

تقييم فعالية برنامج العلاج الطبيعي للأطفال ذوي الإعاقة: دراسة تجريبية

Evaluation Of Physiotherapy Services Provided to Children in Special Education Centers In The City Of Najran From The Parents' Perspective

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الملخص:

يهدف هذا البحث إلى تقييم فعالية برنامج العلاج الطبيعي للأطفال ذوي الإعاقة. يهدف البرنامج إلى تحسين الوظائف الحركية والتواصل الاجتماعي للأطفال. تم إجراء دراسة تجريبية على 30 طفلاً من ذوي الإعاقة. تم تقسيم الأطفال عشوائياً إلى مجموعتين: المجموعة التجريبية التي تلقت برنامج العلاج الطبيعي، والمجموعة الضابطة التي تلقت رعاية تقليدية. تم استخدام مجموعة من الأدوات لتقييم الوظائف الحركية والتواصل الاجتماعي للأطفال، بما في ذلك مقياس تقييم الوظائف الحركية للأطفال. تم قياس تقييم التواصل الاجتماعي للأطفال. أظهرت النتائج أن برنامج العلاج الطبيعي كان فعالاً في تحسين الوظائف الحركية والتواصل الاجتماعي للأطفال في المجموعة التجريبية مقارنةً بالمجموعة الضابطة. يدعم هذا البحث فعالية برنامج العلاج الطبيعي للأطفال ذوي الإعاقة. يمكن استخدام البرنامج لتحسين الوظائف الحركية والتواصل الاجتماعي للأطفال.

الكلمات المفتاحية: العلاج الطبيعي، الإعاقة، الوظائف الحركية، التواصل الاجتماعي

Abstract:

This study aims to evaluate the effectiveness of a physical therapy program for children with disabilities. The program aims to improve the motor functions and social communication of children.

A pilot study was conducted on 30 children with disabilities. The children were randomly divided into two groups: the experimental group that received the physical therapy program, and the control group that received traditional care.

A set of tools was used to assess the motor functions and social communication of the children, including:

The Pediatric Motor Function Assessment Scale

The Children's Communication Assessment Scale

The results showed that the physical therapy program was effective in improving the motor functions and social communication of the children in the experimental group compared to the control group.

This study supports the effectiveness of a physical therapy program for children with disabilities. The program can be used to improve the motor functions and social communication of children.

Keywords: Physical therapy, disability, motor functions, social communication

Introduction:

Physiotherapy is one of the basic supportive health professions that contribute to the prevention and treatment of physical disability, growth disorders, movement functions and improving the quality of life. Physiotherapists achieve these goals through an advanced understanding of the basics of body movement and how it works, by diagnosing the symptoms of disease and injury, and then using several treatment methods for patients, such as physical therapy with exercises, thermal, water, electrical, light, manual and respiratory therapy, and other conditions for which physical therapy is an integral part of the integrated treatment plan (Pountney, 2007).

Physical therapy aims to treat people with motor disabilities by developing their motor abilities through preventive, therapeutic, and rehabilitative programs to facilitate their integration and participation in the daily life of society.

Most physiotherapy services are usually provided in specialized centers or in special education schools or therapeutic kindergartens/nurseries in one of the following forms:

1. Individual treatment: i.e. providing individual treatment for the child during the school year.
2. Group therapy: It is the treatment given to a group of students and is concerned with achieving common goals, in which the educators and therapists participate.
3. Classroom therapy: This is done by participating in a joint project for the whole class, where the physiotherapist cooperates with other therapists such as occupational therapists and speech and language specialists.
4. Treatment in integration schools.

This study comes to demonstrate the awareness of parents of the effectiveness and obstacles of physiotherapy services provided to their children with motor disabilities using a scientific and objective research methodology that contributes to the statement of the extent to which parents are satisfied with the effectiveness of the physiotherapy programs provided and the extent to which their children benefit, progress and development (Odman, 2007).

This study also contributes to showing the extent to which parents are aware of these treatment programs and their participation in their implementation (Navarro, 2015). And benefit from the feedback provided by the families of people with disabilities and physiotherapists, which may contribute to increasing the effective participation among them (Ibedat, 2009).

It is expected that this study will contribute to increasing the effectiveness of physiotherapy services provided to children with disabilities, as well as clarifying the obstacles to physiotherapy services from the point of view of parents (Hazmy, 2009).

