CHALIMBANA UNIVERSITY

DIRECTORATE OF DISTANCE EDUCATION

PSY 4511: PSYCHOLOGY OF DISABILTY STUDIES

FIRST EDITION 2020

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TABLE OF CONTENT

CONTENT **PAGE**

MODULE OVERVIEW

Introduction

This module will introduce you to various types of disabilities. You will learn about causes symptoms and possible treatments of disabilities.

Rationale

The course will equip you with skills to assess children with various disabilities.

Course Aim

The course aims to Introduce to you the psychology of disabilities.

Learning Outcomes

By the end of the course, students should be able to;

- Give different categories of children with intellectual retardation and methods of educating them
- List the causes and characteristics of learners with hearing impairment and strategies of educating them
- Distinguish between neurological impairment and muscular conditions
- Identify the characteristics of gifted and talented children
- Design/modify an appropriate curriculum for the gifted and talented children
- Identify children with visual impairment in the classroom

Study skills

As an adult learner, your approach to learning will be different to that of your school days you will choose when you want to study. You will have professional and/or personal motivation for doing so and you will most likely be fitting your activities around other professional or domestic responsibilities.

Essentially you will be taking control of your learning environment. As a consequence, you will need to consider performance issues related to time management, goals setting, stress management, etc. perhaps you will also need to reacquaint yourself in areas such as essay planning, coping with examinations and using the internet as a learning source.

Your most significant considerations will be time and space i.e. the time you dedicate to your learning and the environment in which you engage in that learning. It is recommended that you take time now before starting your self-study to familiarise yourself with these issues. There are a number of excellent resources on the web. A few suggested links are: http://www.how-to-study.com/ and http://www.ucc.vt.edu/stdysk/stdyhlp.html

Time frame

You are expected to spend at least three terms of your time to study this module. In addition, there shall be arranged contact sessions with lecturers from the University during residential possibly in April, August and December. You are requested to spend your time carefully so that you reap maximum benefits from the course. Listed below are the components of the course, what you have to do and suggestions as to how you should allocate your time to each unit in order that you may complete the course successfully and no time.

Required Materials

Text books and the module.

Need help

In case you have difficulties in studying this module don't hesitate to get in touch with your lecturers. You can contact them during week days from 08:00 t0 17:00 hours. Mr Moono Maurice mmoono.75@gmail.com Tutorial Room 3,. You are also free to utilise the services of the University Library which opens from 08:00 hours to 20:00 hours every working day.

Assessment

Continuous Assessment **50%**

One Assignment	**25%**
One Test	**25%**
Final Examination	**50%**
Total	**100%**

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UNIT 1: COMMUNICATION DISORDERS

1.1 Introduction

Welcome to the first unit of this module, in this unit, you are going to learn about communication disorders.

1.2 Learning Outcome

By the end of this unite; you are expected to;

- discuss communication disorders
- analyse characteristics of various communication disorders
- devise ways of helping children with communication disorders

1.3 **Time frame**

You need about two (2) hours per weeks to interact with this unit.

1.4 Content

- Speech and sound disorders.
- Voice disorders
- Resonance disorder
- Fluency disorder
- Receptive language disorder
- Expressive language disorders
- Cause of language disorders
- Treatment of communication disorders
- Language delay

- Symptoms of language delay
- Causes of language delay
- Diagnosing language delay

The following are common speech and language disorders found in a pediatric population:

1.5 Speech Sound Disorders

A child with a speech sound disorder is unable to say all of the speech sounds in words. This can make the child's speech hard to understand. People may not understand the child in everyday situations. For most children, the cause of the speech sound disorder is unknown. Other speech sound disorders can be linked to things such as a cleft palate, problems with the teeth, hearing loss, or difficulty controlling the movements of the mouth has difficulty making certain speech sounds. This can make the child hard to understand.

1.5.1 Reasons for Concern

- The child doesn't babble using consonant sounds (particularly b, d, m and n) by age 8 or 9 months.
- The child uses mostly vowel sounds or gestures to communicate after 18 months.
- The child's speech cannot be understood by many people at age 3.
- The child's speech is difficult to understand at age 4 or older.

1.6 Voice Disorders

The voice is produced as air from the lungs moves up through and vibrates the vocal folds. This is called phonation. With voice disorders, the voice may be harsh, hoarse, raspy, cut in and out, or show sudden changes in pitch. Voice disorders can be due to vocal nodules, cysts, papillomas, paralysis, or weakness of the vocal folds.

