

## **Educational Programmes for Children with Cerebral Palsy: Parents' and Teachers' Dilemma**

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### **Abstract**

This article deals with the problems of children with Cerebral Palsy, which is considered a Non-Verbal Learning Disorder. The paper is aimed to explain what Cerebral Palsy is and what the types of Cerebral Palsy are. The paper also discusses the educational possibilities of children with Cerebral Palsy and responsibilities of parents and teachers in the education of such children and their dilemma in selecting proper way of schooling and instruction to the children.

It is a fact that 4 to 8 out of every thousand birth have Cerebral Palsy, either mild or severe and numbers of children with such problems are increasing considerably. Cerebral Palsy is a static encephalopathy, is the name for a collection of movement disorders caused by brain damage that occurs before, during or shortly after birth. It is the most common neurologic disorder or common motor disability among children.

It is obviously right that majority of the children with Cerebral Palsy are intelligent and are able to be educated. They must be paced properly for education either in the mainstream (inclusion) or in the special education stream. There possibility for education must not be denied. Both mainstreaming and special education have its own advantages and disadvantages. Parents should select one of the choices according to the physical ability and communication ability their child possesses.

Teachers either in mainstream or in special education have particular duties to perform in the education process of Palsied child. Schools should have opportunities for muscular trainings, various types of therapy and special schemes to develop communication abilities.

Only with interventions of experts like neurologists, speech therapists, physical therapists, occupational therapists, special education experts, psychologists, dedicated teachers and so on can make the education of children with Cerebral Palsy fruitful. Least Restricted Environment and Individualized Educational Plan are the best supporting for their education.

### **Key Words**

Cerebral Palsy, Non-Verbal Learning Disorders, Static encephalopathy, Optimal care, inclusion, Special Education System, Individualized Educational Plan.

### **1. Introduction**

It is a fact that across the world the education sector is seriously thinking of the schooling of children with Learning Disorders. Picture in India is also not different. Indian education sector has opened number of doors for the entry of children with Learning Disorders or Non-Verbal Learning Disorders to avail education.

Other than the common Learning Disabilities or Disorders like Dyslexia, Dysgraphia, Dyscalculia and Dysnomia, some of the spectacular disorders are identified as Non-Verbal Learning Disorders (Thomas S.K, Banuthej & Sangeetha J, 2003). The Non Verbal Learning Disorders (NVLD) refers to the affecting factors of learning process due to physical disorders. Movement problems, unwanted body or limb movement, failure of coordinating the muscle functions properly, difficulty to use hand or fingers or any

other part or limbs to perform a learning task, so and so involves in the vast area of NVLD. Autism, Cerebral Palsy (CP), Downward Syndrome, Global Delay Development and Hyper Activity Disorders are some of the major NVLDs. After autism, Cerebral Palsy is identified as the most common physiological disorder in children and comprehensive attention is needed to treat this disorder.

It is factually observed that 4 to 8 out of every thousand birth have C P either mild or severe. C P is not so rare in present world and numbers of children with such problems are increasing considerably (Weigerink, D J, 2007). Hence, education system should give significant attention on education of children with Cerebral palsy (CP). Many researches in the area are seriously suggested plans for the educational development of CP Children.

## **2. What Is Cerebral Palsy (CP)?**

Rather than a disease, Cerebral Palsy is a stagnant physical and neurological disorder. It is a static encephalopathy, is the name for a collection of movement disorders caused by brain damage that occurs before, during or shortly after birth. C P is caused by damage to the motor control centers of the brain. When the nerve cells – neurons- in these region damage, the appropriate signal can no longer be send to the muscles under their control. The resulting poor control or less effective control of these muscles causes the C P (Deon, 2001). Children have a predictable set of developmental stages and milestones. Delay in reaching milestones is usually the first symptom of C P. Individuals with C P cannot take normal activities like walking or running or cognitive activities as normal children do them. It is the most common neurologic disorder or common motor disability.