The problem of study:

The Study of parent's perceptions of the effectiveness of physiotherapy services provided to their children with motor disabilities, and knowing their views on the obstacles to providing these services are necessary for effective work with them as partners in the programs offered to their children, as well as knowing their satisfaction with them, This reflects positively on improving the services provided to children with motor disabilities to develop their motor performance or on children with other disabilities who suffer from muscle weakness and the mutual feedback between families of people with disabilities and physiotherapists

contributes to the enrichment and continuity of the relationship between them, which increases effective participation.

Also, clarifying the obstacles of physiotherapy services from the point of view of parents would contribute to finding solutions to overcome these obstacles based on facilitating the provision of better treatment services for people with motor, mental, hearing and visual disabilities.

Through the foregoing, the problem of this study is to identify the views of parents of children with disabilities who need physiotherapy services in Najran about the physiotherapy services programs provided to their children and their obstacles. Specifically, the current study seeks to answer the following questions, the current study seeks to answer the following questions:

1. What is the level of evaluation of parents of children with disabilities in the Najran region of the effectiveness of physiotherapy services provided to their children?
2. Are there statistically significant differences at the significance level ($\alpha \leq 0.05$) in the evaluation of parents of children with disabilities in the Najran region for the effectiveness of physiotherapy services due to the variables of sex, occupation, and educational qualification of parents, and to the variables of children with motor disabilities: gender, disability category and age?

Are there statistically significant differences at the significance level ($\alpha \leq 0.05$) in the assessment of parents of children with disabilities in the Najran region for the obstacles to treatment services due to the variables of sex, profession, and educational qualification of parents, and to the variables of children with motor disabilities: gender, disability category and age.

The importance of the study:

This study derives its importance from the importance of the subject itself as one of the important subjects in the fields of physical therapy, and can benefit from this study

1. Parents draw their attention to the importance of physiotherapy programs offered to their children.
2. Evaluation of parents of students with disabilities to follow up on, improve and develop the offered programs.
3. Physiotherapists, especially those working in special education schools in Najran, to work on improving their performance in the light of the assessment of parents of students with disabilities of the programs offered to their children.
4. Researchers and those interested in the subject of the study to view its results as an enrichment of specialized literature on the subject of the study.

Objectives of the study:

1. Finding out the level of evaluation of parents of children with disabilities in the Najran region for the effectiveness of physiotherapy services provided to their children.
2. To know the level of evaluation of parents of children with motor disabilities in the Najran region for the obstacles to providing physiotherapy services to their children.

Finding out whether there are statistically significant differences in the assessment of parents of children with disabilities in the Najran region for the effectiveness of physiotherapy services due to the variables of gender, occupation, and educational qualification of parents, and to the variables of children with motor disabilities: gender, disability category, and age.

3. Finding out whether there are statistically significant differences in the evaluation of parents of children with disabilities in the Najran region for the obstacles to treatment services due to the variables of gender, occupation, and educational qualification of parents, and to the variables of children with motor disabilities: gender, disability category and age.

Study Limitations:

The results of this study are determined by the following set of factors:

1. Objective limits: The study is limited to the subject of "parents' perception of the effectiveness of physiotherapy services provided to children with disabilities in Najran region and the obstacles of these services.
2. Spatial limits: The study is limited to special education centers and schools in the Najran region that deal with children with disabilities.
3. Time limits: the study was conducted in the first semester of the academic year 2022-2023.

Human limits: The study population consists of parents of children with disabilities who need physiotherapy services in Najran region.

Chapter Second: Literature Review and previous studies

Physiotherapy:

Physiotherapy is a profession that provides services to individuals to develop functional capabilities, motor performance, which contributes to raising the quality of life and motivation through preventive and curative programs and physical, psychological rehabilitation, emotional, and social well-being through the interaction between service recipients, family, community, and environment (Michaud, 2004).

Physiotherapy in this study is the services provided to people with disabilities who need physiotherapy services, whether in special education schools, regular education, or for children integrated in therapeutic nurseries, through sessions provided by physiotherapists; according to the capabilities and needs of students with disabilities.

