

Perception Of Physiotherapy Rehabilitation Amongst Parents Having Children with Developmental Disorders: A Cross Sectional Study

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Abstract:

The study explored on the perceptions of physiotherapy rehabilitation among parents of children with developmental problems. Considering parents' viewpoints can help to build better physiotherapy treatment sessions. The study aimed to understand parent's views on the effectiveness of physiotherapy, what motivates them to continue treatment, the obstacles they face, and whether they see physiotherapy as a viable long-term option. A cross-sectional survey was conducted among parents having children with developmental disorders in a PCMC region. A self-made and validated questionnaire was provided which included questions regarding perception, motivating factors, barriers, and long-term option of physiotherapy treatment. Among our study population, 60.98% were females [mothers] and 39.02% were males [fathers]. It revealed a favourable perception of physiotherapy rehabilitation among parents. The several key motivating factors, such as encouraging self-dependence in the child (74%), drawing inspiration from other parents' experiences (53%), a willingness to overcome obstacles (64%), and receiving support from family and friends (74%). The obstacles may include financial burden (74%), time constraint (74%), easy and flexible transportation (4%), prefer traditional treatment (57%), good communication between parents and therapist (69%) regarding the efficacy of physiotherapy. The findings indicated that 58% of parents express a desire to incorporate physiotherapy into their long-term rehabilitation plan for their child. It was concluded a positive perception of physiotherapy rehabilitation among parents. It seems that parents are interested in incorporating physiotherapy into their child's ongoing rehabilitation plan.

Key-words: Physiotherapy, Developmental disorders, Perception

INTRODUCTION

Physical or brain-based issues that affect a child's growth and development of essential life skills are called developmental disorders, commonly referred to as childhood disorders ^[1]. These conditions might affect things like: mobility; biological activity; learning, or cognition; the five senses and perception, language, and physical or emotional independence; social competence ^[1]. The term "childhood developmental disorder" refers to any disorder or condition that affects a child's growth and persists into adulthood ^[1]. Common developmental disorders include: Autism Spectrum Disorder (ASD) ; Down's Syndrome ;Cerebral Palsy ;Muscular Dystrophy ;Spina bifida ;Developmental Delay; etc.^[1]. The prevalence of neurodevelopmental disorders is estimated to be 5-9% ^[2].

Early examination, diagnosis, and rehabilitation are the foundation of children's management ^[3]. It requires a multidisciplinary strategy that offers a variety of treatment options, and It needs to be adjusted in accordance with the child's clinical presentation ^[3]. One of the areas of physiotherapy that has emerged is paediatric physiotherapy ^[4]. Paediatric physiotherapists are experts that deal with children and adolescents, focusing on achieving the best possible physical development ^[4]. They employ a holistic approach, ensuring that in addition to the stated health requirements, the social, emotional, and educational components are also considered ^[4]. They focus and address postural problems, functional skill variety, and the range of motion ^[4]. In the long-term care of children with developmental disorders, the family is considered a crucial component of the multi-inter-transdisciplinary approach ^[5]. The major goal of long-term care is to improve the child's and family's quality of life by increasing parents' happiness with, and engagement in, the rehabilitation program, as they are the ones who are most familiar with their child's needs and skills ^[5]. The study aimed to assess the perception of physiotherapy rehabilitation among parents who had children with developmental disorders. The objectives included identifying parents' perceptions during ongoing physiotherapy rehabilitation, determining motivating factors for continuing treatment, identifying barriers to physiotherapy rehabilitation, and assessing parents' perceptions of physiotherapy as a long-term rehabilitation option for their children. Through interviews and surveys with the help of questionnaire, data were collected to gain insights into these areas. Results indicated varying perceptions among parents, with some expressing positive views regarding the effectiveness of physiotherapy while others cited barriers such as time constraints, financial burden; transportation issues; etc. Motivating factors included improvements observed in their children's mobility and overall well-being, while concerns about the long-term sustainability of physiotherapy were also raised. These findings contribute to a better understanding of parental perspectives on physiotherapy rehabilitation for children with developmental disorders.

MATERIALS AND METHODS

A cross-sectional, questionnaire-based study was conducted with institutional sub ethics approval (DYPCPT/ISEC/64/2023) among the parents with developmental disorders children's, PCMC area, from 01 November 2023 to 31 December 2023 to evaluate perception of physiotherapy rehabilitation; motivating factors; barriers and perceptives regarding long term option. A sample size of 82 was calculated using WinPepi software. Eligible study participants included Parents of developmental disorder children coming to PCMC Physiotherapy OPD between the age of 20-45 years.

