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Educational status of a population with multiple disabilities. Lennox-Gastaut Syndrome

Situación educativa de una población con discapacidad múltiple. Síndrome de Lennox-Gastaut

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Abstract

Introduction: Lennox-Gastaut syndrome (LGS) is an epileptic encephalopathy characterized by recurrent seizures, cognitive impairment and electroencephalographic alterations. The education of children with this condition is a challenge, given their functional dependence and the lack of inclusive adaptations in the educational system. **Aim:** To analyze the educational situation of a child with SLG through a functional educational assessment, identifying their needs and possible inclusion strategies. **Methodology:** A qualitative and descriptive approach was used, based on direct observation, structured interviews with therapists and family members, and the application of the Individual Plan of Reasonable Adjustments (PIAR). **Results:** The child presents motor, cognitive and communicative limitations that hinder his school inclusion. Necessary supports were identified, such as a standing frame, multisensory therapy and alternative communication strategies. **Conclusions:** A transdisciplinary approach is recommended for its development, prioritizing autonomy and gradual inclusion with curricular adaptations.

Keywords: Multiple Disability, Lenoxx Gastaut Syndrome, educational assessment, functional, educational status, inclusion.

Resumen

Introducción: El síndrome de Lennox-Gastaut (SLG) es una encefalopatía epiléptica caracterizada por crisis convulsivas recurrentes, deterioro cognitivo y alteraciones electroencefalográficas. La educación de niños con esta condición es un desafío, dada su dependencia funcional y la falta de adaptaciones inclusivas en el sistema educativo. Objetivo: Analizar la situación educativa de un niño con SLG mediante una evaluación educativa funcional, identificando sus necesidades y posibles estrategias de inclusión. Metodología: Se utilizó un enfoque cualitativo y descriptivo, basado en observación directa, entrevistas estructuradas con terapeutas y familiares, y la aplicación del Plan Individual de Ajustes Razonables (PIAR). Resultados: El niño presenta limitaciones motoras, cognitivas y comunicativas que dificultan su inclusión escolar. Se identificaron apoyos necesarios, como un bipedestador, terapia multisensorial y estrategias de comunicación alternativa. Conclusiones: Se recomienda un enfoque transdisciplinario para su desarrollo, priorizando la autonomía y la inclusión gradual con adaptaciones curriculares.

Palabras clave: Discapacidad múltiple, síndrome de Lenoxx Gastaut, evaluación educativa, funcional, situación educativa, inclusión.

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1. Introduction

Lennox-Gastaut Syndrome (LGS) is a catastrophic epileptic encephalopathy characterized by a distinct triad, including the onset of various forms of epileptic seizures, cognitive deficits with regression or stagnation (Camfield, 2011) , and an EEG showing slow wave configurations along with generalized paroxysms of fast activity during nocturnal periods (Belousova et al., 2022; Nizami et al., 2024; Strzelczyk et al., 2023) atypical absences, myoclonic, tonic/atonic drop attacks, generalized tonic-clonic, focal.

The onset of LGS occurs between the first and eighth year of life (Asadi-Pooya and Farazdaghi, 2022), peaking between 3 and 5 years of age, with a higher prevalence in males than in females (Belousova et al., 2022) atypical absences, myoclonic, tonic/atonic drop attacks, generalized tonic-clonic, focal. Furthermore, 30% of individuals diagnosed with West syndrome progress to Lennox-Gastaut syndrome , with a prevalence ranging from 2 to 10 individuals per 10,000,000 people (Kenyon, 2018) . In 75% of cases, the etiology is symptomatic and includes conditions such as hypoxic-ischemic encephalopathy, neurocutaneous syndromes, meningoencephalitis, intracranial hypertension, and neoplasia, while 25% to 30% of cases are cryptogenic, indicating an unknown etiology (Auvin, 2020; Herrera and Burneo, 2018).

