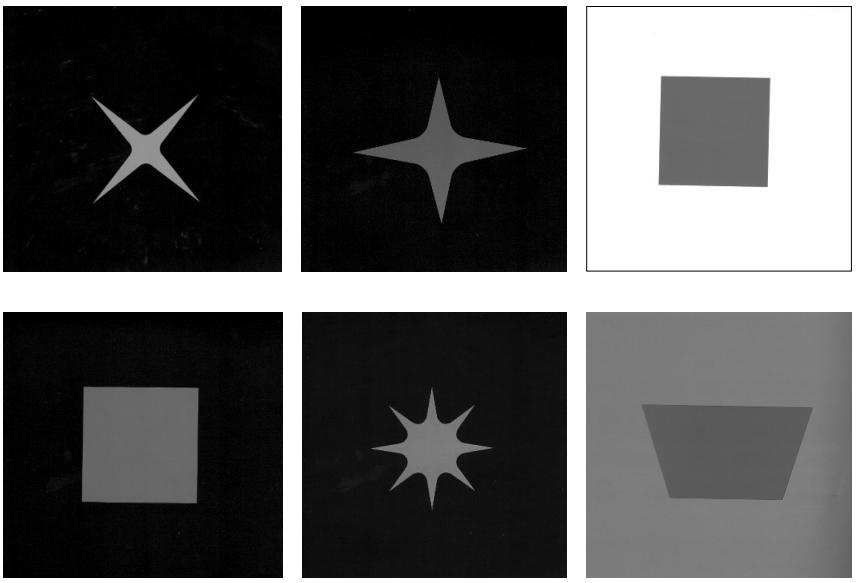
Principle of polarity

Cycle of exercises with colour tables is based on principle of polarity that is basic principle of human visual activity. Only in changing motion, between light and

dark (first polarity) the visual pigment is formed without which we would not be able to see.
Whole program of exercises on colour tables takes approximately 20–30 minutes. It covers 8 basic colours and 8 basic shapes (so-called tank-like) and other derived shapes and colours (see pictures).



Picture 1: Colours and shapes.
Source: Rosenbauer, 1999.



Picture 2: Sample of some chromatotherapic (colour) charts. Source: Rosenbauer, 1999.

❖ **Look at me**

Look at me: a resource manual for the development of residual vision in multiply impaired children. Authors: A. J. Smith & K. S. Cote. (1982). Pennsylvania College of Press ophtometric. Philadelphia. 157p.

This handbook focuses on mediating of basic information as well as on evaluation and on didactic methods indispensable for pedagogues who want to contribute to achieve optimal level of visual skills in multiply impaired children. This handbook includes these basic domains:

- special reasons
- basic eye anatomy
- basic optic principles of eye functioning
- frequent eye malfunctions and eye diseases
- sensory integration
- evaluation of functional sight
- sequence of visual stimulation
- other activities

In Slovakia there is a translation with completed chapters: Functional sight and sight stimulation (part I) and Functional sight and sight stimulation (part II).

❖ **Proposal for work with multiple impaired children**

This material is solid compilation of proposals and ideas that can help in work with individuals with sight and multiple disabilities. We can find a lot of advice how to work with sight and multiply impaired children as well as special or educational recommendation.

Translation by Makovičová (1997) contents also other chapters:

- self-serving
- orientation and mobility
- Braille system
- sensory-motor integration
- management behaviour
- work with multiply impaired children
- pre-work preparation

This work is frequently used not only in centres of special pedagogic consultancy but also in fieldwork.

❖ **Reach Out and Teach**

This material focuses on saturation the educational need of parents of sight and small multiply impaired children. The handbook is written for parents on the basis of their needs and wishes. Program contents 4 parts:

1. GUIDE FOR PARENTS – contents information about timely development of child with activities and proposals that can support child's development in its domestic environment.
2. WORKBOOK – or Book of success with sections where the growth and development of child can be written.
3. SERIES OF SLIDES – for brief introduction of handbook to parents
4. MANUAL FOR TEACHERS – to help teachers to adapt this material into their own practice.

Guide for parents and workbook can be used by parents, but also specialists independently but also with help of consultant. These two parts are closely interconnected. Parent reads about certain section in the Guide and then he can practically apply it in Workbook. After finishing a section, read knowledge can be used in practice with actual child.