Cerebral Palsy is associated with symptoms that include speech difficulties, vision problems, and inability to dress or eat independently as others do and inability to organise bodily actions (Ashwal, Russman & Blasco, 2004).

C P is primarily a problem of proper planning and controlling movements by the individual. To perform any action effectively, human body needs perfectly timed and coordinated process of muscles. This is a cooperative function of two or more muscles. Lack of coordination of muscles results in jerky or unwanted movements. This is applicable to all organs including eyes or organs of speech. Failure of this coordination and cooperation on shortening and lengthening of muscles is the outcome of the Cerebral Palsy (Deon, 2001).

Deon (2001) also states that a person with C P may affected by number of problems including seizure disorder, visual deficits, hearing problems, problems of processing of the perception, attention deficit, inconsistency in using senses, lack of concentration, hyper activity disorder, learning disorder, impairments in speech and hearing and even mental retardation. C P is not an inherited disorder, and as of yet, there is no way to predict with certainty to which children and when will develop it.

It is obviously right that about one third of children with C P have moderate to severe mental retardation, one-third have very mild mental disturbances and another one third have normal to excellent intelligence (Nathan, A. 1991)

Children who are noticeably delayed in achieving milestones and coordinating muscle related functions may continue to progress through the various developmental stages and attain normal ranges of skills later on. The major part of children with C P is capable of leading all sorts of regular social life (Deon, 2001). They need proper training and education to attain this personal and social development.

### *2.1. Types of Cerebral Palsy*

C P, which is a non-progressive disorder, mainly classified into three. The types of motor impairment and its location – types of muscle affliction and by the location afflicted muscle – are used as the basis for this classification. The three major C P groups are Spastic, Ataxic and Athetoid. Other than these three there is hypotonic and dystonic C P (Ashwal, Russman & Blasco, 2004).

In spastic C P individual's muscles are rigid, posture may be abnormal and fine motor control is impaired. The ataxic C P shows problems in balancing and failure in coordination of muscles, limbs and also fails

coordinating the sense perception. The symptoms of athetoid C P are marked by slow, writhing and involuntary movements.

### **3. Educational Possibilities of Children with Cerebral Palsy**

Training and education to a child with C P to lead a normal personal and social life depends up on the severity, nature and location of the impairment, as well as the associated problems the child has.

Since many children with C P are having average or above average intelligence and are able to lead social life, education to them is a necessity. Nathan, A (1991) states that majority of the C P children do not experience mental difficulties. The difficulties they experience are mainly in the coordination of muscles and motor functions, not of mental or cognitive functions. Hence, they can be educated.

The child with C P needs effective support and optimal care along with education. They need regular lovable interaction. Optimal care may involve interaction by physical therapist, occupational therapist, speech-language therapist, special education teacher, adaptive sports therapist, nutritionist and other related supporters. The educational institution must be able to provide all or some of these particles of optimal care. Continuous activities to stimulate vision, hearing and speech and supportive learning rooms including developmental screening rooms are also needed.

In addition to the regular educational goals and objectives, objectives of education process for students with CP may include the area of motor control, perception, sensory stimulation, argumentative communication and living and leisure skills.

#### *3.1 Parental Dilemma in the Education of Children with C P*

Once the education of children with C P is a necessity, the question will arise that what type of education should be? Child with C P has two academic choices: 'mainstream' (regular school system) or Special Education System. The parent can take the decision of mainstreaming their child depending to her or his growth, development and abilities.

According to Hurkman H L (1999) many children mildly or moderately cerebral palsied enjoy success in a normal school education and curriculum, even adaptive physical education programme. Mainstreaming the child, while it is a decision up to the parent, is not to be a decision that is open to every children with Cerebral Palsy. A child who has age appropriate cognitive and communicative abilities, or the abilities at least up to near to normal child and who will not need special medical or parental care can be included in regular school system. Inclusion may fail to others who need special care and regular medical attention. Not every child will benefit from inclusion in a regular curriculum, and if the parents feel that this is the case with their child, they can choose him or her to a special education school.

In short the best choice of schooling for the child with CP depends on the presence and degree of mental impairment and physical impairment, as well as the facilities available in the area for schooling (Schleickorn Jay, 1993).

#### *3.2 Advantages of Mainstreaming or Inclusion of C P Children*

There are several advantages to the child by the method of mainstreaming for the child with CP. The parent can recognise some of or all of the following advantages from the mode of regular schooling;

- Mainstreaming a C P child can help to expand group of friends. Another thing is that regular curriculum and activities may provide normalized academic and social experience to the CP child (many feel that this is the single-best benefit of inclusion) (Schleickorn Jay, 1993)
- Mainstreaming can help to reduce the stigma towards disabled individuals.
- Inclusion may even lessen the occurrences of harassment and marginalisation from others.
- Mainstreaming help the child to recognise as a normal child and so parents can save themselves from regular questions those may raise from different sources about the disabilities of the child. It helps them to stress free.
- Regular schooling gives more opportunities for interaction and hence there are possibilities for

social development.

Schleickorn Jay (1993) points that the success of inclusive approach or mainstreaming is depending up on high positive attitude on the part of regular teachers and the presence of assistants to help the regular teacher to modify the methods and procedures.

### *3.2.1 Disadvantages of Mainstreaming or Inclusion*

Mainstreaming of child with C P has certain disadvantages also. Lack of appropriately specialised or trained faculty is the most profound disadvantage of mainstreaming. It is least possible the availability of instructors with specialised training in all regular schools. If the child sending to a regular school has any major communicative, cognitive or motor limitations, there is a chance that the teacher of the regular stream would not fully know how to handle the child or situation. They may have no prior experience in the instruction to disabled children.

Another problem with inclusion of child with special needs like C P is the possible lack of specialised equipment that the child may very well profit from. One more problem with inclusion is that there may not avail the 'free appropriate education' and 'least restrictive environment' in a regular school, which are suggested by experts for C P children (Rao Alla Appa, 2009).

### *3.3 Special School Education for C P Children*

Special schools are also advisable to children with C P. As such schools are zeroed in on children with special needs; there will have maximum optimal care from teachers. The teachers there will be properly trained and the equipment available will be suitable to the child need. Schleickorn Jay (1993) suggests that special education facilities are largely concentrated in terms of resources for the child- it can certainly be advantageous for a C P child to be able to receive education and therapy under the same roof. Probably the most essential argument in favour of special education is the expertise and equipment that can be found in such schools. Not only do special education instructors have the training needed to successfully educate the children with C P, they also have the necessary specialised teaching equipment those are essential in the academic success of cerebral palsied children.

Selection of special school to the child is connected with the severity of palsy he or she have. Better is send the child for developmental screening with some experts and with their suggestion parents can select the suitable mode of education of their child, either regular scheme or special.

#### *3.3.1. Disadvantages of Special Education*

Special education has some disadvantages. Major thing is that the child there has a chance to be underestimated. They may be easily counted as unable. Another matter is that the school that best fits the child's needs may locate at a great distance from their home and community. Getting admission to such a distant school causes for the lack of regular contact with home and community. The school may not provide the child the education best suited.

Grouping children with many different disabilities to educate does not ensure the unique child's unique needs being satisfied. Another problem is that, disabled children find it is quite difficult to function in the real world after having been in a special education facility until the adult hood. So many years of isolation in the special scheme may adversely affect his or her ability to integrate themselves back to the community (Rao Alla Appa, 2009).

## **4. Training and Education Programmes for Children with Cerebral Palsy**

As it is discussed above, children with C P can attend regular schools if they do not have severe intellectual and physical disabilities. Other children require extensive physical therapy, motivating programmes for developing sensory functions, proper training to perform activities of daily living and requiring some sort of lifelong care and assistance for those who have severe problems.