However, there is a clear lack of information available on multiple disabilities in the Ecuadorian context (Delgado-Carrillo et al., 2019), particularly with regard to aspects related to the incidence, prevalence and, in particular, the educational circumstances of people with multiple disabilities (Cordeiro and Sebastián-Heredero, 2024; Ramírez et al., 2022), who evidently constitute a significant proportion of the population and frequently lack the necessary adaptations and support for effective inclusion (Martínez - Martínez et al., 2020; Mendoza Carrasco, 2018; Palma et al., 2016) .

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In this particular case, the child's diagnosis has evolved over time due to the unique characteristics and complexity of his condition. It is currently identified as Lennox-Gastaut Syndrome (LGS). He also presents with spastic tetraparesis and a global delay in psychomotor development. He is completely dependent on another individual for mobility, feeding, and the performance of any other daily tasks, which is the reason for his absence from an educational institution. However, he participates in early stimulation, physical therapy, speech therapy, and neurosensory therapy.

Therefore, this manuscript involves conducting a functional educational assessment to determine the child's potential, focusing on all areas of participation. It also provides essential opportunities for the child to develop as independently as possible, with reasonable adaptations and the functional, imperative, and individualized supports identified throughout this research. Therefore, this study aims to analyze the educational situation of an individual with Lennox-Gastaut syndrome from a functional educational assessment perspective.

2. Methodology

The research was conducted using a qualitative and descriptive approach, as it provided insight into the current educational situation of the subject of study. Through field research, data relevant to the selected topic were collected, enabling the development of an Individual Reasonable Adjustment Plan (IAP), interviews, and a Functional Educational Assessment. Direct observation and questioning were also used for therapists and family members.

On the other hand, observation allowed direct contact with the participant and the events being studied (González Morales, 2023) . While the structured interview allowed information to be collected through previously posed questions and with a defined structure. (Añorve Guillén, 1991; Díaz-Bravo et al., 2013; Troncoso-Pantoja and Amaya-Placencia, 2017)

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. Likewise, understanding that the functional educational assessment is intended for children with multiple disabilities, allowed assess he spot of view educational, with he aim of gather data that will help families and educational institutions (Vásquez, 2011).

In this research, the population consists of a four-year-old child with multiple disabilities: Lennox-Gastaut syndrome who attends the Child Development Center of the University of Cuenca (CEDIUC) located in the city of Cuenca.

3. Results

3.1. Individual Reasonable Adjustment Plan (IRAP)

The individual reasonable adjustment plan is an instrument that allows a person to be characterized specifying details for can determine needs educational and plan activities for a pedagogical approach.

This tool is made up of five parts based based on information obtained in all contexts in which the child develops. The child's needs at the time of the assessment have also been considered.

3.1.1. Initial characterization

The data prenatal do reference to a pregnancy to term and without none complication. The mother of the evaluated was thirty-five years old at the time of delivery, with a total of three pregnancies, zero abortions, ten controls doctors during all he process of gestation. He delivery was eutocic . Within the postnatal information it is important to know that there was immediate crying, presented hyperbilirubinemia, receiving the care necessary and he period of lactation was until two months of age, being interrupted by multiple medical interventions.

Currently, the child is fed only with semi-liquids through bottles, spoons, between others utensils that they use the members of his family,

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HE unknown that have any type of allergy to any food or product and He's not yet toilet trained, which is why he wears diapers. Occasionally , his sleep is interrupted several times during the night, but he calms down easily.

The patient being evaluated has a chronological age of four years and ten months and has a diagnosis of Lennox-Gastaut syndrome with recurrent seizures and delayed psychomotor development, which, in this specific case, is global due to the fact that he has spastic tetraparesis. He has no defined language; he only communicates through crying and facial expressions. facials, by it so much, depends totally of a adult that it attend. Go to the Center of development childish of the University of Cuenca, in where receives stimulation early, physical therapy and speech therapy.

The minor has not been enrolled in school due to reasons related to his condition, lives with his parents and two brothers, forming a solid family and United. A notable aspect is the support each member provides, which in turn allows them to move forward as a team, respecting norms and rules of coexistence to maintain optimal interpersonal relationships. and prioritizing always the needs of the member of his family with multiple disabilities.

The child does not have medical insurance, which is why his health care is provided of manner private, attending by choice of their parents to specialists so much in conventional and natural medicine. He holds a disability card issued by the Ministry of Public Health, which only qualifies his physical disability, with a percentage of 84%.

3.1.2. Descriptive report : Body expression and motor skills

In this area of a total of twelve evaluation items the skill is acquired concerning to tolerate different textures and in process the that speaks about of the recognition of loud and soft sounds because it responds with body movements to sounds, but does not discriminate between them.

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3.1.2.1. Logical - mathematical relationship

In this area there are fourteen skills to be evaluated, one of which is in the start indicator and deals with maintaining attention on a task, here we can consider that this trying to carry it out because when observe a element that calls his attention he focuses his gaze and makes repetitive movements with his arms.

3.1.2.2. Oral and written comprehension and expression

The person being evaluated only completes the skill of expressing pleasure and displeasure , as he or she has the ability to express it through crying and calming down. In this area, three skills concerning expressing emotions and needs are also included, with a total of eleven items.

3.1.2.3. Discovery and understanding of the environment

In this scope exist nine skills, one of they is recognize people nearby , which is in the process of being completed. The remaining skills correspond to complex abilities for the child at the moment.

3.1.2.4. Artistic expression

In this field exist fourteen items, of the which one HE finds in he indicator of due start to that has the intention of hold objects, but at the moment No account with the coordination and strength necessary to do it.

3.1.2.5. Identity and autonomy

Of a total of twenty-five questions, two are acquired , since it tolerates accessories and lets someone else comb their hair. On the other hand, two skills are found at the beginning; one concerning to chew properly and other to drink with a cup. The remaining No the performs.

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3.1.2.6. Coexistence

In this scope of ten skills fulfills only with the of tolerate dress up, due that No presents opposition to the carry out this action, the remaining still No are carried out by he minor.

3.1.2.7. Context and life history

The child's development proceeded normally until he was two months old, from that period on he began to go to the neuropediatrician due to the seizures he was having and which were increasing. HE intensified further, by it, the family look for the opinion of several professionals. He The first person they went to gave him medication that, according to the parents' opinion, kept him in a state of sleepiness to the child, this happened until the five months, reason by the which they changed as a doctor, attending to other that of equal manner you gave medication that No was very favorable, In addition to mentioning to the family that the condition the minor has has no cure and that nothing can be done nothing further by his welfare. By this reason, they searched again other opinion and were to the city of Quito from six months to first year, the neuropediatrician provided timely care and of quality decreasing the frequency and intensity of the crisis convulsive, besides of that This professional gave the diagnosis of Lennox-Gastaut syndrome, however, due to the distance and The cost of care meant they had to seek another specialist in their own city, with whom they continue to this day.

It is important to emphasize that the family , since the child was three years old, has also opted to receive natural treatment and states that it has significantly reduced the seizures, but without ceasing to receive monthly check-ups from the neuropediatrician.

In all this process No existed advances in his development psychomotor, to to leave of the four years old the child ha attended to physical therapy, speech therapy and stimulation early in the Child

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Development Center at the University of Cuenca, where she has achieved partial head control, auditory tracking, and partial visual tracking.

3.1.3. Inventory of reasonable accommodations and supports

In how much to supports necessary, is of vital importance he use of a furniture that Allows you to change your constant supine posture to an upright position, which improves your field of vision, object manipulation, respiratory function, among several advantages of changing to this position. This can be achieved through a standing frame with a table for upper limb activities. For dental hygiene, it is suggested to use an electric toothbrush , because the person that it attends has elderly ease of arrive to places bit accessible and carry out Proper cleaning thanks to the automatic movement of the bristles. For feeding purposes , a straw with a non-return system is recommended, allowing the liquid to remain inside the straw even when the suction stops.