Chapters refer mainly to reading of child signals, to copying with child disability, to creating of child personality, interaction in family, development of motor activity, fine motor activity (grasp, touch, release, wrist rotation, insert something in mouth, chose of toys, writing and drawing), to everyday life and communication (educational methodology, communication's practice, falling behind in speech development…), to sensory development, to cognitive development, to sensory integration etc.

❖ **Overview of child development from prenatal period to 8 year**

Translation of book By the Ages by Allen-Marotz came out under Portál publisher in 2002. This book is an excellent help and source of ideas not only for specialists, but also for parents of children with disabilities. It contents a survey of the most important knowledge about child development and possible relevant information of child development from prenatal period to 8year of child's life. At first authors proceed in three-month-cycles and then in year-cycles. In each period they describe corporal, motor, cognitive and social development and also what we can expect the child to do in particular period of life. Authors present some advice e. g. how can be child's skills developed in particular period. Last part of the book is dedicated to children with special education needs.

This work contents information about many skills that the child should reach in particular life's phase. It can be an inexhaustible source of possibilities and ideas

for stimulating and developing activities with a child for parents and also for consultant.

- **260 exercises for early childhood by Walter Strassmeier**
  This work is set of suggestions and activities designated to support active development of child in age from birth to 5. Through games it allows determining level of development of child in various fields such as gross and fine motor skills, perception, speech, thinking, social development etc. Exercises stated in this book above all help to stimulate and develop child complexly. Practical part of book contents suggestions and methodological advice for whole scale of activities that can be implemented not only in work with children without but also with disabilities. Exercises contents aim, methodological instruction and annotation on other follow-up exercises.

- **Reynell-Zinkin developmental scales for children with sight disability**
  The authors offer a space for specialists to create their own optimal helping plan to support the development of child with sight disability. The range describes evaluating separately for sightless children and separately for children partially sighted.
  The range consists of two parts, the first of which focuses on *mental development* (social adaptation, sensory-motor learning, exploring the area, responding to sound and understanding speech, vocalization and expressive language, and communication) and the second describes *motor development*.

- **Frostig's test of visual perception**
  Test, or from another perspective, the thematic program by Marianne Frostig, focuses on visual perception. The test contains five subtests concentrating on visual-motor coordination, on the distinction between figure and background, on invariability of shape, the distinction of position in space and on spatial relations (Kastelová, 2012).
  In this test, as well as in others, but mainly in Oregon program, or at a scale Reynell-Zinkin we assume that an experienced special educator can use these scales not only to diagnose a child and diagnosis of his visual skills, but also it can be changed into form when particular topics will serve as a guide on how to work with the child. In this way this tool can be understood as a rich source of ideas for activities with the child with focus on the complex development of a child.

- **Basal stimulation (A. Fröhlich)**
  The basic concept of basal stimulation model is based on the knowledge that it is not possible to capture a meaningful distinction between body and soul. We can

only touch the whole person with available methods and approaches. But intentional distinction between physical and mental action is inadmissible, because the human being is inseparable (Frohlich, A, 1990).
Each person perceives by means of the senses, of the sense organs that arise and develop already in the embryonic stage and they have irreplaceable importance from birth to death. Through the senses he perceives himself and the world around him. Thanks to the ability to perceive, we have learned to move and communicate.
Movement, perception and communication influence each other. Perception allows movement and in contrast communication is possible thanks to movement and perception. The concept of basal stimulation promotes perception, locomotion and communication (Friedlová, 2003).
The basic elements of the concept of basal stimulation are movement, communication and perception and their close interconnection. The concept of basal stimulation allows people to store their life habits in memory pathways with changes in these three areas of support, and so pointed stimulation of the sense organs, using the capabilities of the human brain. The aim of stimulating of the stored memories is to reactivate the brain activity and thus promote the perception, communication and momentum of individuals (Friedlová, 2007).
The basic principle of basal stimulation is finding that using a body we can actually put individual into sharing experiences and perceptions, while taking into consideration the individual child development, not development corresponding to their calendar age. Basal stimulation system assumes that each person is programmed on his own development, which can be properly support in its differentiation (Vítková, 2001).
Basal stimulation stands on *four theoretical bases* (Stupková, 2006):

1. neurophysiological model of development
2. genetics and developmental psychology
3. knowledge from physiotherapy (bases on concept by spouses Bobath
4. knowledge from psychology (theories by A. Adler, theory of early form of self-regulation)

Concept of basal stimulation techniques to support of client's perception are divided on basic and super structural stimulations.
Basic stimulations comprise of (Friedlová, 2003):

- Somatic
- Vestibular
- Vibratory

Super structural stimulation consists of:

- Optical
- Auditive
- Tactile
- Olfaktoric
- Diametric stimulation

In member countries of EU basic stimulation is a very popular concept and it is an interventionist method in special education and nursing. Basic stimulation stands on holistic approach to human being and impossibility to separate body from soul.

