THE IMPORTANCE OF PHYSICAL ACTIVITY IN SPECIAL EDUCATION

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Abstract

Intellectual disability is defined by an IQ score under 70 in addition to deficits in two or more adaptive behaviors that affect everyday, general living. Psychomotor deficiency is a particularly associated with intellectual disability. The importance of physical therapy is obviously in order to recover and educate physical deviations and psychomotor capacity.

Keywords: intellectual disability, physical therapy, psychomotor.

JEL classification: 120, 123

1. General Framework

Lately we are seeing a change in the characteristic of special education school population. If previous generations of pupils in special schools had mild mental disability or border intellect, often being social cases or children with behavioral disorders, the new school population is characterized by a more severe mental retardation and psychomotor disorders. So it is necessary to implement programs for optimize the capacity of psychomotor.

Definition: intellectual disability (ID), also called intellectual developmental disability (IDD), general learning disability, or mental retardation (MR), is a generalized neurodevelopmental disorder characterized by significantly impaired intellectual and adaptive functioning. It is defined by an IQ score under 70 in addition to deficits in two or more adaptive behaviors that affect everyday, general living. Once focused almost entirely on cognition, the definition now includes both a component relating to mental functioning and one relating to individuals' functional skills in their environments. As a result of this focus on the person's abilities in practice, a person with an unusually low IQ may not be considered intellectually disabled. Intellectual disability is subdivided into syndromic intellectual disability, in which intellectual deficits associated with other medical and behavioral signs and symptoms are present, and non-syndromic intellectual disability, in which intellectual deficits appear without other abnormalities. Down syndrome and fragile X syndrome are examples of syndromic intellectual disabilities.

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Intellectual disability affects about 2–3% of the general population. 75–90% of the affected people have mild intellectual disability. Non-syndromic or idiopathic cases account for 30–50% of cases. About a quarter of cases are caused by a genetic disorder.”3

Classification of intellectual disability:

Encoding WHO (World Health Organization):

- IQ = 50-70 - mild mental delay, mental debility (about 85% of the population segment who has mental disabilities);
- IQ = 35-49 – moderate mental delay, mental debility (about 10% of the population segment who has mental disabilities);
- IQ = 20-34 – severe mental delay (approximately 3-4% of all mentally impaired);
- IQ below 20 - profound mental delay (about 1-2% of people with mental disabilities);
- unspecified mentally retarded level – is encountered in situations where there are indications of the mental delay presence, but the intelligence of the person can’t be assessed by standard samples (such as subjects strongly deconstructed, uncooperative, autistic or children whose little ages make difficult to assess their intelligence).

2. Physical and psychomotric deficiencies and intellectual disability

In all the researches which are based on measuring psychomotor performance were concluded that psychomotor deficiency is a particularly associated with intellectual disability, although it does not occur exclusively in this type of deficiency.

In researching the psychomotor performance of mentally disabled child start from comparing this performance to that of the normal child, "Psychomotor development of the normal child constituting the standard of comparison for handicapped"4. Being achieved this comparison, it is observed that people with mental retardation it occurs, frequently, psychomotor immaturity, insufficient perceptual motor level development, the qualitative difference in the function of cortical analysis of sensory stimuli.

General motor development and organization are weak at most mentally deficient, because a good part of them are hyperkinetic, and around two thirds of severe and profound mentally deficient manifest stereotyped movements.

Motor deficit, frequently associated with intellectual disability has a negative influence on the mental organization, creating difficulties in coordinating

3 Wikipedia, the free encyclopedia
4 http://bochislaura.blogspot.ro/2012/10/psihopedagogia-deficientului-de-intelect.html
movements. Coordination is often impaired due to reduced cognitive possibilities that affect precision, flexibility and speed of movements.

Even without the serious movement disorders, it is found at intellectual deficient a weak development of complex movements, especially the movement of hands and inability to perform movements based on verbal indications. The main structures and perceptual-motor behaviors that include body scheme, laterality, perception of color and shape, perception of space and time are affected almost directly proportional to the depth of intellectual developmental disability. Also physical deficiencies are characteristic for students with intellectual disability which can not maintain good posture.

„In the work of recovery and reeducation of children with Intellectual disability, teacher or parent must restore early childhood stage, the stage of sensory-motor; it means acquiring psychomotoricity components, which are performed by and within the game exercise“5.