3.1.4. Pedagogical assessment

In this instrument, most of the activities are not applicable because the child is not enrolled in school. It is important to note that the dependency is total because the child cannot mobilize of manner autonomous, besides of No possess a guy of communication defined and functional. Therefore, all activities to be carried out should be designed to achieve the greatest possible independence.

3.2. Survey of the educational process from the curricular perspective

The survey was conducted in line to four professionals in the area of therapy of language, early stimulation, physical therapy and the coordination of CEDIUC, obtaining the following results:

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3.2.1. How do students with disabilities access the curriculum?

This ask No was applicable due to that the professionals belong to a institution that provides different types of therapies and are not based on the curriculum. Therefore the responses from respondents in their entirety were that they do not access the curriculum because they do not work based on it .

3.2.2. What team model is being worked on in the institution?

According to all those evaluated, the team is interdisciplinary because the criteria of each professional are taken into account and they share objectives; however, it can be denoted according to the responses that the professionals do not know the meaning of the term transdisciplinary.

3.3.3. Is a parallel curriculum used for the education of students with disabilities?

According to all the professionals evaluated , the answer was no, because different activities are planned based on the needs of each child.

3.3.4. Where do we get the curriculum content used for students with disabilities?

The answer obtained of two of the respondents was that No HE works with base in a curriculum. On the other hand, two professionals also responded that activities are obtained from standardized guides and manuals on childhood development.

3.2.5. How are curricular contents developed for students with disabilities?

Once again, two of the professionals responded that they do not work with curricular content ; however, the remaining two respondents responded that these are designed based on each child's abilities and through an individualized care program.

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3.2.6. Does the student have a person-centered educational program?

Of the total number of respondents, half responded yes and the other half no, because each work area at CEDIUC has the capacity to make decisions in its activities autonomously, but considering the common goal they have as a work team.

3.2.7. What are the components of a person-centered educational program?

In this question the answer of each professional varies, because one responded that the components are the family, the professionals and he child, other answer obtained states that The components are clinical diagnosis, diagnostic assessment of the area, developmental age, developmental areas, objectives, activities, resources and evaluation, a third response ensures that it is not performs this activity and finally other of the respondents considers that only there is a component and It is child development, which is why it is noticeable that there is no clear idea about what a person-centered plan is.

3.3. SOCIEVEN Functional Educational Assessment

This evaluation considered nine areas involving the child and their environment, including their immediate family and therapists.

3.3.1. Functional vision assessment

The child observes everything around him and focuses at less than one meter away . This includes faces of people and objects attractions that be older people to ten cm. In His left eye has a larger visual field, he responds to flashing, brightly colored lights, as they tend to attract his attention, and sometimes if he is offered something of his pleasure, he tries to manipulate it. and hold it, the textures of different guys are of his taste especially when They are accompanied by bright colors, sound and are easily manipulated, objects that stimulate his sensitivity vibratory also

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you attract. Constantly expresses pleasure to through random movements of arms and legs, on rare occasions he also makes small babbles when he is very attracted to something.

HE recommends carry out a assessment of his vision by a professional that sea specialist in this area, specifically an ophthalmologist who performs a visual evoked potential test, based on knowing neurophysiological responses.

3.3.2. Functional hearing assessment

The person being evaluated can hear everything that is happening around him, he communicates through crying discriminatory, shouting and sounds guttural, he can hear sounds environmental,onomatopoeic, and human voice, but if presented with sudden sounds above seventy decibels, they may experience spasms. Furthermore, they have the ability to locate the sound source as long as it is a maximum of fifty centimeters away from them.

It is important that you be assessed through an auditory evoked potential test by a speech therapy professional, and In the event that the results are altered, for a specialist as it is a otolaryngologist, for determine that can hear and to what intensity.