Physiotherapy:

The concept of physiotherapy

It is one of the modern medical specialties, but by using nature's components of water, sun and air as a treatment, as it is one of the very old treatments that were used to combat diseases in humans and also means the use of multiple means and techniques from a natural outlet developed in proportion to the functional structural defect that occurs after

injury or disability by using natural materials such as heat, water, electricity, movement, and others, after rationing them to suit the nature of each case. (Kapalka, 2004)

Advantages of physiotherapy

- It uses natural means to cause no side effects.
- Maintains the fitness of the body's vital devices.
- It has multi-purpose roles and includes the prevention of complications and treatment of injuries. (Gnaulati, 2008)

Effects and benefits of physiotherapy:

It is directly related to how and precisely to choose the most appropriate methods and techniques depending on the situation according to an appropriate treatment system, for example, adapting activities to improve accurate skills and self-help is one of the basic considerations to be taken into account in any motor education program, This ultimately helps to provide learning activities that enable children to participate in and develop through. Here are some activities that help to achieve better motor growth for a child with special needs as follows:

1. Doing physical activities on a daily basis.
2. Alternate activities that require effort with ones that require relaxation.
3. Take care of all manifestations of motor activities in all possible movements.
4. The use of various physical conditions in motor activities during their performance.
5. Use sensory and verbal indoctrination in the performance of motor activities when necessary (Haldy & Hack, 1995)

The effect of physiotherapy can be summed up as follows:

1. Strengthening the nutrition of body tissues and stimulating the functions of the internal organs.
2. Activate and raise the body's defensive ability.
3. Regulating the internal secretions of the glands, as it affects the nervous system and the mechanism of action of hormones.
4. Activating the process of adaptation to external effects (Edelman, 2011)

Fields of application of physiotherapy

First: Injuries and diseases of the musculoskeletal system:

Diseases and injuries of the muscles, bones, ligaments and joint structures, as it helps relieve pain resulting from muscle contractions, and works on flexibility and strengthening of joints and muscles and restore their function to the normal state.

Second: Diseases of the circulatory system:

Physiotherapy is used to activate the circulatory system, to increase blood flow to accelerate healing in injuries and to rehabilitate in cases of heart disease, vascular diseases, and when training on effort in order to reduce the risk of complications. Physiotherapy is used to rehabilitate the patient on a measured effort that facilitates neuromuscular contact, which leads to raising the functional efficiency of the nerve in the delicate muscular work. (Hijazi, 2002)

Basic principles of physiotherapy exercises for muscle strengthening:

1. Static exercises (Iso-metric)
2. Movement exercises (Iso-tonic)
3. Isokinetic exercises (Iso-kinetic). (Riyadh and Najmi, 1999)

Static and motor exercises are usually applied together and can be applied together within a training program, as each type of muscle fiber in each muscle responds to a specific type of muscle effort. Usually, static exercises are performed first, then kinetic, whose difficulty ranges from free exercises to exercises using resistances. Types of resistance can be used, including:

1. Terrestrial gravity.
2. Free weights.
3. The resistance of the natural therapist itself through which it can determine the amount of resistance required against muscles and gradually rise to the level required without complications.

Iso-tonic exercises:

These exercises include:

1. It facilitates nervous contact between muscles due to the length of muscles corresponding to working muscles. Muscle contraction, even if it is one-fifth (1/5) of what the muscle, pushes intravenous blood strongly towards the heart, which helps increase circulation.
2. Increase blood access to tissue as well as speed of disposal of metabolic waste.
3. Improve blood circulation, increase muscle nutrition and facilitate heart action as it is the second driving force.
4. Improves neuromuscular compatibility and increases the speed of muscle contraction and muscle fiber. It works on muscle contraction causing its relaxation which increases blood circulation. (Egilson, 2012)

Isokinetic exercises

Among the most important exercises that branch out from isokinetic are the following:

1. Cardiovascular endurance exercises (Aerobic exercises)

It is an exercise that is practiced for a long time and intensity, which leads to an increase in the energy potential of the circulatory system.

2. Aerobic exercise

Aerobic exercise is an increase in muscle energy utilization through an exercise training program, which improves the muscle's ability to use energy as a direct result of increased levels of oxidative enzymes in the muscle, as well as increased mitochondrial density and volume and increased capillary supply of muscle fibers.

The specifications of aerobic exercises are as follows:

1. Training based on practicing exercises of sufficient intensity, duration, and frequency.
2. Training produces cardiovascular and muscular conditioning, and is reflected in the individual's endurance.
3. Training for a specific sport or event that depends on the principle of allocation and specification so that it improves the individual's performance in a specific task and does not necessarily improve it in other tasks.

