

## RESEARCH REPORT

# A QUALITATIVE ANALYSIS OF PARENTAL PERCEPTIONS ABOUT OCCUPATIONAL THERAPY INTERVENTIONS ON CHILDREN WITH SPECIAL NEEDS

### ABSTRACT

#### AIMS & OBJECTIVES

To assess the perceptions of parents about Occupational Therapy interventions on their children using a self-administered questionnaire.

#### STUDY DESIGN

A Cross-Sectional Study

#### STUDY SETTINGS & PARTICIPANTS

Data was collected from OT departments of primary and tertiary care hospitals of Karachi. Parents of children with special needs enrolled in occupational therapy.

#### RESULTS

A total number of 72 participants were recruited. The information about the children with special needs with mean age of  $7\pm 3.8$  was taken from the parents. Findings reported that a child improved in domains i.e. fine and gross motor, self-behaviour, communication and sensory motor with an average percentage.

#### CONCLUSION

It was concluded that OT is an integral part of rehabilitation that showed favourable treatment outcomes as perceived by parents of children with special needs. Further studies are needed to investigate the role of parents in a child's improvement and level of functionality for effective management.

#### KEYWORDS

Activities, Autism, Rehabilitation, Therapy, Disability, Quality of Life.

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## INTRODUCTION

Occupational therapy (OT) is a therapeutic intervention that is used to promote health by improving skills, competence, and independence in daily living skills<sup>1</sup>. In particular, it is a client-centred health profession that is concerned with enhancing health and well-being through the use of diverse OT interventions<sup>1</sup>. In addition, occupational therapy enhances quality of the life, increasing the latitude of choices and the freedom of the individual with special needs<sup>1-2</sup>. Furthermore, the use of occupational therapy as a treatment has been contrasted with the development of physical medicine and rehabilitation. According to Carol and McCudden, dominance to the physician over the development of occupational therapy profession was given during the 19<sup>th</sup> century with respect to healthcare delivery to gain acceptance as a part of rehabilitation team<sup>3</sup>. Therefore, it is considered as an essential part of rehabilitation<sup>4</sup>.

Consecutively, children with special needs required efficient healthcare services as they are at risk of developing chronic disabilities, developmental, behavioural and emotional conditions<sup>5</sup>. Moreover, there is an immense need of quality service providers and rehabilitation centers in the community to provide services to these children so they can live an independent life<sup>6</sup>. Furthermore, in rehabilitation, primary caregivers or parents are an integral part of the child's occupational therapy as it is crucial to determine parental satisfaction to ensure treatment efficacy. The satisfaction of parents is the most common factor that needs to be considered in the evaluation of healthcare interventions in a special population<sup>7</sup>. For this reason, occupational therapists promote development, independence and personal growth of the children. Therefore, it is essential for the parents to understand and perceive the changes in their children before and after occupational therapy<sup>8</sup>. Moreover, the parents' perception is highly dependent on the therapist's communication to ensure effective understanding. This may limit the effectiveness of therapy provision considering parent's needs and expectations to their child's treatment<sup>9</sup>. In addition, parent satisfaction in occupational therapy treatment has an overall effect on the improvement of the child, the enjoyment of the sessions, group and individual one to one session, home programmes and school visits. Increased satisfaction of parents correlates with the positive partnership between the occupational therapy service providers and parents. Thus, it is necessary to evaluate the parent satisfaction and perception for the formulation of better treatment strategies<sup>10</sup>. Unfortunately, due to scarcity of studies, no study has been conducted in Pakistan to determine parental role, and the perception and attitudes towards their child's treatment. Therefore, this study aims to determine the parental perception of occupational therapy intervention on the children, which will lead the primary caregiver to enhance the treatment protocol for effective treatment strategies.

The current science practice has led the spectrum of healthcare towards a variety of interventions that aid a person to live an independent life, thereby minimising the disability<sup>11</sup>. In the field of rehabilitation, occupational therapy interventions are considered to have a variety of ways to help children with disabilities. The targeted interventions used in the field are incorporated in terms of children. The involvement of a parent or a guardian is

extremely necessary to oversee and regulate the flow of treatment<sup>12</sup>. Moreover, families that are subjected to challenges are required to boost the confidence in accepting and dealing with specially-able children to reduce distress. Therefore, it is highly essential that their participation in therapies is encouraged as it grants a sense of emotional stability to both the child and the parents, and as a result, strengthens the therapeutic advancement of their child<sup>13</sup>. In a culture-run society, what individuals need the most is awareness and acceptance. There is also a need of debunking false assumptions regarding healthcare service providers that create misunderstandings regarding therapists. For better development of a child, the span of knowledge the parents have monitors the flow of a therapeutic treatment and might be helpful for a schema regarding treatment into a healthier environment and sense of trust. Kolehmainen et al illustrated the willingness of parental involvement and steered the duration of the therapies; the mother's concerns were considered and dealt with by the therapists, and the progress the child showed at home helped the therapist to plan the treatment/maneuver accordingly<sup>14</sup>.

Thus, parent's selection, identification and implementation of treatment plan influences the outcomes of therapy in children with special needs<sup>15</sup>. On the other hand, Mire et al (2015) predicted the use of various treatment categories, parent perceptions, and use of a treatment category, was slightly stronger than child- and family-specific factors<sup>16</sup>. The findings contributed in highlighting the need of parents' understanding regarding treatment selection and decision-making<sup>15-16</sup>. Moreover, it is demonstrated that the degree of satisfaction of the parents of children who undergo occupational therapy intervention is considered an important factor to reduce their anxiety and improve their satisfaction regarding their child's care<sup>17</sup>. Moreover, it was indicated that the most significant attribute i.e. exposure of experiences, helped parents to expand their own horizon of perception regarding physical and occupational therapy<sup>18</sup>. In addition, it encouraged other community members to create goal-settings and progress-monitoring of their children subjected to occupational therapy<sup>19</sup>. Another study reviewed the understudied literature of parent's participation and engagement in child and family mental health treatment, was mainly concerned with the parent's engagement participation and its outcome on the treatment. It was concluded that whether the parent's participation engagement has overlay with attendance engagement has higher rates of overlap with parent attendance<sup>20</sup>.

## METHODOLOGY

### Study Design

A cross-sectional study was conducted.

### Study Setting

Data was collected from the OT departments of tertiary care hospitals of Karachi i.e. Dr. Ziauddin University Hospital, Liaquat National Hospital (LNH) and Institute of Physical Medicine and Rehabilitation (IPM&R).

### Duration of Study

6 months.

**Sampling Technique**

Non-Probability Convenience Sampling Technique.

**Target Population**

Parents of children with special needs enrolled in OT.

**Sample Size**

The sample size was calculated using online software open EPI, open source calculator version 3.01. Considering 100000 population with 50% of anticipated frequency, therefore a sample of 72 was calculated at 95% Confidence Interval and 8% bound of error.

**Sample Selection****Inclusion Criteria**

Parents/guardian of children aged 6-15 years with special needs enrolled in rehabilitation for  $\geq 6$  months were included.

**Exclusion Criteria**

Parents/guardian of children aged  $\leq 6$  or  $\geq 15$  years with special needs enrolled in rehabilitation for  $\leq 6$  months or those who refuse to participate were excluded.

**Data Collection Procedure**

Data was collected from the rehabilitation department of primary and tertiary care hospitals. Parents of children with special needs were approached and recruited as a sample using convenience sampling technique.

**Data Analysis Strategy**

Data was entered and analysed on SPSS (Statistical Package for Social Sciences) version 20. Participant's demographic details will be represented through descriptive statistics, whereas participant's responses represented through frequency and percentage.

**Ethical Considerations**

The researcher provided complete information about the study to each and every participant before starting the study. The information procured from the participants was kept as confidential information. Every participant was given full rights of withdrawing at any time during the study. Firstly, an informed consent was given for volunteer participation. Subsequent to the consent, a self-administered questionnaire was provided to answer the questions regarding the impact of OT intervention on their children according to their perception was provided to the participants to assure their confidentiality and rights, moreover details regarding the study were also provided to ensure their participation.

