

Extended Abstract

The Effects of Physiotherapy on Children with Cerebral Palsy Below 6 Years Attending to Therapy at Mukisa Foundation-Uganda

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Abstract

Mukisa Foundation (a home for children with special needs in Uganda) offers physiotherapy to over 150 children with cerebral palsy annually. The aim of this study was to find the effect of physiotherapy on children with cerebral palsy attending to therapy at Mukisa Foundation.

In this study, I reviewed 100 children with cerebral palsy together with their parents on how physiotherapy has impacted their children. Exercise therapy was the major technique used and various exercises were applied which included strengthening exercises especially for the neck and trunk, hand functioning techniques for reaching out and grip, positioning, training transfers and transitions, weight bearing exercises, passive joint range of motion stretches, facilitated sitting and applying the tone influencing patterns. These exercise techniques aimed at reducing and improving the disorders suffered by these children some of which include weak neck and trunk control, abnormal tone, drooling, swallowing difficulties, and reflexes.

The strengthening exercises aimed at strengthening the trunk and neck muscles which in turn would enable independent sitting in children, other core muscles of the upper and lower limbs were also strengthened, especially in the floppy children. Hand function techniques were done through using puzzles, playing with path finders, and sorting of bean seeds and these aimed at improving grip together with reach out. Positioning was done in various positions and modalities such as wheelchairs and C.P chairs to prevent development of pressure sores and try to modulate muscle tone especially in gravity free positions. Transfers and transition techniques from lying to sitting and from sitting to kneeling and then standing were done with children to enable attaining of a certain degree of independence. Weight bearing exercises were done in sitting, squatting, half and full kneeling and standing in stander and all these aimed at strengthening the upper and lower limb muscles. The gentle passive Joint range of motion exercises both upper and lower limbs aimed at improving blood circulation, maintaining muscle length, maintaining joint range of motion as well as preventing development of contractures at joints. Tone influencing patterns aimed at improving muscle tone and modulating the primitive reflexes. The facilitated sitting aimed to train independent sitting and strengthen the trunk and back muscles.

Other physiotherapy modalities were used during the physiotherapy sessions and these included the stander which was used in order to prevent contractures and improve stability at joints such as knees, walking frame was used as a mobility structure and train walking, the wedges were used for positioning and neck strengthening, rollers were used for assisted standing and kneeling on 4s.

In the given questionnaires and interviews, 97 of the 100 parents of children with cerebral palsy reported great progress in their children since the start of physiotherapy sessions. 15% of the children attained sitting independently, 70% were able to learn how to roll in bed and turn side to side, 50% had attained stable and strong neck and trunk control while 20% could crawl and transfer from sitting to standing with support on walls or other objects. All mothers reported that they had gained the techniques of feeding their children in a manner of preventing choking in children and they also got hope and relieved their stress.

Cerebral palsy refers to a gaggle of permanent disorders of the event of movement and posture, inflicting activity limitations, that area unit attributed to non-progressive disturbances that occurred within the developing vertebrate or child brain. harm to the central system a nervous cause disorders in contractile organ, system, and sensory systems. These disorders end in posture and movement deficiencies. The causes of motor disorders area unit biological process retardation, abnormal tone, muscle weakness, bodily property management deficiencies, sensory issues, behavioral issues, medical science issues, abnormal movement patterns and reflex, activity, spatiality, and deformities. inside the chance of the assessment to be performed in defined of motor, besides the changes within the tone, co-contraction capacities of the muscles, involuntary extremity and body movements, stabilization of the extremities, error, balance and protecting reactions, sitting balance, higher extremity and hand functions and sensory-perception problems; orthotics, would like of mobilization tools and alternative aid tools, cooperation of the family and their information on the unwellness additionally has to be assessed. trendy medical aid strategies in CP rehabilitation aim to develop the most practicality and independence doable for the kid by victimization the current efferent potential. The dynamic control approach supported ever-changing the motor patterns and configuration of the tasks instead of the graded modeling of the neurologic motor development is employed for rehabilitation. Classification of CP relies on pathology, etiology or clinical description. because of pathology and etiology area unit unclear in numerous cases, universal classification is presently doable just for clinical description, however dependableness is elusive, part since the term covers such a range of clinical shows. Classifications may embrace differing kinds, distribution and severity of motor impairments and associated impairments. as a result of the characteristics of every issue vary wide, the mix of characteristics found in a very person with CP could typically be distinctive.

The classification systems however what is necessary is subjective and rely on the aim of classification. The foremost of the classification systems have poor dependableness, since that they use nomenclature that is known otherwise by clinicians trained in

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numerous disciplines. Victimization easy and everyday language and avoiding from technical terms or maybe pictorial representations area unit additional useful to grasp the classification. An early commit to avoid technical language was followed by one that sought-after solely to decrease reliance thereon and is that the subject's development. Cerebral Palsy is an umbrella term accustomed describes any non-progressive incapacity ensuing from harm to the brain tissue throughout physiological state, birth or throughout babyhood. The abnormal development or injury to the brain tissue disrupts the nerve signals to the muscles and thus causes problem with movements, posture and co-ordination.

In conclusion, physiotherapy is essential in maintaining good health in children with cerebral palsy.