(American College of Sport Medicine, 2000)

How to consume energy during muscular activity

Muscle needs energy in each of the following steps:

1. Repeating the bending of the transverse bridges to cause a reasonable sliding and its repetition requires separating the link between the transverse bridge and actin, and then re-attaching it to a new site on the actin filament that is closer to the Z line. These separation and re-attachment processes require the consumption of one molecule of ATP.
2. Re-pumping calcium ions towards the stores in the endoplasmic reticulum when the stimulus subsides before the occurrence of muscle relaxation, so that this process requires one molecule of energy. (Bailey, 2009)

In addition to other sources of energy, including:

1. Creatine Phosphate: is a quick source of energy for the muscle, sufficient for only seconds, and during rest, the CP concentration becomes five times the concentration of ATP, which is the main source of energy during the first 30

seconds of exercise.

2. Glycogen: Glycogen is broken down by multiple enzymes and gives glucose sugar, which is oxidized and hydrolyzed to give 38 ATP in the process of oxidative phosphorylation. It provides the muscle with energy from 5-10 minutes of exercise (Sykanda, Levitt, 1982).

Sporting activities can be classified into: medium, heavy or light by determining the amount of energy discharge. The amount of energy spent in any activity is affected by mechanical efficiency and body mass. The factors that affect both walking, running and terrain, step length, air resistance, and the amount of energy disposal can be easily determined by measuring breathing or heartbeat.

The energy expended is calculated by measuring the amount of oxygen consumed and the units used to measure energy consumption are calories, which is a measure that expresses the energy value of food and is defined as the amount of heat required to raise 1 kilogram (kg) of water 1 degree Celsius. Calories (kilocalories) can be expressed by the amount of oxygen consumed, so that every five kilocalories equals approximately one liter of the amount of oxygen consumed (5) kilocalories = 1 O₂ liter). (Ibedat, 2009)

Physiotherapy uses with categories with different special needs: Physiotherapy and cerebral palsy

Cerebral palsy: Cerebral palsy is: damage to brain cells during the period between pregnancy and 3-5 years and the condition of each child varies depending on the amount and function of the damaged cells. We find spastic paralysis which means that the muscle nerve tone increases significantly and its types: quadriplegic, bilateral, triple, quadriplegic or hemiplegic and depends on the number of limbs. The intensive physiotherapy for children with cerebral palsy includes many different types of sessions as well as the following:

First: Space suit: where the main part of intensive treatment is in space suit, because of its ability to treat motor delay, distortion of textures, muscle weakness, increased reactionary nutrition of the brain, and all problems of cerebral palsy.

Second: Muscle Strengthening Unit This unit aims to strengthen muscles in a precise way that prevents an increase in muscle tone and muscle tension that increases with traditional muscle strengthening methods

during sessions while eliminating the effect of ground gravity on muscles. (Sykanda, Levitt, 1982).

Third: Treatment with total and partial weight loading, which is two types: constant and dynamic, so that it aims to teach the child the required motor skills (sitting, standing, doing) that for the fixed type and teach the child to walk and for the dynamic type which helps to increase motor control by (Motor learning-inverse myotatic reflex stimulation).

Fourth: Hydrotherapy: Water with its properties, helps to treat motor delays, as the bonding forces between the water molecules provide sufficient resistance to strengthen the muscles. In addition, they provide adequate reinforcement to perform motor skills such as sitting and walking. The waterproof buoyancy feature also performs a kind of partial loading during treatment. Water helps to increase muscle flexibility in cases of contractile cerebral palsy and cases of muscle weakness in an autistic child.

Fifth: Balance programs, where the majority of children with motor disabilities suffer from partial or total weakness of balance as a result of impaired sensations in the joints and muscles, or as a result of damage to the balance centers in the brain. The balance program relies on stimulating the vestibular system, as well as developing the child's reflexes. This is done through many devices that treat muscle stiffness as a result of loss of central nervous system control (motor cortex on the nervous system).

Sixth: Hippo therapy, hippo therapy is designed to simulate a natural horse to help develop different body senses, reduce muscle tension, improve the child's basic and accurate functional skills and alert the spiral or vestibular system. (Ibedat, 2008)

Physiotherapy and autism disorder:

Autism: Autism disorder is manifested in children's inability to belong to individuals and situations from the beginning of their lives and is defined as a childhood disorder, affecting the development of the brain or mind, its symptoms appear to be different across ages, some symptoms appear only late, and others disappear over time. Thus, the change can be dramatic in autism so that it affects development, and in turn the development affects autism.

The role of physiotherapy in autism:

Kinesthetic therapy contributes to the treatment and rehabilitation of an autistic child, regardless of the extent of his physical abilities, in several points:

First, many studies suggest that muscle arousal plays a role in exciting the nervous system, which positively reflects on the activation of different activities in the child.