3.3.3. Functional assessment of communication and language

Expressive communication is quite limited, however, he communicates through crying, facial expressions and sometimes guttural sounds. Depending on Va's level of communication Dijk HE finds in he of nutrition and, of agreement to the level of development Rowland's and Campbell's behavior is pre-intentional. Finally, his auditory attention span lasts a maximum of five seconds, as evidenced by the child's body movements and audible responses.

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3.3.4. Functional assessment of cognitive level

And hear, moving his or her fingers when presented with objects with textures and temperatures he or she likes. His or her attention span while engaged in an activity lasts for ten seconds in a sitting position; his or her level of cognitive development is at the sensorimotor stage.

3.3.5. Functional assessment of social and family interaction

Due to his condition and to the emergency health, he evaluated has difficulties for to be able to socialize with others people that No be members of his family, be these adults either children. In regular situations, his interaction is usually limited; he allows and accepts any activity, stimulus, or object that a person offers him, regardless of whether it is someone he knows or not, but his response to what is presented is usually head movements and, sometimes, his breathing accelerates.

3.3.6. Functional assessment related to behavior

He self-stimulates with repetitive hand movements and observes them when he's calm or enjoying an activity. It's difficult to notice characteristic aspects of his behavior due to his motor skills, but he can be considered quite passive and doesn't exhibit disruptive behaviors.

3.3.7. Sensory Functional Assessment

The person being evaluated tolerates physical contact, except when sudden movements are made. They tolerate any type of lotion or substance on their body, but if they are in a cold temperature, do small shocks, you like the massages and No presents opposition. Yeah something is of his pleasure, manifests it through calm facial expressions, movements of his mouth, head and limbs, these responses usually last a maximum of a minute. He suffers from spastic tetraparesis, which is why it is difficult for his muscles to relax and his sensory integration is not the most adequate.

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Therefore, he responds in the same way to different stimuli presented to his sensory systems.

3.3.8. Functional assessment of independence and habits

The minor is completely dependent on another person to carry out activities of daily living. as eat, change from clothes, brush their teeth, wash their hands, etc Use diapers and the family requests that first HE board it essential for that HE can develop alone. With This refers to their motor skills, communication skills, among others.

3.3.9. Functional assessment of orientation, mobility and motor skills

It is necessary to consider that their size and weight correspond to their chronological age, reason by he which HE has to contemplate other shape of displacement by he overexertion muscular exercise performed by their parents. Within this, one can think of a mobile bipedestador or any similar object where the child can be in an upright position , but held by a harness and that it has wheels to facilitate its mobility.

3.4. Person-centered plan

3.4.1. Characteristics

He is a receptive child who is attentive to what is happening around him. He responds to what he likes with movements of his limbs and guttural sounds. He also expresses some of his needs through crying. He has head control with slight oscillations. His auditory monitoring allows him to know that something interests him. He interacts with his family and especially with his mother. An important characteristic is the family support he receives unconditionally.

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3.4.2. Life story

The prenatal check-ups were the necessary ones and There were no complications during the childbirth . The life of the child HE development of manner conventional during the first months. TO From 2 months of age they noticed that the child had seizures, the family went to several professionals for help, the first one they went to gave medication that, according to the parents' opinion, kept the child asleep all the time, this happened until 5 months, which is why they changed professionals, going to another who also gave medication that was not favorable according to the parents' criteria, in addition to telling the family that the child's condition has no cure and that nothing more can be done for his well-being, which is why they changed their medical opinion and went to the city of Quito from 6 months to the first year. The neuropediatrician provided care timely and quality decreasing the frequency and intensity of seizures, in addition to this professional giving the diagnosis of Lennox-Gastaut Syndrome , however, due to the distance and the cost of care they had to look for another professional in their same city with whom they continue to date.

