DOI:https://doi.org/10.54393/pbmj.v5i5.417

PAKISTAN BIOMEDICAL JOURNAL

https://www.pakistanbmj.com/journal/index.php/pbmj/index

Volume 5, Issue 5 (May 2022)

Original Article

Awareness, Knowledge and Satisfaction of Physiotherapy Treatment in Cerebral Palsy Children's Parents

Shahzaib Anwer[1], Aqsa Naveed[2], Saba Riaz[3*], Rabia Jawa[3], Muhammad Ahmad Naseer[4], Aamir Gul Memon[5], Hareem Nazir[5] and Muhammad Mubarak[5]

[1]Physiotherapy Department, Quaid-e-Azam College of Engineering and Technology, Sahiwal. Pakistan
[2]Shareef Memorial Clinic, Lahore, Pakistan
[3]Department of Physical Medicine and Rehabilitation, School of Health Sciences, University of Management and Technology, Lahore, Pakistan
[4]Spina Cure, Lahore, Pakistan
[5]Riphah International University, Lahore Campus, Lahore, Pakistan

ARTICLE INFO

Key Words:

Awareness, Cerebral Palsy, Disability, Physical Therapy, Rehabilitation

How to Cite:

Anwer, S., Naveed, aqsa ., Riaz, S., Jawa, R., Naseer, M. A., Memon , A. G. ., Nazir, H., & Janjua, M. M. . (2022). Awareness, Knowledge, and Satisfaction of physiotherapy treatment in cerebral palsy children's parents. : Awareness, Knowledge, and Satisfaction of Physiotherapy Treatment. Pakistan BioMedical Journal, 5(5). https://doi.org/10.54393/pbmj.v5i5.417

***Corresponding Author:**

Saba Riaz,
Department of Physical Medicine and Rehabilitation, School of Health Sciences, University of Management and Technology, Lahore, Pakistan
sabariaz317@gmail.com

Received Date: 8th May, 2022
Acceptance Date: 24th May, 2022
Published Date: 31st May, 2022

ABSTRACT

Cerebral palsy (CP) is a neurological ailment that includes a variety of signs and symptoms, some of which might be associated with neurodegenerative or metabolic problems, especially those that begin in the first two years of life. It can be caused by a variety of factors. Children with disabilities' families have grown increasingly active in their care and have taken on the role of primary caregiver. Early detection and intervention of problems to minimize developmental delays. **Objectives:** To assess the awareness, knowledge and satisfaction about physical therapy in parents of cerebral palsy children visiting hospitals in Lahore **Methods:** Cross-sectional study was conducted at visiting hospitals in Lahore from November 2021 to April 2022 through a non-probability convenient sampling technique. A total of 81 parents were selected for this study. The data was assembled by using a self-made questionnaire. **Results:** Parents of 35 (43.2%) children were aware of physiotherapy while 46 (56.8%) came to know about physical therapy treatment after coming to the hospital setting. The majority, 51(63%) parents were aware of physiotherapy treatment because of child specialist referral. 64(79%) children were taking physiotherapy treatment on daily basis. 45.7% of parents were extremely satisfied, 38.3% were very satisfied and 0% were not satisfied with physiotherapy treatment. **Conclusions:** It was concluded that the majority of parents were not aware of physical therapy before visiting the respective setting or having a session with a physiotherapist and the majority of parents were satisfied by the physiotherapy treatment given to their children.

INTRODUCTION

Cerebral Palsy (CP) is one of the most frequent physical and developmental impairments in children [1]. CP has numerous etiologies, resulting in a brain injury that affects posture, and balance. It affects two to three out of every 1,000 live births [2]. It is a neurodevelopmental condition marked by anomalies in muscle tone, mobility, and motor skills, which are linked to brain damage in the developing brain [3]. CP is now described as "a collection of permanent impairments of movement and posture development that cause activity limitation and are related to non-progressive problems in the developing fetus or infant's brain." CP is frequently accompanied by sensory, perceptual, cognition, communication, and behavioral impairments, as well as epilepsy and secondary musculoskeletal problems [4]. CP is a neurological- ailment that includes a variety of signs and symptoms, some of which might be associated with

Copyright (c) 2022. PBMJ, Published by Crosslinks International Publishers
This work is licensed under a Creative Commons Attribution 4.0 International License.

DOI:https://doi.org/10.54393/pbmj.v5i5.417

neurodegenerative or metabolic problems, especially those that begin in the first two years of life. It can be caused by a variety of factors [5]. According to European data, the average occurrence of CP is 2.08 per 1000 live births. There are four types of risk factors for CP: preconception, prenatal, perinatal, and postnatal [6]. There would be emerging evidence in recent years that small age individuals with CP can acquire several secondary health issues that generally develop later in life [7]. Multiple comorbid, such as visual, hearing, and intellectual defacement, as well as epilepsy, are usual in kids with CP, necessitating a multi-disciplinary approach to care and support throughout their lives. They are more likely to have health problems [8]. Caring for a kid with a disability like CP puts an emotional burden on parents, which can lead to mental health problems in the future [9]. Caregivers of children with CP encounter particular responsibilities and obstacles, with possible negative impressions on both caregiver and child's psychological well-being [10]. The strain of caring for children with CP is an underappreciated issue. In addition to their psychological issues, the parents are socially alienated, unable to participate in social activities, stigmatized, and have difficulties in their families and communities [11].

Children with disabilities' families have grown increasingly active in their care and have taken on the role of primary caregiver. Children with CP sometimes demand more participation from their caretakers due to the varying degrees of the disorder [12]. Individuals with non-ambulatory CP have distinct activities connected with personal care, positioning, communication, social engagement, comfort, and emotions that have a role in determining their overall fitness and qualities of life (CP) [13]. Early interference services are meant to satisfy the developmental requirements of children and guardians aged from newborn to five years. Early detection and intervention of problems to lessen developmental delays, decrease' the development of secondary impairments, and enhance family competency in caring for their child are the goals of these services, which are tailored to the requirements of the child and families. The use of early intervention to help newborns with or at risk of CP improve motor and cognitive skills; however, long-term outcomes of the intervention have yet to be determined [14]. When newly acquired abilities are applied to a child's everyday routine, they can enable increased engagement in meaningful activities [15]. Water-based activities should be added in addition to traditional modes of therapy, to ensure long-term gross motor function improvements [16]. As the primary caregivers of a child with CP, mothers face difficulties that affect their health and well-being. Working together and communicating openly is essential for mothers to successfully support their children in living their best lives [17]. The most common motif noted was that people's perception of the role of physiotherapy in the treatment of CP was confined to only exercises, stretching, and training, rather than the true extent of its involvement in developmental aid and functional independence. Because of their previous experience with physiotherapy service arrangements, the parents picked physiotherapy over conventional medical therapy [18]. Physiotherapy' is an important part of the management of CP, and it includes a variety of therapeutic therapies aimed at increasing physiological and functional outcomes. Physiotherapy' is frequently utilized and advised by all members of the healthcare teams [19]. For kids with disabilities, a family-centered home program is fundamental to their progress [20]. This research was conducted to assess the awareness about physiotherapy in parents of CP children.

METHODS

This descriptive cross-sectional study was conducted at visiting hospitals in Lahore from November 2021 to April 2022 via a non-probability convenient sampling technique. The sample size was 81 parents of cerebral palsy children visiting hospitals in Lahore for physiotherapy treatment. Children from 2 to 7 years old suffering from cerebral palsy, and children who had spastic diplegia, spastic quadriplegia, and ataxic were included in this study. Children which had polio, clubfoot deformity, Down syndrome, Congenital Heart Disease (CHD), any fracture on limbs, and parents with mental abnormality (dementia) were excluded from this study. The self-administered questionnaires were distributed to parents for data collection. Data (demographic and medical) was collected directly from parents and caregivers of patients by asking questions about awareness of physiotherapy. Consent was obtained from parents/guardians. Data were analyzed through SPSS version 21 and Microsoft excel.

RESULTS

Out of 81 parents interviewed, 35 participants (43.21%) were male and 46 (56.79%) were female. 26 children (32.1%) were less than 1 year old, 42 were between 1 to 6 years (51.9%) and 13 children were 7 to 12 years (16.0%). Among 81 participants, there were: 46 participants (56.8%) were not aware of physical therapy before visiting the respective setting, 25 participants (30.9%) were aware but did not have a chance to get it, 9 participants (11.1%) were aware, and had a few sessions while just 1 participant (1.2%) was getting physiotherapy sessions for a long time. Regarding knowledge, 61.7% of the parents had knowledge about

Copyright (c) 2022. PBMJ, Published by Crosslinks International Publishers
This work is licensed under a Creative Commons Attribution 4.0 International License.

DOI:https://doi.org/10.54393/pbmj.v5i5.417

therapy comprising of physical activities and exercises for several disorders, 8.6% had knowledge about therapy is given by using some heating and electrical modalities, 28.4% believed to be both (Table 1). 51 participants (63.0%) came to know about physical therapy from a child specialist doctor, 8 (9.9%) said that they were suggested by a neuro-physician, 5 people (6.2%) said that they came to know by media sources and 17 participants (21%) were suggested by those patients who were already taking physiotherapy treatment, the relationship of parents and caregiver from where they knew about physiotherapy (Table 2). About the level of satisfaction, 45.7% parents were extremely satisfied, 38.3% were very satisfied, 14.8% very moderately satisfied and 1.2% were slightly satisfied (Figure 1).

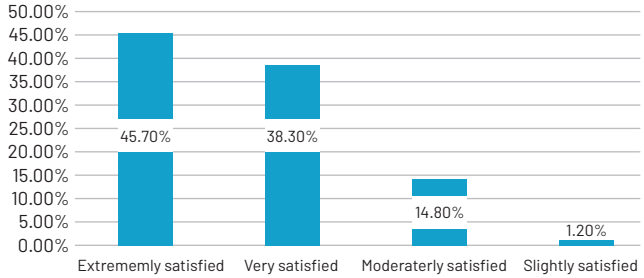

Figure 1: Satisfaction of parents by physiotherapy treatment of their cerebral palsy children

Knowledge of Cerebral Palsy and its physiotherapy treatments in parents	
Knowledge	**Frequency (%)**
A therapy comprising of physical activities and excercise for several	50 (61.7)
A therapy is given by using some heating and electrical modalities	7 (8.6)
Both a and b	23 (28.4)
Some other reviews	1 (1.2)
Total	81 (100)

Table 1: Knowledge of Cerebral Palsy and its physiotherapy treatment in parents

Descriptive statistics for a source of a awareness and frequency of physical therapy treatment			
Source of Awareness (%)		**Frequency of physiotherapy sessions (%)**	
From a child specialist doctor	51 (63)	Daily	64 (79)
From a neuro-physician doctor	8 (9.9)	Whenever it is feasible	8 (9.9)
From media	5 (6.2)	Not taking proper sessions	9 (11.1)
From someone who was already getting it	17 (21)	Total	81 (100)
Total	81 (100)		

Table 2: Descriptive statistics for a source of awareness and frequency of physical therapy treatment

DISCUSSION

CP is a term used that has been used from time to the set for children with motor impairments [20]. CP is a serious condition that has far-reaching effects on children and their families [22]. Ramanandi VH and Panchal DN conducted research to check the perception, acceptance, and hopes of the Father and Mother of cerebral palsy' in Gujrat [18]. A vast range of psychosocial issues is experienced by the mother and father of youngsters with CP. As an important peer of the rehabilitation team, physiotherapists come in regular and long-term contraction with the household and caregivers of the CP child. This makes the bigger authority of a physiotherapist from other than just dealing with sensory-motor rehabilitation of a CP infant to recognize needs and expectations and counsel the caretaker, mother, and father or household as and when required. Studies like this can provide precious facts for designing a family-centered care program for kids with CP. In another study, the primary standards which symbolize ranges of awareness, acceptance, and expectations in caregivers of teens with cerebral palsy' in Gujrat were assessed. Different kinds of expectations were seen from the parents which they were needed to be clarified [18]. It was observed that out of 81 participants, 72 parents (88.9%) were satisfied with the physiotherapy treatment given to their child while on the other hand, while 9 parents (11.1%) were not satisfied. This shows they need more care to be satisfied. A study conducted by Rabiatul on An Ergonomic Perspective of User Need on Physio-Treadmill (PhyMill) Criteria: Knowledge and Awareness of Cerebral Palsy among Future Parents show Participants were asked to complete a self-administered questionnaire that included general information, awareness of cerebral palsy, product criteria, and thoughts. About 55% of individuals have a low degree of awareness, and 69% have no awareness of CP treatment, according to the findings. The lack of awareness and knowledge of the condition and its treatment among potential parents was highlighted in this study [23].

CONCLUSION

It was concluded that the majority of parents were not aware of physical therapy before visiting the respective setting or having a session with a physiotherapist, and the majority of parents were satisfied by the physiotherapy treatment given to their children.

REFERENCES

[1] Michael-Asalu A, Taylor G, Campbell H, Lelea LL and Kirby RS. Cerebral Palsy: Diagnosis, Epidemiology, Genetics, and Clinical Update. Adv Pediatr. 2019;66:189-208. doi: 10.1016/j.yapd.2019. 04.002.

[2] Gulati S and Sondhi V. Cerebral Palsy: An Overview. Indian J Pediatr. 2018;85(11):1006-1016. doi: 10.1007/s12098-017-2475-1.

[3] Vitrikas K, Dalton H and Breish D. Cerebral Palsy: An

Copyright (c) 2022. PBMJ, Published by Crosslinks International Publishers
This work is licensed under a Creative Commons Attribution 4.0 International License.

DOI:https://doi.org/10.54393/pbmj.v5i5.417

Overview. Am Fam Physician. 2020;101(4):213-220.
[4] MacLennan AH, Lewis S, Moreno-De-Luca A, Fahey M, Leventer RJ and McIntyre S et al. Genetic or Other Causation Should Not Change the Clinical Diagnosis of Cerebral Palsy. J Child Neurol. 2019;34(8):472-476. doi: 10.1177/0883073819840449.
[5] Appleton RE and Gupta R. Cerebral palsy: not always what it seems. Arch Dis Child. 2019;104(8):809-814. doi: 10.1136/archdischild-2018-315633.
[6] Sadowska M, Sarecka-Hujar B and Kopyta I. Cerebral Palsy: Current Opinions on Definition, Epidemiology, Risk Factors, Classification and Treatment Options. Neuropsychiatr Dis Treat. 2020;16:1505-1518. doi: 10.2147/NDT.S235165.
[7] Heyn PC, Tagawa A, Pan Z, Thomas S and Carollo JJ. Prevalence of metabolic syndrome and cardiovascular disease risk factors in adults with cerebral palsy. Dev Med Child Neurol. 2019;61(4):477-483. doi: 10.1111/dmcn.14148.
[8] Zuurmond M, O'Banion D, Gladstone M, Carsamar S, Kerac M and Baltussen M et al. Evaluating the impact of a community-based parent training programme for children with cerebral palsy in Ghana. PLoS One. 2018;13(9):e0202096. doi: 10.1371/journal.pone.0202096.
[9] Barreto TM, Bento MN, Barreto TM, Jagersbacher JG, Jones NS and Lucena R et al. Prevalence of depression, anxiety, and substance-related disorders in parents of children with cerebral palsy: a systematic review. Dev Med Child Neurol. 2020;62(2):163-168. doi: 10.1111/dmcn.14321.
[10] Irwin L, Jesmont C and Basu A. A systematic review and meta-analysis of the effectiveness of interventions to improve psychological wellbeing in the parents of children with cerebral palsy. Res Dev Disabil. 2019;95:103511. doi: 10.1016/j.ridd.2019.103511.
[11] Vadivelan K, Sekar P, Sruthi SS and Gopichandran V. Burden of caregivers of children with cerebral palsy: an intersectional analysis of gender, poverty, stigma, and public policy. BMC Public Health. 2020;20(1):645. doi: 10.1186/s12889-020-08808-0.
[12] Pretorius C and Steadman J. Barriers and facilitators to caring for a child with cerebral palsy in rural communities of the Western Cape, South Africa. Child Care in Practice. 2018;24(4):413-30. doi.org/10.1080/13575279.2017.1347146.
[13] Kolman SE, Glanzman AM, Prosser L, Spiegel DA and Baldwin KD. Factors that Predict Overall Health and Quality of Life in Non-Ambulatory Individuals with Cerebral Palsy. Iowa Orthop J. 2018;38:147-152.
[14] Fiss AL and Jeffries L. Early Intervention Services for Young Children with Cerebral Palsy. Cerebral Palsy. 2020:2455-72. DOI: 10.1007/978-3-319-74558-9_153.
[15] Ryan JL, Levac DE and Wright FV. Reliability of the Motor Learning Strategies Rating Instrument in physiotherapy intervention for children with cerebral palsy. Dev Med Child Neurol. 2019;61(9):1061-1066. doi: 10.1111/dmcn.14177.
[16] Ballington SJ and Naidoo R. The carry-over effect of an aquatic-based intervention in children with cerebral palsy. Afr J Disabil. 2018;7(0):361. doi: 10.4102/ajod.v7i0.361.
[17] Smith M and Blamires J Dr. Mothers' experience of having a child with cerebral palsy. A systematic review. J Pediatr Nurs. 2022;64:64-73. doi: 10.1016/j.pedn.2022.01.014.
[18] Ramanandi VH and JM PD. A qualitative study to conceptualize levels of awareness, acceptance and expectations in parents of children with cerebral palsy in Gujarat, India. International Journal of Contemporary Pediatrics. 2018;5(2):6.
[19] Das SP and Ganesh GS. Evidence-based Approach to Physical Therapy in Cerebral Palsy. Indian J Orthop. 2019;53(1):20-34. doi: 10.4103/ortho.IJOrtho_241_17.
[20] Jayashree KR, Kovela RK, Thakur A and Priya PR. Effectiveness of Mother as a Rehabilitative Aid (MARA) Program in the Recovery of Children with Cerebral Palsy-An Assessor blinded Randomized Controlled Trial. Indian Journal of Public Health Research & Development. 2020;11(6):419-24.
[21] Panteliadis CP. Cerebral palsy: a multidisciplinary approach. Springer. 2018.
[22] Tsibidaki A. Family functioning and strengths in families raising a child with cerebral palsy. Res Dev Disabil. 2020;106:103767. doi: 10.1016/j.ridd.2020.103767.
[23] Ariffin RA, Adib MA, Shalahim NS, Daud N and Hasni NH. An ergonomic perspective of user need on physio-treadmill (PhyMill) criteria: knowledge and awareness of cerebral palsy among future parents. InJournal of Physics: Conference Series 2020;1529(5):52071.

Copyright (c) 2022. PBMJ, Published by Crosslinks International Publishers
This work is licensed under a Creative Commons Attribution 4.0 International License.