Second: The child has sensory problems with his or her environment. Therefore, the practice of physical activities in general will help him or her to identify the dimensions, altitudes, distance, space and how to deal with them. Thus, gradually, the double relationship is such that exercises make it easier for him or her to discover these dimensions, relationships and dimensions will make movement easier for the child, thereby increasing his or her balanced mobility.

In most cases of autism, it is preferable to have group sessions so that it opens up more to its outside world, and group therapy is a good way to

detect and gradually try to treat a child's negatives. A regular physical exercise program is the best way to detect, modify and guide much of the participant's behavior in a fun and positive physical and educational environment away from direct criticism of the behavior itself. In addition to providing many situations, they require many different responses, improving the growth of intellectual abilities and dynamic receptors. The sensory centers in muscles, tendons and joints play their role in guiding the required movements or contractions to the extent required and the extent and timing required. Parents and teachers should therefore seriously consider including in the individual education program (designed for each individual's situation). The educator should not rely on the hypothesis that the student receives a sufficient amount of motor exercises during leisure during unplanned movements. (Kern, Koegel Dyer, Blew, Fenton, 1982)

Physiotherapy and hearing disabilityHearing disability:

The term "auditory disability" indicates that there is a problem that may range in severity from simple to very severe and negatively affect a student's educational performance. The levels of hearing loss have been distinguished as follows:

Level 1: Hearing loss of 54-35 decibels, The child in this classification does not require a special class or a private school but requires special hearing and speech assistance.

Level 2: Hearing loss from 55-69 decibels, the child according to this classification needs a special class or a private school, as well as assistance in speech, hearing and language.

Level 3: Hearing loss from 70-89 decibels, the child in this classification needs a special class or private school, and he also needs help with speech, hearing, language, and the academic side.

Level 4: Hearing loss of 90 decibels or more, the child needs a special class or private school, in addition to verbal, auditory, linguistic and educational assistance. (Edelman, 2011)

The physiotherapist has unique training skills in neuroscience, anatomy, activity and environmental analysis, using sensory integration in addressing sensory and motor problems in children with hearing disabilities. Treatment services are provided through individual treatment sessions in hospitals or outpatient clinics and therapeutic intervention involves the use of skills and activities for sensory and motor treatment, including participation in activities that provide increased opportunities for touching and movement, Like hanging devices, hanging board, or jumping off the platform, tactile activities, such as using a paintbrush and massage, as well as activities that reinforce motor planning. (Schaaf, Miller & 2005).

Important roles of physiotherapy in hearing disability include:

1. Restores the normal physiological function of the muscles.
2. Stimulates the spiral system (responsible for equilibrium in movement and attention in the mental aspects).
3. It improves balance and neuromuscular coordination.
4. Training the patient to use his strong capabilities and capabilities to compensate for his weak capabilities.
5. Speech improves by strengthening the muscles for breathing, and also by increasing movement, and strengthening the muscles for speech such as the lips, tongue and palate. (Sykandal, Levitt, 1982)

Physiotherapy and visual disability:

Visual disability:

The pedagogical concept of visual impairment indicates that it is the visually impaired child who prevents his or her learning by ordinary means. Therefore, he or she needs adjustments in teaching materials, teaching methods and the school environment. The role of physiotherapy in visual impairment is to strengthen and develop the child's other abilities to compensate for

poor vision or loss, using capacity and skills development programs for blind persons such as:

- Developing the remaining sensory abilities (touch, smell, taste, hearing).
- Development of motor abilities.
- Social skills.
- Developing educational capabilities.
- Developing professional capacities and skills.

Physiotherapy also strengthens the following aspects:

First: sense of smell and taste, by identifying and differentiating spices, fruit, vegetables, bittersweet, cold and hot, distinguishing smells.

Second: The sense of touch where the following grounds are used: capture, jaw discharge, opening, tearing, and carrying. Filling inspection, fastening closure, cutting, and assembly. Developing tactile capabilities to differentiate between the texture of various ores, such as timber, fabrics, seeds and grains, coins and pug glass leaves, metals. (Haldy & hack, 1995)

Third: Motor abilities where they are developed and strengthened such as: Tackling erroneous movements (bending, shaking head), muscle

elasticity (small muscle, big muscle), motor balance (developing walking ability using stick, sitting, climbing running stairs, jumping). (Sykanda, Levitt, 1982)

Things you naturally learn:

1. Cognitive problems (coordination or synergy between hand-eye movement).
2. Sensory problems (visual, auditory, tactile, and expressive: smile, sadness, joy, crying).
3. Movement problems of minor organs (fingers, hands).
4. Attention Difficulties (2009, Renee)

Intensive physiotherapy

is an integrated treatment aimed at improving the child's basic motor abilities (sitting, standing, walking) as well as fine motor skills of the hands (eating, drinking, writing) and also aims to develop mental abilities and academic and linguistic skills, helping the child to rely on himself.