Is important emphasize that the family from the 3 years of the child's life has also opted to receive treatment natural and who claim that it has decreased seizures, leaving traditional medication and using natural medication, but without stopping receiving monthly check-ups of the neuropediatrician. In all This process No existed advances in his development psychomotor. At age 4, the child attended hippotherapy, physical therapy at FISIOSENS, and is currently receiving physical therapy, language therapy, and early stimulation at the Child Development Center of the University of Cuenca (CEDIUC).

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3.4.3. Activities you enjoy

There are several activities that they like, such as those that involve sensory stimuli, especially bright colored lights, vibrating objects, soft and smooth textures. On the other hand, they also like to consume semi-liquid foods and foods with characteristic textures. as he cereal processed. Also is important know that you pleases move his hands near his eyes and swinging his limbs randomly. His preferred body position is lying on his back.

3.4.4. Activities you don't like

That that No you pleases includes food citrus fruits, changes of position as positions sitting, prone position or any other position that is abrupt and sudden loud sounds are not to their liking either.

3.4.5. Family expectations

His family expects the child to be independent, also to have a way of communicating with others and interact optimally with other people. Furthermore, his family hopes that the child's health will become increasingly stable.

3.4.6. Links

The child commonly bonds with his or her mother, father, siblings, therapists, and health professionals.

3.4.7. Skills, strengths and aspects to strengthen

3.4.7.1. Skills

- Follow-up auditory.
- Control cephalic partial.
- Movements of limbs.
- Perception and reception of information.

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- Notice people and objects.

3.4.7.2. Strengths

- Material didactic elaborated and acquired by his family.
- Tools therapeutic in home.
- Support total of his family.
- Predisposition positive of his family for improve the condition of the child.
- Creativity and love of his family.

3.4.8. Aspects to strengthen

- Follow-up visual.
- Control cephalic.
- Motor skills fine: hold objects.
- Tolerate new postures.
- Babbling.
- Experimentation gradual of new textures (feeding).

3.4.9. Suggested activities

3.4.9.1. Sensory stimulation

Goal. - Assimilate and organize the sensations that HE receive of the around, toasting answers that adapt to each situation.

3.4.9.2Proprioceptive system

Objective: To understand each part of the body and its function through different sensations provided by the environment.

- Smell a lotion or cream with a pleasant aroma, feel its texture and then participate in massages that start from the fingers of

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the feet, legs, trunk, arms, hands, fingers and at the end on the face.

- Tap several objects as brushes, feathers, cotton, between others. Later each one of these items will travel several parts of the body of manner cephalocaudal and proximal - distal.

3.4.9.3. Vestibular system

Aim: Coordinate and balance his body in different moments and circumstances.

- Swing in different items as roller, ball, bobath, kunga, rocking chair, hammock or any other that allows for gentle, repetitive movements. At first, these movements will be light and then increase in intensity.

3.4.9.4. Touch system

Aim: Explore he world to through of their textures and temperatures, complementing it always with sounds, images and smells that each element of the environment possesses.

- Feel different textures in the palm of your hand, starting with smooth textures and then touching rough objects and experiencing various contrasts such as soft and hard, liquid and sticky, and much more.
- Appreciate in everything he body elements such as gelatin, noodles, foam, rice or any other, while I am lying in a bathtub.
- Hold with the hands bottles with different temperatures and feel he contrast.

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3.4.9.5. Visual system

Aim: Notice all it what's happening around and discriminate his function.

- Observe lights through a projector and listen to the verbalization of everything that is being observed.
- Follow a luminous object with your eyes and make different movements like top to bottom or left to right and vice versa.
- Notice my body and my face through from a mirror.

3.4.9.6. Auditory system

Objective: Assimilate sounds and associate them with different activities.