**Data Collection Tools**

Self-administered questionnaire comprising of 14 questions was used in the study. The questionnaire was divided into Fine Motor Skills, Gross Motor Skills, Self-behaviour, Communication and Sensory Motor Skills. Each domain consisted of 3 questions using 'Yes', 'No' and 'Sometimes' options, except for Q14 that consisted of 10 mm scale to rate the child's improvement.

**RESULTS**

A total number of 72 participants voluntarily participated in the study, including 48 males and 24 females. The information about the children with special needs with mean age of  $7\pm 3.8$  was taken from the primary caregivers, in particular parents. The detailed description is demon-

strated in Table-1.

<b>Table-1 Demographic Characteristics</b>	
<b>Number of Participants</b>	
Parents	n = 72
Children	n = 72
Gender	Male (n = 48) Female (n = 24)
Age	$7\pm 3.8$
<b>Diagnosis</b>	
Cerebral Palsy	20 (28%)
Autism	12 (23%)
Delayed Milestones	12(23%)
Down Syndrome	2 (5%)
ADHD	9 (12%)
Other	17 (23%)
Duration of Therapy/Session	$43\pm 11.3$
No. of session/week	$2.1\pm 0.6$

In the domain of fine motor skills, majority of parents (34%) respond that their child is able to perform fine motor movements with appropriate gripping, whereas 32% parents reported that their child can perform well coordinated movements as shown in Figure-1.

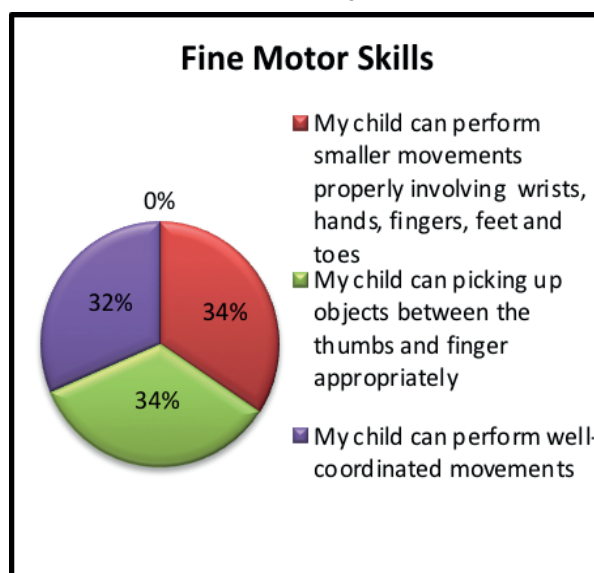


Figure.1 Shows fine motor skills of children

On an average, 56% of the parents reported that their child can adequately balance in different alternate positions, whereas 44% reported that their children can perform ADL's adequately as shown in Figure-2.

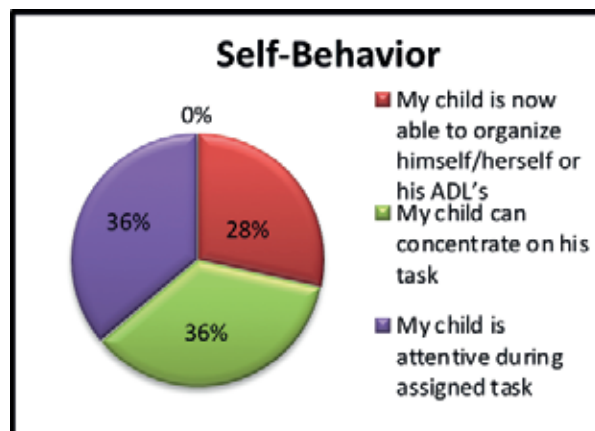


Figure.2 Shows self-behaviour of children

However, in comparison to other domains, only 28% parents reported their child being able to organise him/her while 36% reported that the child is focused and attentive in the assigned task as shown in Figure-3.

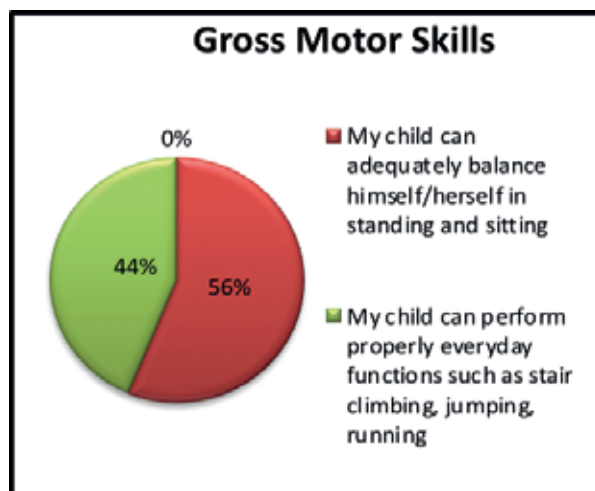


Figure.3 Shows gross motor skills of children

The findings also showed that 32% to 34% participants can effectively communicate and get along with others as well as shown in Figure-4.

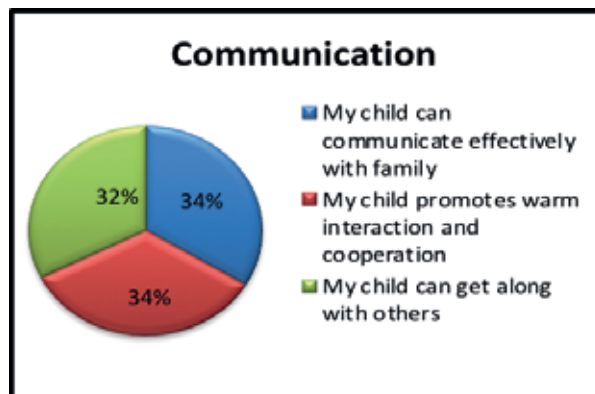


Figure.4 Shows communication of children

In the last domain, high percentages i.e. 51% and 49% showed that parents reported improved motor function and cognition of participants as shown in Figure-5.

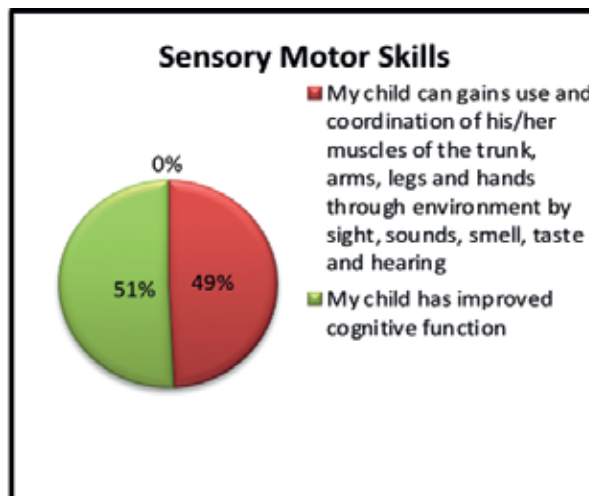


Figure.5 Shows sensory motors skills of children

### DISCUSSION

The results of the study reported that in fine motor domain, 34% of children have improved in movements of wrist, fingers, hand, feet and toes and holding small objects between their fingers and thumb while, 56% have improved their balance during sitting and standing. Whilst, lowest percentages reported in self-behaviours and self-organisation skills i.e. only 28% of the children have shown improvement in organising themselves in activities of daily life. Furthermore, parents reported greater improvement in sensory motor skills domain i.e. 49% to 51% of children have shown improvement in coordination and cognitive skills. Therefore, it is indicated that parents have positive perception regarding occupational therapy intervention in their children suffering from different special conditions. Children who were receiving long duration of sessions have shown more improvements as compared to those who received less duration of sessions. Therefore, the overall rating of parental perception was found to be 6.17, which revealed moderate improvement. To the best of the author's knowledge, this study is the first to be conducted in Pakistan to determine parental perception in Occupational Therapy interventions. Subsequent to this, parental participation in OT interventions has shifted towards a family-centred approach around the world, thereby highlighting the crucial role of parents in rehabilitation. Moreover, there is some evidence that ascertain the intrinsic and extrinsic factors as well as cultural influences on child's therapy and parental participation that may lead to improvements in self-efficacy and occupational performance. Therefore, parental participation is highly encouraged in rehabilitation settings to understand the aspects of management while also training them for home programming in order to achieve healthier perception towards child care.

