

Habilitaton Of Cerebral Palsy Children: Survey Condundcted Among Physiotherapists of Mid Malabar Region, Kerala

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ABSTRACT:

Background and Objectives: Physiotherapy is the major discipline which serves cerebral palsy children to develop and maintain their sensory motor skills, physical condition and functional status through exercises, training, mechanical aiding and coping techniques. In this study, we have made an attempt to investigate the level of participation and concerns of therapists involved in cerebral palsy treatment in the mid Malabar region of Kerala. **Materials and Methods:** The study, the first step in a three stage research plan, was conducted through an online survey among 54 therapists through a structured questionnaire containing 30 close end questions. The research team contacted each of the participants over emails or phones to ensure their sincere participation on time. **Results:** 38 therapists responded to the survey with duly filled forms. The response received after the time bound (n=1) was not considered. The data available were treated on MS Excel for descriptive statistics. **Conclusion:** Physiotherapy centers at mid-Malabar serve a very few CP children compared to its mass in this region. However, these children too have limitations in getting intended therapy programs due to subjective reasons. This study observes a great need of periodic training programs for therapists of this region on CP support schemes at the Government level along with workshops on evaluation, documentation, group therapy, low cost functional aiding.

Key-words: Cerebral palsy, Survey, Physiotherapy.

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INTRODUCTION:

Cerebral palsy (CP) is a childhood condition in which there is a motor disability (palsy) caused by a static, non-progressive lesion in the brain (cerebral).¹ The contributory incident may happen in early babyhood, usually less than 2 years of age. CP children have a situation that is non-progressive; therefore, they are in most ways normal children with special needs. It is important to consider the physical and mental problems of a CP child; however, keeping always in mind the greater long-term goals, which is similar to that for all

normal children, is important as well. The goal for these children, their families and society at large is for them to grow and develop to their maximum capabilities.¹⁻²

Physiotherapy is the major discipline which serves children with cerebral palsy to develop and maintain their sensory motor skills, physical condition and functional status, through exercises, training, mechanical aiding and coping techniques.² However, the therapeutic protocols while managing a CP child varies greatly among therapists depending on their understanding, perception, experience and skills.

Various statistical records by Government and Non Governmental organizations state that Mid Malabar region of Kerala, i.e. Malappuram, Kozhikode, South Kannur, Kerala have the highest density of children with special needs. Also, a large difference in therapist - patient ratio, particular geographical nature of this region, low socioeconomic status, limited awareness about rehab possibilities, etc. have made the situation more tougher for children with cerebral palsy. No studies on the clinical scenario have been performed among the therapists working in the rehabilitation of Cerebral palsy so far. In this study, we have made an attempt to investigate the level of participation, concerns and limitations of therapists involved in cerebral palsy treatment in this region.

MATERIAL AND METHOD:

This study is the first step in a three stage research plan focused on "Habilitation of Cerebral Palsy Children of Mid Malabar Region of Kerala. A structured questionnaire, comprised of 2 sessions, of 30 closed end questions was prepared by the researchers. This was validated by clinicians, therapists, parents of children with cerebral palsy, special educators and laymen.³ Once validated, the survey questions were uploaded at "Google forms". Multiple submission options by a single participant was disabled to avoid duplication of data. Later, 60 Physiotherapists, who practiced in the Malappuram, Kozhikode and South Kannur were invited to participate in the survey by visiting the survey link through mobile phone, tabs or computer. The research team contacted each of the participants over emails or phones to ensure their sincere participation on time. The online access to the link was closed on the 15th day after the upload.

RESULTS:

The researchers could contact 54 among the 60 Physiotherapists identified in the region of interest. Six (n=6) therapists could not be contacted due to personal or

subjective reasons. The purpose of the study was communicated to them over the phone. Thirty-eight (n=38) therapists responded to the survey with duly filled forms on time. The data availed were treated for descriptive statistics through 'Google forms' and stats.