- Listen to familiar sounds through any device and verbalizations that explain the device's sounds.
- Notice and tap images of animals with textures and sounds own of each animal which is found in the graph.
- Feel the vibrations that occur in another person's neck area with your hand while they are speaking, as well as observe their facial movements.
- Listen to the sounds of various musical instruments and observe how they are played, then try to reproduce the movements that must be performed to hear the sounds again.
- Hear sonatas of Mozart while HE they perform others activities.

3.4.9.7. Olfactory system

Aim: Relate smells with places, people, food or objects.

- Sniff different aromas as essences either humidifiers with aromas floral and fruit trees.
- Distinguish he smell of different places to the that HE frequents commonly.

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- Manipulate, savor and smell fruit, besides of hear the verbalizations with he name of the fruit.

3.4.9.8. Gustatory system

Objective: To know the taste of different foods, in addition to associating them with their name, smell, and image.

- Prove different flavors and textures of fruit, gelatin either any food that HE arrange, contrasting flavors.
- Feel in the lips, cotton swabs, feathers, brushes either any another element.
- Hear verbalizations of the that is this eating.

All systems must be addressed to ensure proper sensory integration. They can be worked on together or separately, in sessions that the child can tolerate. Activities must be carried out beforehand, meaning the child must be explained what will be done.

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Suggestion for future curriculum alignment

Table 1. Curricular alignment

Teaching:	Degree/Course: Initial 1		Parallel:		Day:		
Unit didactics: Exploring he world.			Time: Two weeks				
Aim general: Interact with he around through of the exploration and stimulation of their senses.							
Needs	Area	Contents	Activities	Operational objective	Reasonable adjustments/ supports	Resources	Evaluation indicators
Communication: Expressing desires and emotions through gestures and facial expressions. Accompanying activities with verbalizations. Socialization: Interacting with other people in their environment.	EMOTIONAL AND SOCIAL BONDING Recognize characteristics of their own identity and how to react when hearing their name. Interact with an adult through simple games with actions and objects that catch their attention . NATURAL AND CULTURAL DISCOVERY Follow objects with their eyes that have strong colors, lights, and shine. React to contact with rough and smooth textures; and to pleasant and unpleasant flavors. Manipulate and explore objects (toys) according to their functionality. SUPPLEMENTARY CONTENT Sensory Integration Receive, process, and respond to sensory stimuli received from the environment. In a coordinated manner through different places. SUPPLEMENTARY CONTENT Orientation and mobility Allow mobility in a safe manner and in an adequate posture.	Distinguishes his/her name Interacts with another person Visual tracking Experiences textures and flavors Explores objects Coordinated movement	to your name while performing everyday activities accompanied by verbalizations. Observe another person for 30 seconds while they make different facial expressions or sounds that attract attention. Look at a luminous object and follow its path. Feel textures with your hands and feet. Contrast the differences between some textures. Try different food flavors. Hold objects with sticky textures that make them easier to grip. Visit a nearby park and experience the textures and aromas of the place.	Upon hearing their name, the child will react with gestures, movements , or sounds. When faced with visual and auditory stimuli , the child will interact with others. When faced with a luminous object , the child will follow it visually. When sensing textures, they will react with gestures, movements, or sounds. When faced with several textures , the child will sense the difference between two of them. When sensing several flavors , the child will react with gestures, movements, and/or sounds. When faced with objects with a sticky texture , the child will try to grab them. When going to the park , the child will sense textures and react with gestures, movements, or sounds.	Standing frame with non-slip floor	HUMAN RESOURCES Teacher Support teacher SUBJECT RESOURCES Pointer Light projector Texture notebook Texture mat Flavors Slime Speakers Music Story Puppets	Reacts with gestures, movements, or sounds when called. Observes another person for 30 seconds. Visually follows an object. Reacts with gestures, movements, or sounds when sensing textures. Feels the contrast of two different textures. Reacts with gestures, movements, or sounds when sensing different flavors. Tries to hold objects. Reacts with gestures, movements, or sounds when sensing textures. found in the park.