3. Physical therapy and special education

The purpose of special education is to build skills of students with intellectual disability and to deliver them to society, so they can be useful in the socio-economic process of the country.

The instructional and educational tasks proposed by the school curriculums can not be achieved without the existence of minimum psychomotor skills:

- children in special kindergartens can not develop communication skills and self-service, according to age and degree of impairment in the absence of fundamental movements of the limbs, or handling activities, or knowledge body scheme;
- „at special school in various subjects such as reading,, writing, math, environmental science, manual skills, pre-vocational activities are included in the programs of activities development of psychomotor skills 6
- for students of arts and trades schools without having made certain perceptual-motor skills (body scheme, laterality, time-space orientation), coordinative and conditional abilities can not develop abilities required to practice trades.

Psychomotor impaired students can not absorb knowledge received and can not form skills set by curricula, even if the educator, teacher or professor strive in this direction, including through a preoccupation of building psychomotor capacity.

5 Voinea, A, 2010, p. 341
6 Radu, 2000, p. 84
This action is insufficient within hours which aim is to acquire the knowledge. Therefore, it is necessary that students deficient in psychomotor domain to be included in physical activity programs that lead to optimization of psychomotor ability.

Physical therapy general objectives are:

- control muscle tone;
- improving articular mobility;
- training static and dynamic balance;
- harmonious physical development;
- development of laterality;
- coordination development;
- respiratory reeducation;
- developing fine and rough motor skills;
- body scheme development;
- correcting walking;
- correcting postural deficiencies.

The means used for therapy in mental retardation children are various, imitation and playing, as well as using different stimuli like: auditory stimuli - songs, visual stimuli - using certain colors, certain objects, tactile stimuli - touch incentive / start motion, farms or barely perceptible have an important role in learning motor. The program adapts to individual needs, depending on age, level of motor development, IQ, associated disorders.

Although the importance of physical therapy is obviously its hours allocated in special schools are insufficient. For exemplify we did a study case in Special School no. 5 from Bucharest.

<table>
<thead>
<tr>
<th>Special School No. 5</th>
<th>Number of students with mild and moderate mental delay</th>
<th>Number of students with severe and profound mental delay</th>
<th>Number of physical activity classes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>107</td>
<td>105</td>
<td>44</td>
</tr>
<tr>
<td>Number of students 0-4th grade</td>
<td>Number of students of 5th-10th grade</td>
<td>Number of students 0-4th grade</td>
<td>Number of students of 5th-10th grade</td>
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<tr>
<td>37</td>
<td>70</td>
<td>54</td>
<td>51</td>
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</tbody>
</table>
### Table: Kyphosis, Lordosis, Kypholordosis, Cscoliosis, Scoliosis, Kypho-scoliosis, Neurological diseases, Other diseases

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Kyphosis</th>
<th>Lordosis</th>
<th>Kypholordosis</th>
<th>Cscoliosis</th>
<th>Scoliosis</th>
<th>Kypho-scoliosis</th>
<th>Neurological diseases</th>
<th>Other diseases</th>
</tr>
</thead>
<tbody>
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<td>Students with mild and moderate mental delay</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
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<tr>
<td>0-4th grade</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>3</td>
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<td>5th-10th grade</td>
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<tr>
<td>Students with severe and profound mental delay</td>
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<td>25</td>
<td>5</td>
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<td></td>
</tr>
<tr>
<td>0-4th grade</td>
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<td>3</td>
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</table>

#### 4. Conclusions and proposals

- Physical therapist intervention in special schools is needed, he has to follow at different ages:

**6-7 years**
- Moving in the form of game to develop coordination and spatiality;
- Correcting posture;
- Maintaining a good muscle tone at the level of back muscles;
- Develop interest in physical exercise.

**7-11 ani**
- Learning the correct posture / the correct position in the bank;
- Encouraging sports.

**11-15 ani**
- Increased effort capacity
- Outdoor activities to develop motor skills
- Correction spine deviations
  - This type of education conducted among school allows sanogene learning behaviors and their integration into behavioral routines, leading to improve and maintain health.
Increasing the number of physical therapy classes in special education schools.

REFERENCES

5. *** Wikipedia, the free encyclopedia