

International Encyclopedia of Rehabilitation

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Conductive Education to Promote Behavioural Initiative in Children with Cerebral Palsy

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Cerebral palsy is one of the major conditions that cause severe disability in children and constitutes a relatively large percentage of disabled children. The definition of cerebral palsy is non-progressive brain damage that occurs for various reasons in the period from pregnancy through to childbirth and results in permanent abnormalities in relation to movement and posture. The abnormalities change as the child grows and matures with one type of abnormality replaced by another type of abnormality. At the same time, varying degrees of impairment in areas such as intellect, language, chewing, swallowing, sight, and epilepsy (not all of these symptoms appear in patients).

Unfortunately, individuals who have cerebral palsy may face prejudicial treatment based on the assumption that intellectual impairments accompany motor impairments. This is not always the case in individuals with cerebral palsy. In fact, largely because of motor deficits, children with cerebral palsy end up being unable to participate fully in terms of their behaviour; consequently, intellect and language acquisition are also affected. As their age increases, they are severely restricted in their social interaction and conduct; their behavioural initiative and motivation gradually decrease as a result of attempts that repeatedly fail and their entrenched dependence delays the development of their bodily functions. Eventually they experience muscular atrophy and skeletal deformity; they are unable to use their body effectively, affecting their ability to relate socially. How can we develop behavioural initiative and motivation in children with cerebral palsy? How can we activate the nerve conduction system of nerve-impaired children so that they can achieve psychological and functional development through effectively utilising their bodies, language and actions and developing active personalities?

Since cerebral palsy manifests itself clinically as a set of composite symptoms, the methods for rehabilitation and treatment should also be composite and holistic. The conductive education model provides us with the possibility of implementing comprehensive measures for combining rehabilitation and education. It provides a new challenge to the traditional treatment methods that have existed for a long time (these include passive methods such as medicine, injections, acupuncture and massage). On the surface, it seems that there is little relevance between conductive education and rehabilitation treatment. However, the basic principles of conductive education derive from various theories including those concerning muscle re-education in movement science and nerve induction. The concepts behind these theories are not limited to the narrow sense of reading, writing and mental calculations; they also extend to the broader sense of movement, actions and feelings.

The traditional methods for treating cerebral palsy emphasized the use of physiological methods for treating cerebral palsy. The child received the treatment in

a completely passive manner. Conductive education, on the other hand, emphasizes the development of the child's sense of initiative and behavior. In line with theories concerning reshaping and conducting the damaged nerve system, it emphasizes the possibility of achieving change through repeated stimulation and nerve reshaping, and indicates that movement initiative is a basic factor in nerve reshaping (Hu Mingxia 2006). Conversely, the more initiative is taken in movement, the easier it is to establish and reshape the damaged nerve system. The essence of conductive education lies in encouraging the child to change from being passive to taking the initiative; reshaping the movement model of their cerebral nerve through movement initiative and, through task analysis, taking large movements and breaking them down into movements that are easy to perform. It enables children to experience success through constantly doing; after they develop confidence in their own ability, they will more actively explore the surrounding environment on their own initiative. Guiding the child's sense of initiative and ability to undertake actions lies at the core of the thought behind conductive education.

Conductive education stimulates a child's sense of initiative through the technique of rhythmical intention. It is a technique that combines teaching and learning. Rhythm is the pulse of movement. The intention is the objective of a person to achieve a task. So far as cerebral children are concerned, completing a movement is very slow and arduous. They induce and regulate their own movements and actions by following the instructions of the conductor. In addition, there are often blanks between movement due to a lack of coherence. We can use the language of rhythmical intention and techniques such as nursery songs to help children develop the intention to move. Through slow nerve conduction, it is possible to form the child's inner and outer language, and the child can then use his or her subjective awareness to guide behavior. In this way the conductor can successfully convert her own requests for the child to complete movements into the child's own behavioral initiative. Once the child has grasped movement function, she can then employ it on her own initiative to realize her own intention during daily life experience.

In addition, conductive education requires the child to adopt many different types of learning at the same time and to apply different types of function at the same time. Throughout the process the child's sense of initiative and ability to solve problems are being induced. Interspersed throughout the day's activities is a lot of role-play. During the activities within the group, the success of the participants encourages a desire on the part of the children to participate actively; they pay attention to the mutual imitation; during the course of playing games, the cooperation that they learn stimulates their interest and the class design organically brings together the content of daily life. The environmental stimulus makes them want to express their wishes. After their language and movement ability is improved and they experience success in their activities, their self-confidence is significantly strengthened, as is the active manner with which they naturally behave and participate. This increases the frequency with which they take the initiative in their actions, which then stabilizes and continues the development of different types of movement and language patterns, social interaction skills and basic understanding, and thereby promotes the holistic development of the child's body and mind.

Conductive education only has 60 or so years of development in the world of medical education, but it is being accepted and used by more and more people.

To sum up, conductive education is a system that is established on the basis of scientific medical theory. It performs an active and effective function in treating children with cerebral palsy. The theory and techniques of conductive education comply with the rules of physical and mental development of disabled children and should be disseminated and promoted. In line with the continuing development of a civilized society, conductive education should be recognized, accepted, used and developed by more and more people. This will spur on the healthy development of the rehabilitation industry of disabled children. At the same time, we should acknowledge that there is a large gap between the ideals and practice of children's rehabilitation and that the road is very long.

References

- Hu Mingxia. 2006. Movement Control and Movement Learning (dongzuo kongzhi yu dongzuo xuexi). Taiwan: Jinming Tushu Company Limited.
- Li Shuchun. 2000. Cerebral Palsy (xiao er nao xing tanhuan). Henan Science and Technology Publishing Company.
- Liu Jinhua. 1997. Children's Development Psychology (ertong fazhan xinlixue). Shanghai: East China Normal University Publishing Company.
- Ou Anna, Yu Xueping. 2002. Conductive Education – Walking along with the Children (yindao shi jiaoyu - ban er tongxing). Hong Kong: Hong Kong Rehabilitation Association World Health Organisation Rehabilitation Cooperation Centre.
- Tang Jiulai, Wu De. 2007. Cerebral Palsy – Conductive Education Treatment (xiao er nao tan - yindao shi jiaoyu liao fa). Beijing: People's Health Publishing Company.
- Zheng Yujun, Chen Yu Qihua. 1995. Hong Kong Conductive Education Chinese Materials Collection (xianggang yindao shi jiaoyu zhongwen ziliao hui ji ben). Hong Kong: Hong Kong Conductive Education Committee.