3 Research

In our research project, which we implemented with Kapičáková (2012) we focused on proposal and application of concept of basal stimulation on individuals with multiple disability. We proposed and applied short-term program of basal stimulation on four recipients. We were implementing basal stimulation in duration of 10 days. We met every day in the morning or afternoon. Adapted to the percipients' daily regime, we met in time, when percipients were after meal, relaxed and had met biological needs. Meetings focused on basal stimulation were realized in therapeutic room, in the white and dark snoezelen room. Planning short-term program and choice of technique were based on anamneses dialogues with specialists, study of client's documentation and biographical anamneses. First meeting we focused on establishing of communication, mutual contact, inducing trust, confidence and sense of security.

The main aim of short-term program of basal stimulation was to stimulate the perception, perception of one's body, its borders, the same as stimulation of sensory perception through somatic, vibration, vestibular, optical, auditive, tactile and olfactory stimulation. Because percipients were individuals with multiple disability and were immobile, basal stimulation was for them very suitable method. During realization of basal stimulation we proceed by ten principles of basal stimulation.

Our planning of short-term intensive program of basal stimulation for every one individual we built on holistic view on them, on dialog with persons and through autobiographic questionnaire. We focused on information about health, particular characteristics resulting from disability, but mainly on information about their interests, hobbies, feelings, about features of their personalities. We tried to find out what is stressful for them, what they do not like, we were interested in their sociability and daily routine. During planning process of basal stimulation and planning other intervention programs is according to our opinion very important and necessary the perfect knowledge of individual and approaching to him/her to a bio-psycho-social being.

During the meetings designed and realized by us, we tried to respect individual development of psychic processes and specification of individual and according to this to create comprehensive and clear impulses for every individual and thus to gain their trust, certainty and friendship. Since we were strange people for individuals with multiple disabilities, we tried to provide them known impulses, we tried to connect it with pleasurable experiences and feelings and through this cut off uncertainty and distrust. With the aim to support perception, communication, movement and new experiences, we implemented to our meetings step by step new unknown elements. According to our opinion basal stimulation is a method which creates friendships; it is a method about feelings, experiences and gentle approach.

Techniques of basal stimulation are mostly realized during early age in children with severe disturbance of development, but also in individuals with multiple disabilities in every period of life. This concept is based on child's experiences from intrauterine development (Horňaková, 1999). During our research project we found and confirmed that vibration, vestibular and somatic stimulus activated memories and previous experiences in individuals with multiple disability. For example, percipient K., during vestibular stimulus pronounced word "mama, mamí", words were echolalic, but were emotionally tinged. We believe, that it reminded her situations when her mother swing her in arms. This percipient was on week stay. Second percipient B. was from early age in children's home and did not feel parental love, she was in arms as in limited space and her body was in limited space too and through this was supported increasing of her perception. She perceived vibrations during talking, scent, what is olfactory stimulations and swaying provided her vestibular stimuli. On every of these stimuli she reacted very active and through her own positive reactions.

During our research we noticed that within jointly swaying they turned head from one side to another side in direction of swaying, when we stopped, they stopped too with turning head. According to Friedlová (2003, s. 21), position nest "allows individuals to rest and creates a pleasant feelings within the meaning 'I feel good', and while offering them a sense of security and improving the body's own borders." This position is based on the experiences that we felt when we developed in the womb of our mother and helps us more intensive perceive the different parts of our body. This statement confirmed and we agree with it because our experience with percipient tells us, this position on one hand calm her and on the other hand helps her to support perception. When percipient L. was upset, we layed her in position "nest", she started to perceive more intense and can better express her positive reaction. This position was also liked by percipient B.

Skin touches and body touches act emotionally, encouraging and stabilizing. They can be seen as a form of systematically and regularly recurring tenderness, which indicates the closeness and attention.