OBSERVATION & DISCUSSION:

Physiotherapy, undoubtedly, is one of the major health service facility to train and support children with special needs. However, awareness of its scope of practice, especially in the field of paediatric disability is questionable. The clients, i.e. children with cerebral palsy and their parents, are still doubtful about the possibilities of physiotherapy and are widely misguided to a range of unscientific health practices. Sadly, a large number of general medical practitioners or clinicians of this region have very limited understanding about the prospects of the structured physiotherapy program in children with special needs.

The Physiotherapists practicing in the Mid Malabar Region were academically well qualified and experienced to practice CP habilitation program. 95% participants of this study have done graduation and above. However, most of the therapists (i.e. 74%) were general practitioners who did not specialize or practiced exclusively in paediatric rehabilitation.

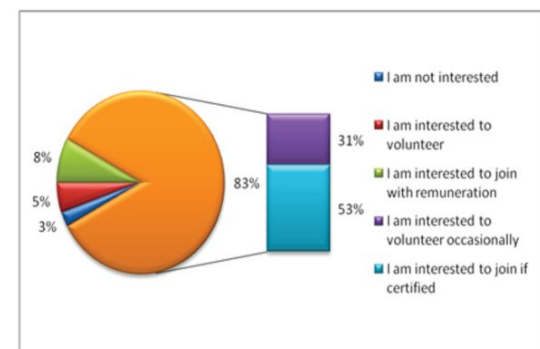


Figure-1: Identify your level of interest in participating in periodic cerebral palsy camps

In view with the geographical nature of Malabar region, the possibilities of a disabled child to reach to a clinic or rehabilitation unit at the town is really not easy. Therefore, the need of community based rehab units stands strong. 80% and above of the participants in this study express their interest in joining the periodic community Physiotherapy camps if they are certified for it. This study recommends, accepting this as a reasonable demand by the therapists and utilizing their professional skills periodically towards the habilitation of children living in remote areas. Meanwhile, the need for a number of regular community rehab service providers have to be met eventually through basic care training for community volunteers.

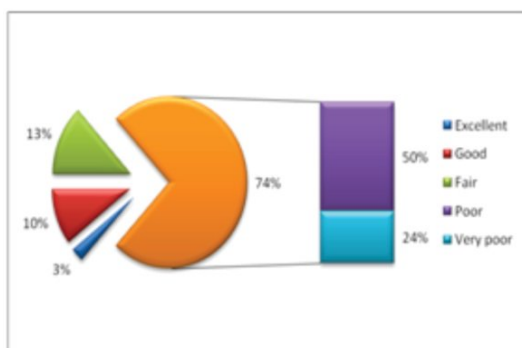


Figure-2: Identify your level of knowledge about various government acts and schemes on aiding children with disabilities

A child with cerebral palsy visits a physiotherapist regularly for his or her therapy needs and therapists are their major source of information related to disability and rehabilitation.² It is very unfortunate that a great number of therapists are unaware about various support schemes promoted by the Government for these children. This study proposes periodic training programs for therapists by the authorities on various government acts, social rights, financial supportive aiding towards treatment and education of children with special needs, social upliftment programs etc.

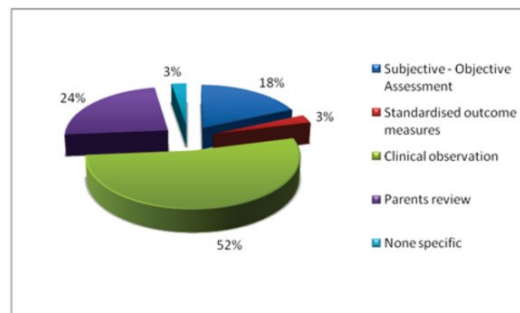


Figure-3: Identify your evaluation protocol to comment on the clinical progression of your CP patient.

This study also observes large need of regular compulsory training programs to develop the skills of therapists in paediatric disability evaluation, parent counselling, documentation, supportive orthotic aiding, group therapy programs and management of CP. The use and documentation of progress reports, development charts, basic sensory-motor and functional outcome scales shall be promoted compulsorily in all physiotherapy facilities. This report may be subject to inspection regularly by district or sub-district officials.