Despite our results, a study conducted by Russel et

al compared intensive Neurodevelopmental Therapy with Occupational therapy services on hands of children with Cerebral Palsy showed no difference on quality of hand function, upper extremity movement and parent's perception of the child's hand function activities when children are receiving therapy. Moreover, findings of the study showed no evidence of immediate or short-medium term benefits of treatment. This raises the need that parents must be involved in therapy sessions to identify their child's needs and determine the improvement with respect to therapeutic management<sup>21</sup>.

It has been suggested by number of references that collaborative work of parents and therapists in identifying child needs and implementing a treatment plan would be beneficial for favourable health-related outcomes. Since the family serves as a unique entity in patient care, their assistance is valuable for effective recovery<sup>20</sup>. Moreover, it may also be helpful to design unique aims and goals for the child accordingly as per the understanding of therapists and parents. Therefore, involvement of parents in formulating therapeutic strategies will serve as an important aspect in care of the child, whilst improving occupational performance. Despite of this fact, family-centred practices are difficult to implement in most of the cases that may occur due to lack of parental knowledge, attitude and certain beliefs related to child care and development, in particular with disabilities<sup>26</sup>. Although, therapists emphasised on this approach to gain improvement in treatment goals and are designing specific home programmes involving both the child and parent participation<sup>18-20</sup>. However, lack of parent's involvement in therapy may lead to affect outcomes of the intervention if not followed properly. This leads to a communication gap between parents and therapists and may affect perception towards intervention.

In another study, the mother's perception regarding influence of PT and OT services on their care giving competency was assessed. It was found that parents of children with disabilities have better care giving capabilities towards their children<sup>22</sup>. Also, it promotes positive support from the therapists to their children associated with the understanding and treatment efficacy. In contrast, Kruijsen-Terpestra et al (2014) suggested that understanding the experiences of parents with their child's intervention might help to meet the needs of parents and subsequently get them engaged in their child's intervention in relation to the physical and/or occupational therapy of their child in a rehabilitation and acute care setting.<sup>23</sup> While in most of the studies the role of the parent in child's intervention was not well explained, that makes it more difficult to interpret the outcomes in relation to the specific aspects of therapy and intervention and degree of parental involvement. Furthermore, it was concluded that the parent's involvement and perception is essential for a child's improvement and for the smooth conduction of the therapy programme<sup>16</sup>. In particular, the number of

approaches have encouraged parent training for effective home care and treatment outcomes that will be operative for the growing realisation regarding their roles in child management<sup>20</sup>. Studies have also concluded that parent training empowers families, within a culturally sensitive framework<sup>26</sup>. Moreover, this approach has the potential to optimise the effectiveness of therapy goals. Therefore, parent training model should be studied and implemented in a variety of contexts that would be helpful to improve the practice, perceptions, experiences, and effectiveness of OT interventions and practice in patients.

However, our study showed certain limitations including time constraints, scarcity of researches as well as parental unwillingness to participate; therefore, the study was conducted with a relatively small sample size. Subsequently, it is suggested that parents' perception should be taken in to consideration for effective management. Moreover, further studies are suggested to investigate the role of parents in child's improvement and level of functionality for favourable outcomes.

## CONCLUSION

It was concluded that Occupational Therapy is an integral part of rehabilitation that showed favourable treatment outcomes as perceived by parents of children with special needs. Moreover, further studies are suggested to investigate the role of parents in child's improvement and level of functionality for effective management.

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