It is the most intense form of communication (Vítková, 2001). Communication by basal stimulation is somatic dialogue, which overcomes communication barriers and creates an atmosphere boyfriend love confidence. By the concept of basal stimulation Andreas Fröhlich (2009) states that the most basic means of communication is through touch and just feel we can enter into association with other people and introduce them to our presence. With this statement we agree because we succeeded in our research through touch to enter the world of selected individuals and to build a relationship with them full of confidence and safety. Already in the middle of a meeting they managed to know our voice when we walked around they smiled on us, rotated to see us and sought to establish communication.

In our short-term intensive program of basal stimulation can be observed in percipient L. as through somatic dialogue changed her attitude towards staff with which she often did not come into contact and allowed them to touch her – caressing her, hug her … For example, the percipient K. after meeting basal stimulation with patience while she is waiting to eat and made no outcry. Horňáková (2004) states that when an individual initiative to arrange an appropriate manner gives it to him in motor response.

With this statement we identify as we had the opportunity to observe the percipients in our survey sample, that through incentives, which we encourage them to perception, those induced motor responses. For example percipient B., who used at least lower limbs relegated them pointing the snake, which was around the legs, or when we stimulate the body in the soothing somatic stimulation, lift the legs turning around for the flashing lights mirror balls. We share the view Friedlová (2009) that one of the many effects of basal stimulation is also soothe, relax and unwind.

These reactions can be also observed on the individuals with multiple disabilities, with whom we worked. At the beginning of the meeting were spasmodic and colicky or restless and finally managed to get released limb spasms, induce relaxation and calm.

Percipient D., who had Rett Syndrome, manage to express her satisfaction, with satisfied gaze and reducing scratching and eating fingers and a quick smile.

Basal stimulation provides various breathing techniques that help particular individual with multiple disabilities perceive their body, and breathing is a good technique to make contact. Even in our meetings we used to start the meeting contact by breathing, either through the laying his hands on the chest of an individual, or an individual leaning back on our chest massage or stimulating respiration. In our opinion, these techniques have great communicative value. During intervention meetings planned and arranged by us we were able to convince the basal stimulation helps to break down the fear of the unknown space and darkness. We could see it on the percipient L., who does not like dark room snoezelen, because in it he feels dissatisfied. But before we introduce him there, we encourage him in a dry basis, we

have given him there somatic stimulation and then we moved him into a dark room, we gradually and turn on and off lighting effects. In a dark room, we realized jointly contact breathing, not to worry, feel confident and safe. Based on the experience and information we come to conclusion that basal stimulation is a very suitable method for individuals with multiple disabilities, because they develop in all areas, is challenging, respecting their individuality and is based on scientific knowledge of the human body functioning and psychological condition.

Evaluation of research activities

On meetings by means of techniques of basal stimulation we managed to raise contact, communication with the percipients, to promote the perception of its own body position in space and sensory perception. By getting the percipient conducted basic stimulation every day, it was possible to notice their changes quickly. Percipient got used to it that we devoted to them every day. We received feedback from specialists, the percipient are calmer, cheerful, not nervous and managed to eliminate mood swings.

In general, selected individuals with visual and multiple disabilities responded positively to basal stimulation techniques. Vestibular stimulation all experienced the most intense. This stimulation was conducted with all selected individuals except percipient D., as it was very difficult for her and she did not cooperate in moving and in motion, she was hypotonic and lethargic, which is one of the manifestations of her disability.

Concept of basal stimulation techniques require continuous training and proper implementation to achieve the therapeutic goal. In individuals with severe multiple disabilities activities are extremely reduced, and often limited to the most elementary vital actions. Using of basic stimuli it is possible at least partially to expand horizons of perception of one's body and the outside world. The concept of basal stimulation is based on perception and allows interaction between individuals and the environment. It ensures pleasant body feelings and mediates experiences of the body. It is the most important area for learning for individuals with severe disability that can be provided only on the basis of positive perception of emotional relationship, containing basic interaction and communication support and implementing through the activities of the day.

The conclusion of this discussion, we completed with approach by Housarová et al. in Hájková (2009) on the basal stimulation According to their opinion using of techniques and procedures of basal stimulation leads to experiencing of pleasant feelings and success, to basic social communication, creating of foundation on which further phases of special pedagogical action.

4 Literature

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(reviewed twice)

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