Speech or language therapy along with classroom education helps the C P child to overcome communication problems. Speech therapy helps to develop those muscles which are associated with ability to speech, and improving speech. Children who cannot speak and communicate effectively may be able to benefit from communication technologies such as computerised voice synthesiser or computerised instructional package. Children may also benefit from picture boards or other communication devices that allow them to point to make their desires known.

Individual and family counseling, behaviour modification programmes, etc. are also required according to the condition of the C P. Attention deficit/hyperactivity disorder is common in children with C P and may require behavioural, educational and medical interventions. A speech-language therapist will be a best assistance in the school. Such interventions along with education reduce the demand on care givers and help the child with C P to obtain some degree of self- reliance, which helps build self- esteem.

### **5. Teaching Methods for Children with Cerebral Palsy: Teacher's Dilemma**

While the palsied children in the special school receive pull-out services such as physical, occupational and speech therapy, the teachers there have less tension. At the same time, if they are in normal schools, their regular education teachers will need to ensure that the classroom is organised in a manner that does not create any significant physical obstacle to the child.

The given suggestion may be followed by them:

- Teachers should set up the classroom in such a way so that plenty of space is available for the student to move around the room and to sit comfortably.
- Students who struggle with communication should have the option of using assistive technological equipment in the classroom, either provided by the school or by the child her/himself.
- Teachers can also do needed modification on teaching modules and assignments that require a good deal of writing and other skills. Skill development tasks should be treated with prime importance.
- Democratic ways of discussion with parents, assistance to children at any time, no way of punishments and best way of interactions are to be followed.
- The learning tasks of children with NVLDs should properly identified and must be treated in well to do manner.

Teachers who are responsible to teach children with C P should demonstrate a great deal of emotional support and patience. Encourage C P child with positive feedback, assisting in developing friendship with peers, make a friendly relation with the child and regular contact with parents and physical or speech therapist are all the ways the teacher can inspire confidence and success in students with cerebral palsy. Teachers also have a significant responsibility of directing the child either from the regular stream to a special education school or vice-versa depending up on the physical and intellectual status of the child they identified (Schleickorn Jay, 1993).

Regular methods or approaches of teaching may not work effective with CP children. Innovative changes are needed in the process of teaching. Along with deviated processes, teachers must try to make provisions for continuous auditory motivation, visual motivation and related functions. Terminal assessment of the individual should be conducted and teaching-learning processes must be modified according to the assessment result.

#### *5.1 Specific Instructional Approaches*

Classroom teacher who handle children with CP should set certain beginning objectives. Teacher has to take steps to:

- a. Modify the classroom environment suitable to accommodate the students' movements and attempts.
- b. Become familiar with the student's primary and preferred methods of communication.

Classroom must be equipped and might be used a combination of augmentative devices including

communication boards with different types of symbols, words and letters on it. Manual or computerised communication devices with an individualised key board, digital display, light emission article, coloured objects and voice stimulator, unicorn stick and other pointing devices may be used.

## 6. Conclusion

To cope with the social necessity, children with C P needs appropriate public education to take place in the 'Least Restrictive Environment.' Child needs to be experienced with a highly individualised educational plan (Karande & Kulkarni, 2008).

The process of developing an individualised educational plan for a child with C P begins with an assessment of the child's needs. After the assessment as per the guidelines the school has to work with the parent and others involved in the child's education and treatment to develop individualised educational plan. This plan must develop with the cooperative effort of a team of educational experts consisting professionals, regular teachers, special education teachers, different therapists, counsellors, psychologists, experts in developmental screening and experts in teaching children with special needs. Parents also should be given enough opportunity to participate in the planning, execution and evaluation of the individualised educational plan.

The education system that focused the attempts to overcome the difficulties of children with CP will help the society to reach on the concept equality of educational opportunity. As the children with CP have ability to be educated, the state's education system must provide opportunities with all special supports to them. In this case the pioneering piece of legislation of USA known as 'IDEA', 1975 (Individuals with Disabilities Education Act) is a model step.

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