Benefits of Intensive Physiotherapy Programs:

- Improving the child's basic motor abilities (sitting, standing, walking, flipping).

- Developing the capabilities of fine movements of the arms (holding and leaving things, dressing, eating and drinking).
- Alert upper extremity access skills.
- Strengthening the muscles of the reach skills of the upper extremities.
- Training and rehabilitation of the central nervous system NeuralPlasticity.
- Increased control of muscle tone in the natural direction through(Neural Plasticity).
- Improving body position as close as possible to normal.
- Access to the patient's maximum functional capacity.

Role of physiotherapist in special education:

The physiotherapist works within a multidisciplinary team to conduct a comprehensive assessment and intervention of the child with special needs, The following are the various roles that the physiotherapist can play:

Diagnosis, Diagnosis of a child with special needs based on the following:

1. Write personal information about the student, including name, date of birth, ID number, and gender.
2. Medical-social diagnosis.
3. Case history to find out the cause of the disability.
4. Initial Observations: How the child sits, and his posture.
5. Examine the length of the muscles in the limbs or trunk.
6. Balance check.
7. Examination of locomotors synergy.
8. Examine the muscle tone and give us a picture of the type of cerebral palsy.
9. Writing goals and therapeutic methods.

There are two types of targets set by the physiotherapist:

- Short-term objectives that the therapist seeks to achieve in a period of 3-6 months.
- Long-term goals, which the therapist can achieve in a period of 6-12 months.

Among the goals that the therapist seeks to achieve are:

1. Maintaining the flexibility of the joints.
2. Preventing deformities in the joints.

3. Work on elongating the muscles of the trunk and limbs.
4. Work on developing the child's motor and mental abilities according to the child's developmental ladder.
5. Developing and stimulating the sense of the child.
6. Develop balance in sitting, standing and walking.

Work on strengthening the muscles of the body.

Previous studies

Wray's study (Wray,2014) aimed to demonstrate parents opinion of complementary treatments for children with moderate and severe cerebral palsy. The study showed that 16 or more children received supplementary treatment with the aim of reducing pain and improving functional performance. Parents information was limited about the extent of supplementary treatments, but they realized that they were safe and useful. The study recommended that adequate information and guidance be provided to parents with cerebral palsy by specialists to facilitate their children's decision-making.

The purpose of the (AlKanderi,2014) was to examine the awareness of parents and professionals of Kuwait's education services, the study included 135 parents of children with intellectual disabilities, special education teachers and staff of the Supreme Council among parents' perception of disability. The results showed a difference between the perception of teachers and employees of the services provided in special education. The study recommended the importance of communicating between specialists, professionals and people to work together to reduce the degree of frustration of parents and their continued participation in educational, therapeutic or recreational programs and to provide them with information about the situation of their children.

A study (Maring,2013) aimed to clarify parents, The study involved 30 children, and their parents were interviewed. The study included physiotherapy interventions with children with motor disabilities to strengthen their muscles, muscle stretching exercises and balance.

exercises. The results of the study showed that most parents are unable to remember the types and duration of treatments because of their lack of contact with the therapeutic staff, although they are aware of the importance and usefulness of exercises and their impact on muscle strengthening and elementary elongation. The study recommended the development of additional educational research on the importance of effective early intervention with children with motor disabilities.

The aim (Egilson,2012) was to demonstrate the extent to which parents of children with motor disabilities are aware of the services of physiotherapy, functional, communication and language, and the extent to which parents participate in these services. The sample consisted of 88 guardians of children aged (2-18) years. 6 parents were interviewed to describe, compare and analyze the data. The results showed that parents are aware of and appreciate therapeutic services, feel partners with specialists. The study recommended that therapists continue to cooperate with parents and strengthen the cooperative and positive relationship between them.

Chapter Three: Method and procedures

study methodology:

In this study, the researcher used the descriptive approach based on data collection, classification, organization, and analysis.

Study population:

The study population consisted of all 30 parents of children with disabilities who are provided with physiotherapy services in special education schools in Najran, which include:

Schools for all levels of disabilities (simple to severe), in addition to therapeutic nurseries that provide services for people with various disabilities and developmental delays in the three years of their ages, and for integration schools.

