A Pilot Study of Cerebral Palsy Children

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Abstract

Cerebral palsy (CP) registers appear to be appropriate tools for answering questions regarding the prevalence and characteristics of this common childhood disability. Registers are population databases issuing from multiple sources, relying on a clear definition and inclusion and exclusion criteria of CP, and requiring a mix of skills with the collaboration of obstetricians, pediatricians, and epidemiologists. In Europe alone there are 18 different CP registers or population data collections on CP, and collaborative research efforts exist through a European network. Data collection on CP has also been done in Australia (register), the United States (surveys), and Canada (register). Beside monitoring trends, other public health contributions of CP registers might be to reduce the frequency of CP and to improve the quality of life of children with CP. CP registers are useful to clinicians by enabling them to identify subgroups of children requiring specific etiologic investigations, and also to provide more accurate information to the parents of children with CP.

KEYWORDS: Cerebral palsy, children, pilot study etc.

INTRODUCTION:

Cerebral Palsy is a range of neuromuscular disorders caused by injury to an infant’s brain sustained during late pregnancy, birth, or any time during the first two years of life. People with cerebral palsy have a wide range of difficulties, from a clumsy walk to an inability to speak or swallow, caused by faulty messages sent from the brain to the muscles. In the mid-1800s, William Little, an English physician, first described cerebral palsy in connection with birth injuries.

Speech production is a specific act of breathing requiring a flexible, well-controlled and co-ordinate respiratory system to accommodate and adapt to ventilator and mechanical demands. Speech breathing requires a dynamic interplay between relaxation pressure and muscular pressure to support lung volume and air pressure for speech production. Children with cerebral palsy frequently present with speech breathing difficulties, due to their poor postural control, abnormal muscle tone and reduced ability to co-ordinate the timing and grading of the musculature of the respiratory mechanism.

THE OBJECTIVES OF STUDY:

1. To search the reasons behind the children’s suffered by Cerebral Palsy
2. To study the different problems of Cerebral Palsy. Children’s.
3. To study rehabilitation of Cerebral Palsy
4. To observe the educational programmers carried by teachers of Cerebral Palsy children’s

RATIONALE:

To investigate whether an intensive block of Bobath therapy, addressing postural control and co-ordination of movement, impacts on speech breathing and
intelligibility

HYPOTHESIS:
An intensive block of eight sessions of Bobath Therapy focusing on improving postural stability and alignment, reducing fluctuating tone and involuntary movements, will show improvements in the client’s speech breathing (loudness of voice and syllables per breath length) and intelligibility

METHODOLOGY:
- Design: Single-subject ABA design
- Intervention: Three week therapy block – 8 sessions, approximately 75 minutes long. Bobath trained Speech and Language Therapist and Physiotherapist.
- Body Function and Structure:
  - Fluctuating postural tone
  - Involuntary movements – alternating
  - Movements – wide ranging proximally and smaller writhing distally
  - Decreased proximal stability due to poorly sustained muscle activity,
  - Particularly abdominal muscles.
  - Asymmetry affecting alignment –postural scoliosis, convex to the right
  - Fatigue

ACTIVITIES:
- Reduced breath group length (number of syllables/breath)
- Reduced intonation and loudness of voice
- Imprecise articulation

PARTICIPATION:
- Reduced speech intelligibility.
- Reduced confidence when conversing with peers

ENVIRONMENTAL FACTORS:
- Noisy nursery environment
- Increased contact with unfamiliar people

PERSONAL FACTORS:
- Confidence
- Aware of speech difficulties and difference in comparison to peers

INTERVENTION:
- Weight bearing through limbs to reduce involuntary movements and promote improved trunk activity.
- Improve proximal stability.
- Improve grading of movement and ability to sustain midrange positions.

CONCLUSION:
In order to impact speech intelligibility, an intensive block of Bobath Therapy should be augmented with a more direct approach to specifically target speech production, such as, voice loudness and breath group length in speech activities. Many c.p. children’s have problems while writing. They could not write immediately or fast. (18) The different skills are used for intellectual progress of Cerebral Palsy. Mostly Cerebral Palsy children’s possess the leg disease. Due to this mostly Cerebral
Palsy. children’s could not walk properly. For this to walk the Cerebral Palsy children’s properly operation is done. The Cerebral Palsy children’s have interest in playing to stand, walk, these things the Cerebral Palsy can do easily. Hence the c.p. children’s are interested to play the sitting games. The c.p. children’s like to play the sitting games e.g. to put boxes on each other, to draw paint, to string main etc. Mostly Cerebral Palsy children’s come to school by bus. Then to bring and with draw / send c.p. in school by bus is one of difficult problem. Mostly the parents of Cerebral Palsy fills from mental trouble. Cerebral Palsy children’s with co-related children debate because of taking debate because of taking, giving material things. The teacher tries to solve the debate. Mostly Cerebral Palsy children’s like to learn the things in which they are interested. A child of two who cannot walk, or feed and dress herself, but who can see, and does not have severe learning difficulties has a four in five chance of reaching age 20 years. • A child of two who cannot walk, or feed and dress herself, and has severe learning diffi-culties, but who can see, has a three in five chance of reaching age 20 years. A child of two who cannot walk, or feed and dress herself, and has severe learning diffi-culties, and is blind has a two in five chance of reaching age 20 years. Children who were born preterm have a slightly better outlook than a child with the same impairments who was born at term.

REFERENCES: