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].

**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 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 convenience sampling technique. A total of 81 parents were selected for this study. The data was assembled 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.

**Key Words:** Awareness, Cerebral Palsy, Disability, Physical Therapy, Rehabilitation


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**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.

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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.

M E T H O D S

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.

R E S U L T S

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
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

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

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

<table>
<thead>
<tr>
<th>Source of Awareness (%)</th>
<th>Frequency of physical therapy sessions (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>From a child specialist doctor</td>
<td>61 (63)</td>
</tr>
<tr>
<td>From a neuro-physician doctor</td>
<td>8 (9.9)</td>
</tr>
<tr>
<td>From media</td>
<td>6 (6.2)</td>
</tr>
<tr>
<td>From someone who was already getting it</td>
<td>17 (21)</td>
</tr>
<tr>
<td>Total</td>
<td>81 (100)</td>
</tr>
</tbody>
</table>

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

**D I S C U S S I O N**

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].

**C O N C L U S I O N**

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.

**R E F E R E N C E S**