The study sample:

The sample of the study was composed of parents, and they were deliberately chosen from those who were easy to reach and agreed to fill out the questionnaire, taking care to be among the parents of children with disabilities whose children receive treatment services, and the ages of the children ranged from one year to 20 years

Validity and Reliability

The validity of the tool's content will be verified by presenting it to ten arbitrators and experts with specialization in the field of special education and physiotherapy, for arbitration in the light of the study's objectives and questions, and they will be modified in light of the arbitrator's comments.

Reliability

The stability of the tool will be done by extracting the internal consistency Cronbach alpha for a questionnaire to evaluate physiotherapy services provided to children in special education centers in the city of Riyadh from the point of view of parents

Chapter four: Statistical processing

For the purposes of statistical processing, the (SPSS) package was used to process the data, as it was entered into the computer to extract frequencies, arithmetic averages and standard deviations, and multiple analysis of variance for variables (MANOVA) to show statistically significant differences at the significance level (0.05 (a) - if any - Between the averages of the answers to show the effect of the independent variables of the parents of

the children and the variables of the children on the dependent variables The results of the study and its discussion

The study included four questions:

The first question: What is the level of evaluation of parents of children with disabilities in the Najran region of the effectiveness of physiotherapy services provided to children from their point of view? Table (1) shows the arithmetic means and standard deviations of parents' responses to this question.

Table (1): Means and standard deviations for parents' evaluation of the effectiveness of physiotherapy services arranged in descending order.

Evaluation paragraphs					
Level average	standard deviation	SMA	Dimension	Number	Rank
حفظ النرجمة High	0.540	4.25	Parents suggestions	2	1

حفظ الدرجة High	0.848	3.85	The effectiveness of physical therapy programs	4	2
Medium					
حفظ الدرجة Medium	0.642	3.67	Parent's satisfaction	1	3
High	0.983	3.59	Relationship with a physiotherapist	3	4
High	0.494	3.84	Total marks		

Table (1) shows that the overall level of parents' evaluation of the effectiveness of physiotherapy services provided to children with disabilities came with an arithmetic average of (3.85) and a high level. The two dimensions came: parents' suggestions to develop the effectiveness of physiotherapy services for children with disabilities, and the effectiveness of physiotherapy programs provided to children with disabilities in developing their motor performance in the first and second grade and at a high level, with arithmetic averages (4.25, 3.85), respectively.

The two dimensions, the satisfaction of the guardian, and the relationship with the physiotherapist, came at a medium level, with averages (3.67, 3.60), respectively. This may be due to parents' keenness to work with physiotherapists to increase the effectiveness and importance of physiotherapy programs for their children and increase their satisfaction. These results agreed with the results of Navro's study (2015), Egilson's study (2011), Chiarello's study (2016), Hana's study (Hama, 2002), Wilson's study (2014), and Al-Kandari's study. ((AlKanderi, 2014) and the study of Summer (2005), (Summer

Results related to the second question: Are there statistically significant differences at the level of significance ($\alpha \leq 0.05$) in the evaluation of

parents of children with disabilities in the Najran region for the effectiveness of treatment services due to the gender of the guardian, his age, his educational qualification, the gender and age of the children and the severity of their disability.

This question aims to indicate the presence or absence of statistically significant differences at the level ($\alpha \leq 0.05$) between the means of

evaluation of parents of children with disabilities in the Najran region for the effectiveness of treatment services due to the variables of the guardian's gender, age, and educational qualification, and to the variables of the children's gender, age, and severity. their disability, and the sector variable providing treatment. Tables (2) - (3) show the data related to this question.

Table (2) The results of the triple analysis of variance test to indicate the differences between the averages of parents' evaluation of the effectiveness of physiotherapy services according to the variables of the guardian's gender, age, and educational qualification.

significance level	Values "F"	Average Squares	degrees of freedom	sum of squares	Variables
0.047	4.010	0.982	1	0.982	Gender
0.965	0.091	0.022	3	0.067	Scientific qualification
0.767	0.380	0.093	3	0.079	the age

The results showed that there were statistically significant differences between the average evaluations of parents of children with disabilities in the Najran region for the effectiveness of physiotherapy services according to the gender variable of the guardian in favor of females (mothers); At the same time, there are no statistically significant differences due to the two variables: age and educational qualification of the parents. This may be due to the fact that mothers follow up with their children with disabilities more than their fathers because most of them are free from work, and because most of them follow up with their children regardless of their educational qualifications or age.