A self-made and validated questionnaire was provided to parents with developmental disorders children's. A 20-item questionnaire included questions regarding perception, motivating factors, barriers, and long-term option of physiotherapy treatment. The initial section addressed the involvement of physiotherapists in managing developmental disorders in children, the improvement of a child's quality of life through physiotherapy, awareness of physiotherapy exercises, access to trustworthy information about physiotherapy treatments, and the expertise of physiotherapists. The subsequent section explored motivating factors such as fostering the child's self-reliance, drawing inspiration from others' recovery journeys, demonstrating a commitment to overcoming challenges, maintaining determination in the face of obstacles, and receiving support from both family and friends. The third section investigated obstacles including financial constraints, time limitations, transportation challenges, adherence to traditional practices, and the importance of effective communication between therapists and parents. The final section examined the desire to pursue physiotherapy as a long-term treatment option, the positive overall impact, and the level of support and guidance received from physiotherapists.

Data entry and interpretation were done on an Excel sheet. Percentages and frequencies were used to count and show each individual response.



Figure 1: Parents of children with developmental disorders filling the questionnaire along with the therapist

RESULTS:

Among our study population, 60.98% were females [mothers] and 39.02% were males [fathers] age between 21-45 years. The distribution of developmental disorders in participants were developmental delay (42.6%), cerebral palsy (40.2%), down's syndrome (9.7%) and autism (7.3%). The study revealed a positive perception of physiotherapy rehabilitation among parents. According to figure 2, 67.1% parents were aware of Role of Physiotherapy, 62.2% parents agreed that physiotherapy enhances child's Quality of life, 89% parents were aware of physiotherapy exercises given to their child, 69.5% parents have good access to reliable information about physiotherapy treatment and 67.1% parents were aware of the knowledge and experience of their physiotherapist treating their child. The several key motivating factors, such as encouraging self-dependence in the child (74%), drawing inspiration from other parents' experiences (53%), a willingness to overcome obstacles (64%), and receiving support from family and friends (74%) which is shown in figure 3. According to figure 4, the obstacles may include financial burden (74%), time constraint (74%), easy and flexible transportation (4%), prefer traditional treatment (57%), good communication between parents and therapist (69%) regarding the efficacy of physiotherapy. Figure 5 indicates that 58% of parents express a desire to incorporate physiotherapy into their long-term rehabilitation plan for their child. The study found that 54.9% of parents agreed on the positive long-term impact of physiotherapy. The study revealed that 59.8% of parents expressed overall support and guidance by physiotherapists.

