Introduction: It is well known that movement is the basis of human life, and physical activity is essential for the overall development of the child. The motive experience is the basis of the child’s knowledge and behavior. Not surprisingly, the child can feel the need for active physical activity for a long time without showing any signs of fatigue [1, 118].

Learning the main movements (walking, running, crawling, jumping, throwing, climbing), according to the specific age of the child, is the condition for its general development - cognitive, emotional and volitional processes [4, 39].

Different anatomical defects (malformations), somatic disabilities and functional abnormalities leading to impairment of the physical, psychomotor and the general personality development are observed when there are motor abnormalities existing due to intrauterine lesions, birth injuries or postnatal diseases. These motor deficiencies include the impaired coordination of movements; limited ability for proper orientation in space; reduced physical endurance; reduced capacity. The disorders affect the manipulation skills, the psychomotor performance, the process of speech and cognitive development even if the intellect is retained. Basic motor skills, such as the following, are also affected: walking and running, movement of the limbs and the coordination between them; the process of implementation of basic household and work activities of daily life is disturbed. These deficiencies lead to preconditions for negative changes in the psycho-social qualities and traits of the child. The so called “inferiority complex” is thus formed [5, 230].

Regardless of the age-specific and physical health of the child, it should feel well, it should have all conditions to exhibit freely its natural movements, to show its knowledge on the morphological data related to its physical development [1, 119].

Aim is to study the efficient organization and use of the specialized rehabilitation environment in order to stimulate the individual development of children with physical disabilities

Tasks:

- Technical equipment of the specialized rehabilitation center for children with disabilities.
- Forming a multidisciplinary team providing timely rehabilitation of motor disorders from early childhood by methods and means of physical and rehabilitation medicine.
- Effective use of the specialized equipment aimed at active involvement of the maximum number of children with mobility limitations, according to their individual needs of rehabilitation.

Material and Methods: any child showing the sings of retarded psychomotor and physical development needs specialized examination and consultations with a number of specialists, and it is the subject of efforts of a rehabilitation team including the pediatric neurologist, orthopedist, endocrinologist, psychologist, special pedagogue, social worker and other specialists depending on the specificity of the disease and its needs.

The rehabilitation of children requires high professionalism, great patience, responsibility and unconditional love for the child with special needs. There are diseases in which physiotherapy and rehabilitation treatment start already from the first days after birth and continue as the child grows. The early diagnosis and well-timed treatment of the childhood diseases by the methods and means of physical therapy might be crucial for the child’s development, as well as the degree of its independence in everyday life and the subsequent professional realization.

At the same time the access of many children to specialized rehabilitation centers is highly limited. The families having such a child are forced to travel long distances every month, while some children are rehabilitated abroad due to the lack of specific devices in the country (e.g. the system for device-assisted locomotion therapy and the device for rehabilitation of pelvic floor) [8].

One way of solving this problem is providing the existing specialized centers in the university hospitals and the rehabilitation hospitals in the country with specialized devices [6, 96-104].

In recent years, the funds necessary to purchase this equipment have been provided by a charity campaign under the patronage of the President of Republic of Bulgaria – “Bulgarian Christmas”. In the period of 2012-2013 the charity campaign has provided the equipment and ensured functioning of the specialized Kinesitherapy and Ergotherapy Child’s Rehabilitation Center for children with motor deficit in the Clinic of Physical and Rehabilitation Medicine at the University Hospital - Pleven, Bulgaria.

The new equipment is intended primarily to support the rehabilitation of
children with cerebral palsy. It enables the training of children with paraparesis to walk as different versions of walkers are used. In case of lower extremity paraparesis and healthy upper limbs traditional walkers with front wheels driven by handles at the height of the trochanters are utilized (Fig. 1). The need for assistance is replaced by walking in parallel walker. If the upper limbs are affected but in lighter degree compared to the lower extremities, the child can be successfully trained to walk with a higher walker which also fixes the chest. In the case of tetraparesis when it is difficult for the child to stay in vertical position, a verticalizer should be applied (Fig. 2). Using it the child could be secured for longer, could be fed, trained and could communicate [3, 7-10]. However, if the condition is very severe then “universal system for treatment with a position” could be used. Another aid for training to walk and master stairs is the so called “pediatric ladder”, representing several stairs of different height and fixed railings for going up and down (Fig. 3). The “dry pool” is suitable for the psychomotor training (Fig. 4).

The board for the daily routines has a power supply and when a bell is used it beeps and the electric lamp illuminates. When it is plugged in, a light signal is emitted, which records the positive result of the child’s activity (Fig. 5). For training and improvement of different grips and subtle finger movements there are special tools and devices [2].

The combined efforts of the specialists in the multidisciplinary team working in the Center are aimed at: providing the opportunity for the development of each child, according to the specificity of its disease; assisting the child in developing own skills according to its individual possibilities; including the child into various rehabilitation activities corresponding to its level of development and addressed to its individual needs; choosing and applying a variety of techniques, methods and tools necessary for the implementation of the rehabilitation objectives; creating a suitable atmosphere that encourages positive social relations and active involvement.