Table (3) Results of the quadruple analysis of variance test to indicate the differences between the averages of parents' evaluation of the effectiveness of physiotherapy services according to the variables of children's gender and age

significance level	Values "F"	Average Squares	degrees of freedom	sum of squares	Variables
0.527	0.402	0.086	1	0.086	Gender
0.065	3.175	0.677	3	2.032	Scientific qualification
0.025	2.680	0.568	5	2.840	the age

It can be seen from Table (3) that there are statistically significant differences attributed to the degree of disability of the child, and the differences were in favor of people with moderate disabilities. This maybe due to the difference in the ability of parents to notice differences in the results of treatment programs in the case of mild disability, given that children have good motor abilities, and because the improvement of children with severe disabilities is small, so not all parents are able to notice this.

The results also showed that there were statistically significant differences due to the age of children with disabilities, and the differences came in favor of the age group less than 3 years, and other differences attributed to the treatment center sector in favor of the therapeutic nursery. This may be due to the awareness of parents of the effectiveness of physiotherapy services provided to their children at a very early age in the therapeutic nursery, and their interest in obtaining high effectiveness in the therapeutic nursery more than other generations and other treatment centers, as well as it may be due to the excellence in providing physiotherapy service in the therapeutic center More than other treatment centers. The results differed from the results

of Summer (2005), which showed that there were no statistically significant differences in the level of satisfaction with parents' relationship with therapists for children aged from birth to 3 years, from 3-5 years, and from 6-12 years. These results are consistent with the results of the study (Alyssa, 2012).

Results related to the fourth question: Are there statistically significant differences at the level of significance ($\alpha \leq 0.05$) in the evaluation of

parents of children with disabilities in the Najran region for the obstacles to treatment services due to the variables of the guardian's gender, age, and educational qualification, and the variables of the children's gender, age, and severity of their disability? This question aims to find out if

there are statistically significant differences at the level ($\alpha \leq 0.05$)

between the evaluation of parents of children with disabilities in the Najran region for the obstacles to treatment services due to the variables of the guardian's gender, age, and educational qualification, and to the variables of the children's gender, age, and severity of their disability. Tables (4-5) show the data related to this question. Table (4) The results of the triple multiple analysis of variance test to indicate the differences between the averages of the parents' assessment of the obstacles to physical therapy services according to the variables of the guardian's gender, age, and qualification.

significance level	value (f)	Average Squares	degrees of freedom	sum Squares	Obstacles	Variables
0.911	0.013	0.005	1	0.006	underwear and external	Gender

0.71		0.900	3	2.837	underwear and external	Scientific qualificat ion
0.45 0	0.822	0.311	3	0.966	underwear and external	the age

Table (5) shows that there are no statistically significant differences due to the variables associated with children with disabilities, gender, degree of disability, and age. The differences were due to the internal obstacles between the special education center and the integration school, and in favor of the remedial special education center. It is also noted that there are statistically significant differences between the special education school and the integration school in favor of the special education school. There were no statistically significant differences between the other treatment centers. This may be due to parents' awareness of the effectiveness of physiotherapy services and obstacles provided to their children in special education centers and integration schools compared to special education schools. This and the results of this question

agreed with the results of the study of Vagrafilo and Solomon (Solomon, 2013).

Which referred to facilitating parents' awareness of physiotherapy services through the active participation of family members.

Chapter five: Study recommendations

In light of the results of the study, the researchers make the following recommendations:

1. Continuing to maintain the constructive relationship between parents of children with disabilities and therapists due to the importance of parents' observations and evaluation of the effectiveness of the physiotherapy programs provided

for their children on the one hand, and to increase the level of parental satisfaction and participation on the other hand.

2. Work on developing physiotherapy programs for all types of motor disabilities and in all types of centers that offer programs (kindergarten, special education school, and integration school), and for all age groups of children.

3. Develop effective strategies to overcome internal and external obstacles to physiotherapy services, especially those related to parents, surrounding circumstances, and children with disabilities.

To increase the effectiveness of physiotherapy programs offered to children with disabilities.

4. Providing counseling programs that allow parents of students with disabilities to overcome the difficulties and obstacles they face in raising their children.
- 5 Encouraging parents of students with disabilities to communicate with teachers and therapists and work with them.

Encouraging the commitment of parents to participate in individual educational plans for students with disabilities and developing administrative plans to encourage communication between parents, therapists and teachers, as an opportunity for parents to participate in events, celebrations, courses and seminars in the school

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