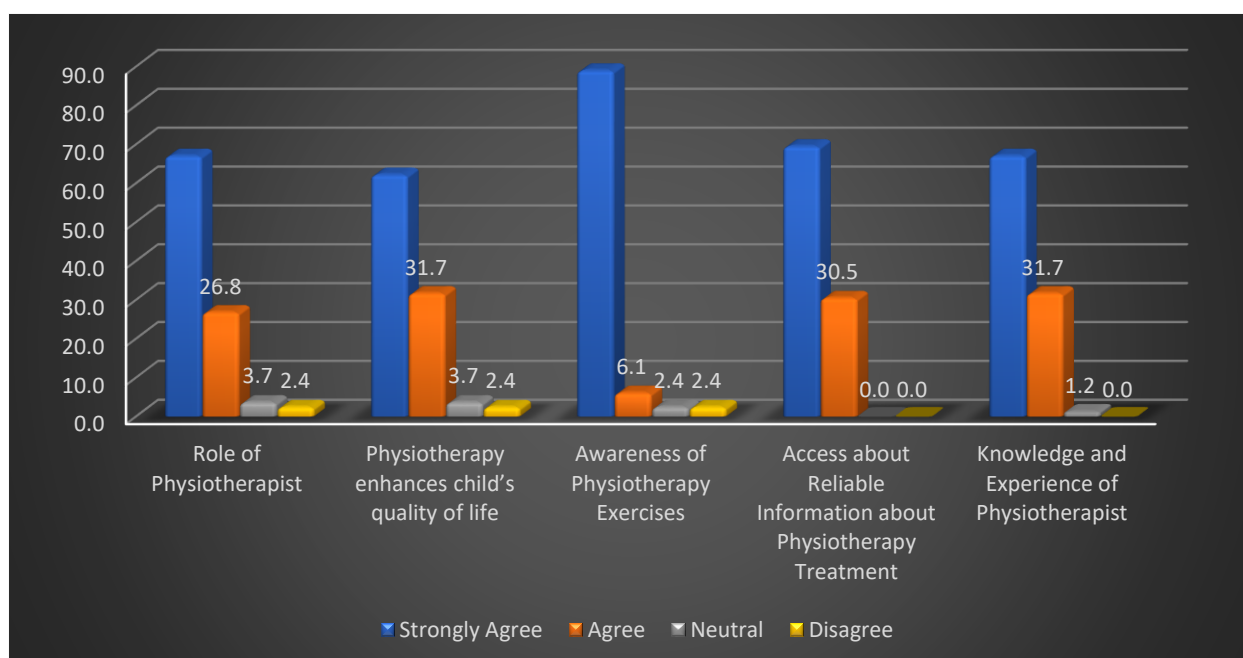


Figure 2: Percentage Distribution of Perception of Physiotherapy Rehabilitation of Parents

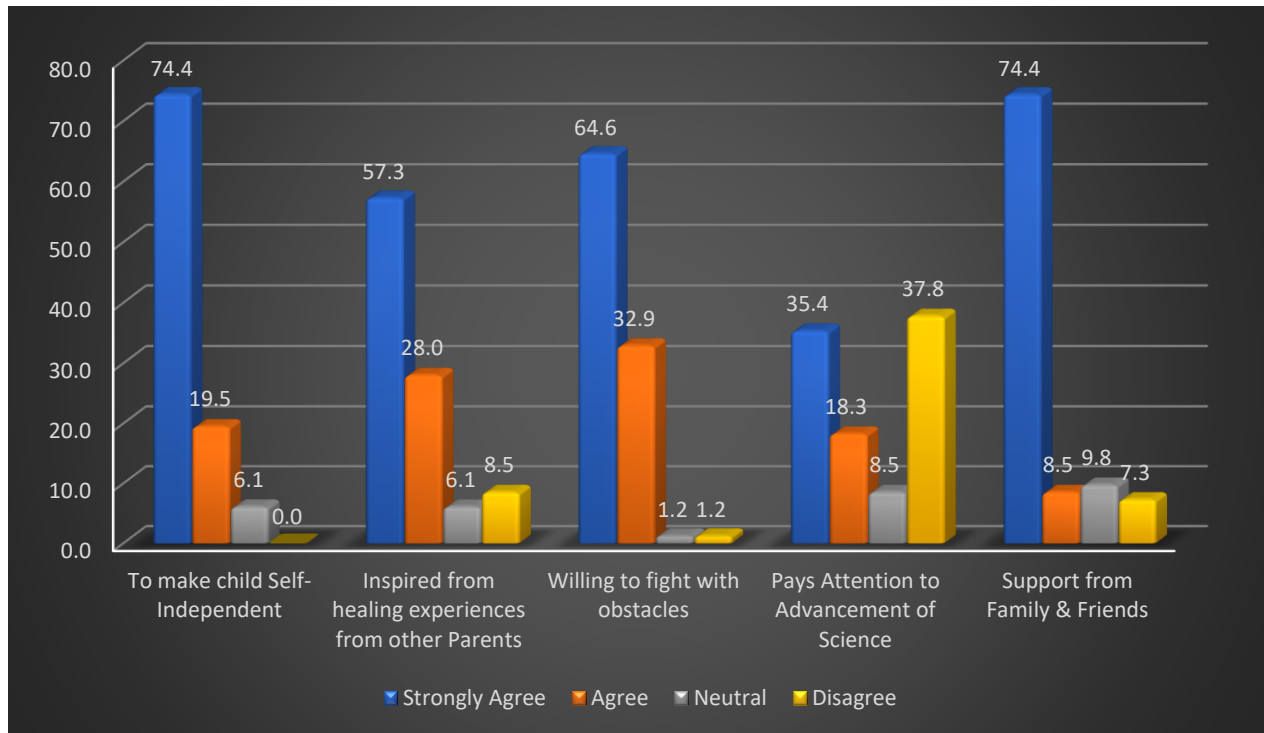


Figure 3: Percentage Distribution of Motivating factors to continue Physiotherapy Treatment