Tab. 1.

Results of the parents’ assessment of effectiveness of the specialized environment organized at the Child’s Rehabilitation Center

<table>
<thead>
<tr>
<th>Indicator</th>
<th>“а”</th>
<th>“б”</th>
<th>“в”</th>
<th>“д”</th>
<th>“е”</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Cozy setting is arranged</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>20,69</td>
<td>79,31</td>
</tr>
<tr>
<td>2. The devices are in compliance with the age and the needs of the child</td>
<td>0</td>
<td>0</td>
<td>9,20</td>
<td>21,84</td>
<td>68,96</td>
</tr>
<tr>
<td>3. Highly qualified specialists work with the child</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>9,20</td>
<td>93,10</td>
</tr>
<tr>
<td>4. The physical loading is adequate to the child’s abilities</td>
<td>0</td>
<td>0</td>
<td>9,20</td>
<td>21,84</td>
<td>68,96</td>
</tr>
<tr>
<td>5. The exercise stimulates the child for active physical activity</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>27,59</td>
<td>72,41</td>
</tr>
<tr>
<td>6. The child feels satisfied with the achievements in the rehabilitation process</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>27,59</td>
<td>72,41</td>
</tr>
</tbody>
</table>
of the child in the rehabilitation activities; ensuring the child’s right to choose various rehabilitation activities to participate in; getting familiarized with and using different techniques of communication (verbal and nonverbal), according to the individual traits of each child; stimulating the cooperation of all participants in this process (child, specialists, parents) [7].

At the core of establishment of the specialized rehabilitation environment one can find understanding that children are more alike than they differ, regardless of their abilities, that they develop better in an environment where their needs are taken into account and met individually [7].

The overall activity of the multidisciplinary team at the Center is organized on the basis of collective application of the principles:

- respecting the dignity of the personality - by ensuring the adequate assessment of the child’s personality, respecting its importance and development opportunities, taking into account its individual traits;

- help for self-help – the child is supported in learning how to act according to its abilities, how to solve the task assigned by the specialist independently, how to be active and have positive emotional attitude to the rehabilitation activities;

- equality and non-discrimination - in the process of communication with the child during the implementation of the rehabilitation activities no discriminatory elements are permitted (in relation to gender, age and ethnic origin etc.).

**Results:** The data from the operation of the Child’s Rehabilitation Center at the University Hospital – Pleven was analyzed for 2013 compared to 2014. The number of children with disabilities, aged 0 to 7, who had attended the Center was essential for the study. A survey was carried out with the parents of children that had visited the Center in 2014 concerning their opinion of the effectiveness of the organized specialized environment.

The registry data showed that in 2013 the Clinic was visited by a total of 58 children with various motor abnormalities (cerebral palsy, obstetric paralysis, post fracture conditions, etc.). With the opening of the Child’s Rehabilitation Center in 2014, the number of rehabilitated children has increased to 92 for the whole year, which was 36.96% more compared to the previous year. This data proved that the specialized rehabilitation environment has fulfilled its purpose and was available to more children in need and their families.

The survey presenting the results of the parents’ assessment of effectiveness of the specialized Child’s Rehabilitation Center was carried out on the basis of the original five-point grading scale. The scores for each indicator were marked by index letters “a” - not; “b” - rather not; “c” - I don’t know; “d” – rather yes; “e” - yes. The results for each indicator are given as a percentage for each index letter (Table 1).

The opinion of 87 parents of children attending the rehabilitation Center at the University Hospital – Pleven was studied on voluntary application.

In the obtained results it was good to see that there were no answers for any of the indicators with values “a” - not; “b” - rather not. Also, only 9.20% of the parents cannot assess to what extent the devices in the newly organized Center were related to the age and the needs of the child and how much the physical activity was adequate to its abilities. All other results of indicators were summarized in the values “d” – rather yes and “e” - yes. The parents were definite that highly qualified professionals work with their child (93.10% for the index “e” - yes), as well as that the newly organized environment was pleasant, serene and cozy (79.31% for the index “e” - yes). Similar results were obtained for the other indicators. The parents believed that physical exercises stimulated the child to be doing active physical activity to the highest degree, and that the child felt satisfied with the achievements in the rehabilitation process (72.41% for the index “e” - yes). They assessed the physical loading as adequate to the child’s abilities and performed with devices corresponding to the age and the needs of the child (68.96% for index “e”-yes).

The high values of the parents’ assessments from the applied rating scale revealed that the newly organized specialized rehabilitation environment stimulated the locomotive activity of children with physical disabilities.

In conclusion it could be stated that the specialized equipment at the Child’s Rehabilitation Center provided opportunities for early rehabilitation of children with motive disorders from early childhood, implemented by the methods and means of physical and rehabilitation medicine. The newly organized rehabilitation environment at the Center allowed the specialized equipment to be used by a significantly larger number of children with motive deficits that were involved in the rehabilitation process with desire and interest. Encouraging the physical activity of children with disabilities guaranteed their general emotional, cognitive and volitional development.

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