Source: Own elaboration

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4. Discussion

Based on the first specific objective, it is mentioned that the description of the educational, personal and family conditions, with the help of the instruments for collecting information and in coincidence with the problem of this research, it can be established that the child has the diagnosis of a rare pathology from which limited and varied information is obtained. According to Gutiérrez-Zúñiga et al. (2018) and Irazoque-Palazuelos and Barragán-Navarro (2009) the prevalence of this pathology is 2 to 10 per 10,000 people, in addition to the fact that the ethology is cryptogenic because the causes in this specific case are unknown.

Furthermore, according to the data collected, it can be noted that the child is currently not enrolled in school because he or she is completely dependent on another person to assist him or her with hygiene, feeding, and mobility activities. It is also vitally important that the child's hearing and vision be assessed by a specialist.

Likewise, when trying to identify reasonable supports and adjustments, these may be supports that allow changing posture, but without doing so in an abrasive way that causes pain and facilitating the assistance provided by other people (FINSTERBUSCH ROMERO, 2016; López García et al., 2022; Tello-Blanc and Paredes-Floril, 2022)

According to the teacher survey , it can be emphasized that there is no transdisciplinary teamwork, however, they do share common objectives and goals. Furthermore, the authors Arellano Torres and Peralta López (2015) el foco de la planificación de los apoyos en el ámbito de la discapacidad intelectual es la persona, poniendo un especial énfasis en la toma de decisiones de los usuarios de los diferentes servicios y, por tanto, en la necesidad de consultarles. En ese sentido, la Planificación Centrada en la Persona (PCPmention that the person-centered plan is based on the talents, abilities and desires of the person with a disability and designed to enrich a possible future, it allows us to notice the lack of

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knowledge of therapists, its use and application, which is why it needs to be implemented considering the child, his family and the comprehensive development center he attends.

5. Conclusions

Based on the accumulated data and considering the milestones achieved in his psychomotor development, the child is not incorporated into the educational system. Currently, his formal education is not advocated due to circumstances related to his autonomy, as this would require an integration process rather than optimal and effective inclusion. However, as he acquires specific skills, his incorporation into the academic environment must be reevaluated. In anticipation of this progression, a curriculum alignment framework has been developed to serve as a reference point for future educational adaptation.

Regarding social participation, there is limited exposure to diverse environments, as their social sphere is limited to family members, therapists, and health professionals. In this context, it is imperative to foster opportunities for interaction with peers and adults, which will enhance the development of their socioemotional skills and broaden their communicative experiences.

Regarding reasonable accommodations, the use of a standing frame is recommended, as it facilitates postural variation and vertical body alignment, thus benefiting respiratory, digestive, and circulatory functions. Furthermore, its use will help strengthen muscular tolerance and endurance, as well as improve the visual field. It is also recommended to use straws equipped with a non-return mechanism, which minimizes excessive air intake and retains fluid after sucking, making swallowing easier. For oral hygiene, the use of an electric toothbrush is suggested, as it allows more precise access to hard-to-reach areas and reduces the

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risk of unintentional occlusal bites, thus optimizing the duration and effectiveness of tooth brushing.

Ultimately, the person-centered plan has been formulated for implementation both at home and in the therapeutic center, incorporating multisensory stimulation methodologies that promote the proper integration of sensory modalities. As a complementary measure, a curricular alignment framework has been designed to serve as the basis for future academic inclusion, ensuring a structured transition tailored to the specific needs of the child.

6. Authors' contribution

KF: Initial drafting, data collection, analysis of results, discussion, final revision of the article.
DB: Data collection, analysis of results, discussion, final review of the article.
KB: Data collection, analysis of results, discussion, final review of the article.
AG: Data collection, analysis of results, discussion, final revision of the article.

7. Ethics committee approval and consent to participate in the study

The study was authorized by the Child Development Center of the University of Cuenca (CEDIUC) and included written informed consent from the parents of the participating minor.

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