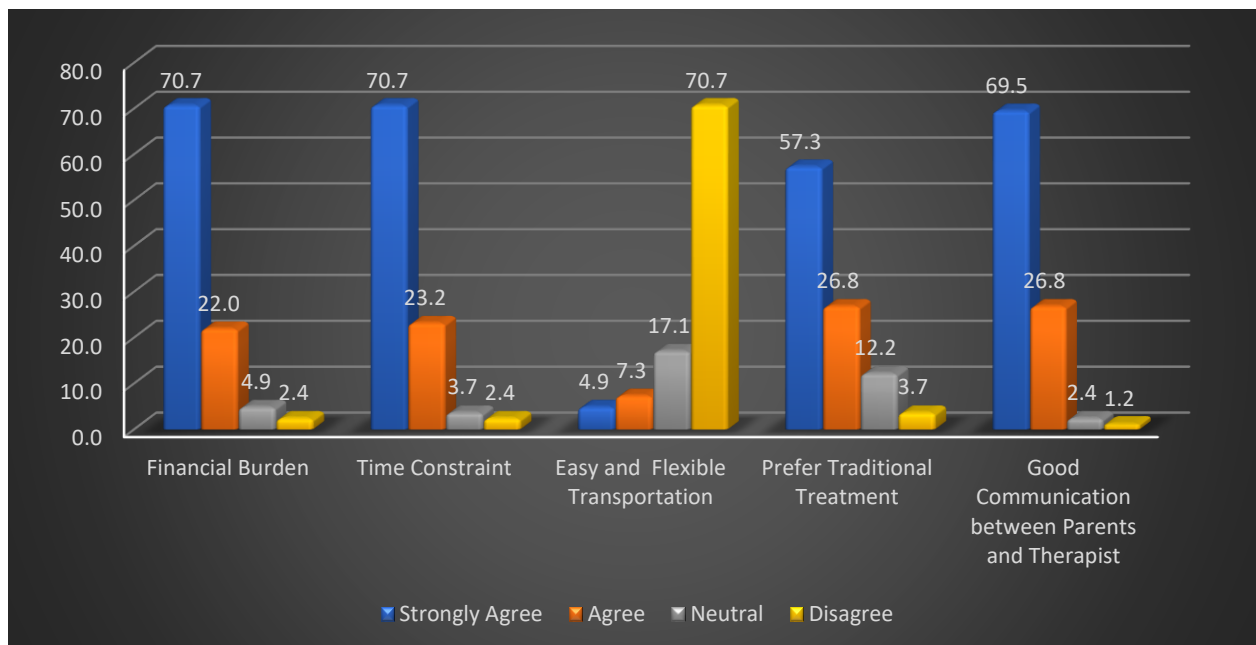


Figure 4: Percentage Distribution of Barriers faced by Parents to Continue Physiotherapy Treatment