Therapists who participated in this study noticed that the parents suffer a huge financial burden in transporting their children to the therapy center. Mostly, it's not the cost of therapy, but the transportation charges and related difficulty restrict the child to have regular therapy sessions. Most of their children cannot depend on mass transportation facility due its structural inconvenience and may have to depend on contract carriages. This study identifies the need of disabled friendly and wheelchair accessible, public transport facility at this region.

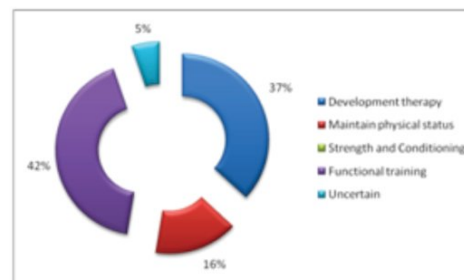


Figure-4: Identify your major objective while treating a CP child between 12 - 18 years

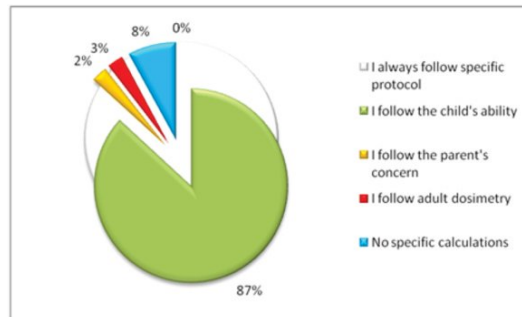


Figure-5: Identify your method of calculating dosages of exercises in cases with CP

It was very unfortunate to watch that the participant therapists had dissimilar views on functional objectives, plans and dosimetry of the treatment programs of an elder CP. 37% participants focused on Neurodevelopment whereas 16 and 42 percentage concentrated on maintaining physical status and functional training respectively. The rest of the participants were uncertain about their objectives. However, according to the scholarly articles of international reference standards, and recommendations of the National Strength and Conditioning Association- NSCA, children with cerebral palsy, especially spastics, have a greater amount of weakness in their muscles. Strengthening and conditioning shall be the major focus of any therapy program during this age group. In this study, we have no participant actually practicing these recommendations by earlier researchers.⁴⁻⁷

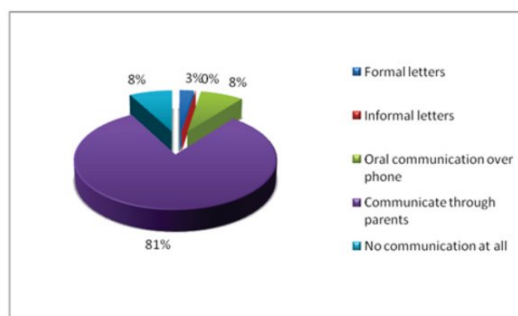


Figure-6: Identify your mode of communication with a medical consultant or a specialist therapist

The communication between medical consultant and Physiotherapist is utmost important while planning and executing therapy program for children with cerebral palsy. In this study, we observed that the communication between clinician and therapist were highly informal. Most of the children who were sent for therapy or for a medical review were without a formal reference letter. This practice of casual communication through parents cannot benefit the children in many ways. Communication gap also can definitely have undesirable effects on the child. This study proposes the need of training in professional communication and queries between clinician and therapists.

As mentioned, a large number of participants in this survey were general practitioners and most of them take opinions from specialist therapists while planning and executing treatment for their clients with cerebral palsy. This practice of the cross reference is greatly appreciable. Less than 10%, depends on scholarly articles or academic reference. The latter groups were either exclusive paediatric practitioners or researchers.

CONCLUSION:

Physiotherapy centers in the mid-Malabar region serve a very few CP children, as compared to its density in this region. However, these children too have limitations in getting intended therapy programs due to subjective reasons. The need of more numbers of community based rehabilitation units stands strong. This study observes a great need of periodic training programs for therapists on various Government support schemes, rights of children with special needs, use of outcome scales, low cost functional aiding, professional communications and parent counseling.

Conflict of Interest: None

Source of Fund: Self.

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