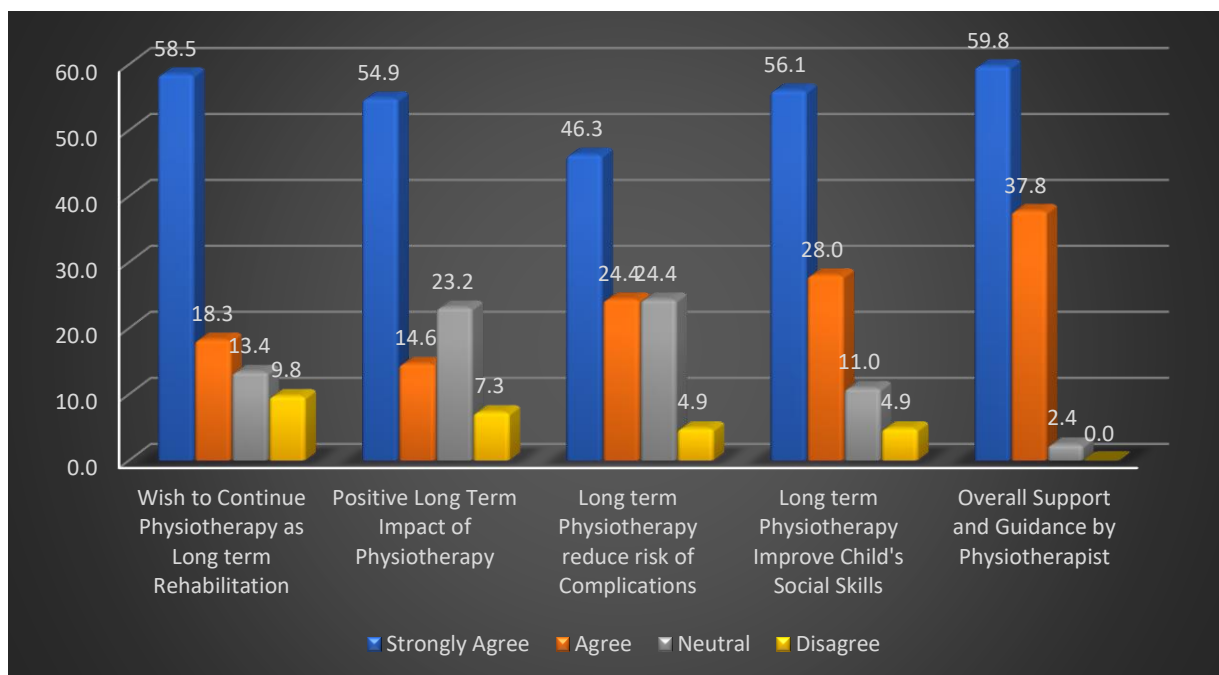


Figure 5: Percentage Distribution of Perception of Physiotherapy Rehabilitation of Parents to Continue for Long Term Rehabilitation

DISCUSSION

The study aimed to explore the perspectives of parents with children having developmental disorders regarding physiotherapy rehabilitation. The findings indicated that, according to parents, physiotherapy not only plays a significant role but also improves the quality of life for children with developmental disorders. A review supporting this result was done by Sakti Prasad Das(2019) which revealed Physiotherapy is a crucial component in the care of cerebral palsy (CP), which covers a range of methods of treatment to enhance the various physiological and functional outcomes ^[6]. The study showed that 67% of parents have faith in the physiotherapist treating their child because they think the professional has the knowledge and expertise enough to provide the most effective therapy possible. A study was done by Astrid Crom et.al (2019) which stated that the therapist contributes to the alliance with knowledge, experience, and communication skills as well as a viewpoint on the child's health and treatment ^[7]. The therapist's skills and knowledge alone will not enable parents to take a more active and empowered role in their child's care ^[7]. Parents should be motivated and given opportunities to actively engage in their child's therapy ^[7].

Gaining insight into the factors that drive parents to sustain their children's physiotherapy treatment is crucial for fostering long-term commitment. This study highlighted several key motivating factors, such as encouraging self-dependence in the child, drawing inspiration from other parents' experiences, a determination to overcome obstacle, and receiving support from family and friends. The study highlighted that 74% of parents consider their primary motivation for seeking physiotherapy to be the desire to make their child self-independent.

A study was done by Lisa Kronsell et.al (2021) which stated that parents also stressed that the degree of independence was based on the children's ability in all facets of their daily lives, including their rehabilitation ^[8]. The study revealed that 74% of parents receive support from their family and friends. A study was done by Erjona Dervishaliaj (2013) which stated that bringing up a kid with developmental impairments may have an adverse effect on the way a family functions as well as the interactions the family has with other families ^[9]. Another factor connected to parental stress is family cohesiveness ^[9]. Low levels of parental stress appear to be predicted by strong family cohesiveness in the homes of children with developmental disabilities ^[9]. Moms report less stress associated with raising children when they feel supported by their families ^[9].

The results highlighted several obstacles that parents could face when it comes to physiotherapy rehabilitation. These obstacles may include financial burden, time constraint, easy and flexible transportation, prefer traditional treatment, good communication between parents and therapist regarding the efficacy of physiotherapy. Addressing those barriers is essential to improve accessibility and guaranteeing parents are knowledgeable supporters of their child's developmental requirements. Optimizing the overall effectiveness of physiotherapy approaches will also benefit from the identification and mitigation of these barriers. The study showed that 70% of parents felt that they lacked convenient and flexible access to transportation for their child to reach the physiotherapy center. A study was done by Ikenna, Chigozie Uchenwoke et al. (2022) which stated that the results of this study show that treatment adherence for patients with cerebral palsy is influenced by several factors, including the patients' economic situation and the relationship they have with their therapists ^[10]. Additionally, the distance to the clinic is a significant component in this relationship ^[10]. The clinic's distance from the patient may also be a significant deterrent to treatment ^[10]. There is additional strain of inadequate transportation networks and terrible roads ^[10].

The study revealed that 69% of parents experience effective communication between themselves and the therapist. Parent-therapist communication is essential because it creates an environment that is favourable for teaching parents about the importance of adopting and upholding healthy behaviours when it comes to their health and treatment ^[10]. The degree to which patients adhered to their treatment appointments was also likely to suffer from poor communication with the healthcare providers ^[10]. A physiotherapist should explain conditions and treatments in detail to patients and involve them in creating goals and plans for their care to foster a positive and healthy patient-therapist relationship ^[10]. The study disclosed that 57% of parents favour traditional treatment methods. A study was done by Saipriya Vajravelu et.al (2019) which stated that according to physiotherapists, every family has a set of traditional or cultural beliefs, regardless of their level of education or income ^[11]. Through their experience, they discovered that parents would be hesitant to continue with their child's treatment if their cultural and religious views were not respected and considered in the treatment plan ^[11]. Physiotherapists in this study, however, felt that, in contrast to the previous study, parents' and family members' attitudes, customs, and feelings for their children frequently got in the way of the therapy ^[11].

As the effect of the family's culture, beliefs, and attitudes is unavoidable, this clearly shows that physiotherapists must comprehend the impact of the family's culture on child-rearing practices and their capacity to provide care to build a successful treatment plan ^[11].

Parents' opinions on physiotherapy as a long-term rehabilitation alternative were investigated, and the results showed a complex picture of both its advantages and disadvantages. Some parents could accept it as a necessary component of their child's growth, while others might be hesitant or worried about how long-lasting such interventions would be. Recognizing and resolving these issues is crucial to promoting a more thorough comprehension of physiotherapy as a practical and efficient long-term rehabilitation approach for children with developmental disorders. The findings from our study indicate that 58% of parents express a desire to incorporate physiotherapy into their long-term rehabilitation plan for their child with a developmental disorder. A study was done by Ikenna, Chigozie Uchenwoke et al. (2022) which stated that making sure that the treatment schedules are purposefully designed to encourage patient adherence is a crucial first step in improving physiotherapy treatment adherence for children with cerebral palsy and other developmental disabilities ^[10]. For the most part, these patients must follow complicated care protocols and long-term rehabilitation programs ^[10]. The results of our study suggest that 54% of parents acknowledge the positive long-term impact of physiotherapy. A study was done by Yi-Nien Chen et.al. (2013) stated that long-term conventional physical therapy can have an impact, even in older children with cerebral palsy ^[12]. The study indicated that 59% of parents perceive the overall support and guidance provided by the physiotherapist during their child's treatment as trustworthy. A study was done by Stavropoulou M et.al. (2020) which stated that for the therapy to be effective and for the child to benefit, the physiotherapist requires the parents' collaboration ^[13]. This is so because the results are strongly influenced by the parents' confidence, support, and active engagement ^[13]. Building and maintaining a pleasant and harmonious relationship with their professional physiotherapist is essential for parents to set a solid basis for their child's therapeutic and supportive role in managing the condition ^[13].

Because of convenience sampling, our study has certain limitations. Firstly, the educational background of the parents was not factored, which could have influenced the outcomes, particularly regarding their attitudes and behaviours. Secondly, the socioeconomic status of the parents was not considered, overlooking a crucial aspect that could impact various aspects of the study, such as access to resources or cultural influences. Additionally, the study was conducted within a confined area, potentially constraining the diversity of participants and circumstances represented, thus limiting the generalizability of the results to a broader population. These limitations highlight the need for future studies to incorporate a more comprehensive approach, considering a broader range of factors to ensure a more representative and insightful analysis.

CONCLUSION

The study concluded that there was a positive response from parents' perceptions of physiotherapy rehabilitation. According to parents, motivating factors included encouraging self-dependence in the child, drawing inspiration from other parents' experiences, a determination to overcome obstacles, and receiving support from family and friends. On the other hand, perceived barriers from parents' perspective encompass financial burden, time constraints, issues with easy and flexible transportation, a preference for traditional treatment, and the significance of parents and therapists having effective communication. The study's findings reveal that 58% of parents express a desire to include physiotherapy in the long-term rehabilitation plan for their child with a developmental disorder.

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