1.6.1 Reasons for Concern

- The voice is hoarse, harsh, or breathy.
- The voice is always too loud or too soft.
- The pitch is inappropriate for the child's age or gender.
- The voice often breaks or suddenly changes pitch.
- Frequent loss of voice

1.7 Resonance Disorders

Resonance is the overall quality of the voice. A resonance disorder is when the quality of the voice changes as it travels through the different-shaped spaces of the throat, nose, and mouth. Resonance disorders include the following:

- **Hyponasality (Denasality):** This is when not enough sound comes through the nose, making the child sound "stopped up." This might be caused by a blockage in the nose, or by allergies.
- **Hypernasality:** This happens when the movable, soft part of the palate (the velum) does not completely close off the nose from the back of the throat during speech. Because of this, too much sound escapes through the nose. This can be due to a history of cleft palate, a submucous cleft, a short palate, a wide nasopharynx, the removal of too much tissue during an adenoidectomy, or poor movement of the soft palate.
- **Cul-de-Sac Resonance:** This is when there is a blockage of sound in the nose, mouth, or throat. The voice sounds muffled or quiet as a result.

1.7.1 Reasons for Concern

- Speech sounds hyponasal or hypernasal
- Air is heard coming out of the nose during speech

1.8 Fluency Disorders (Stuttering)

Fluency is the natural “flow” or forward movement of speech. Stuttering is the most common type of fluency disorder. Stuttering happens when there are an abnormal number of repetitions, hesitations, prolongations, or blocks in this rhythm or flow of speech.

At present, the cause is most likely linked to underlying neurological differences in speech and language processing. Internal reactions from the person talking, and external reactions from other listeners, may impact stuttering, but they do not cause stuttering.

1.8.1 Reasons for Concern

- The parents are concerned about stuttering.
- The child has an abnormal number of repetitions, hesitations, prolongations, or blocks in the natural flow of speech.
- The child exhibits tension during speech.
- The child avoids speaking due to a fear of stuttering.
- The child considers himself to be someone who stutters.

1.9 Language Disorder

A language disorder is characterized by difficulty conveying meaning using speech, writing, or even gestures. There are two main types of language disorders: receptive and expressive. Causes of language disorders are unknown in many children. Known causes may include hearing loss, intellectual disabilities, emotional disturbance, a lack of environmental exposure to language, or brain injury.

1.10 Receptive Language Disorder

• Difficulty understanding words and/or sentences • Difficulty attending to the speech of others • Difficulty with following directions and learning

1.11 Expressive Language Disorder

• Difficulty using the right words when talking • Difficulty combining words to make sentences • Limited vocabulary • Difficulty putting sentences together correctly

1.11.1 Reasons for Concern

- If the child does not use any words by 16-18 months.
- The child cannot follow simple instructions, such as "Give me your shoe" by 18 months.
- The child cannot point to body parts or common objects when asked by 18 months
- The child has not started combining words by age 2
- The child does not use complete sentences by age 3
- The child imitates or “echoes” parts of questions or commands instead of responding appropriately by age 3. For example, when asked "What's your name?" the child says, "Your name"
- The child’s sentences are still short or jumbled by age 4
- The child often uses words incorrectly by age 4. For example, a child may say "cut" for "scissors," or "dog" for "cow"

1.12 Causes of a Communication Disorder

A child may be at risk for a communication disorder if there is a history of the following:

- Cleft lip or cleft palate
- Craniofacial anomalies
- Velopharyngeal insufficiency
- Dental malocclusion
- Oral-motor dysfunction
- Neurological disease/dysfunction or brain injury
- Respirator dependency, respiratory compromise, or tracheostomy
- Vocal fold pathology
- Developmental delay
- Autism

- Prematurity or traumatic birth
- Hearing loss or deafness

1.13 Treatment for Communication Disorders

Early intervention is very important for children with communication disorders. Treatment is best started during the toddler or preschool years. These years are a critical period of normal language learning. The early skills needed for normal speech and language development can be evaluated even in infants. At that age, the speech-language pathologist works with the parents on stimulating speech and language development in the home. Active treatment in the form of individual therapy usually starts between the ages of 2 and 4 years.

If you have concerns with your child's communication skills, discuss them with your child's doctor. The doctor will likely refer the child to a speech-language pathologist for evaluation and treatment. All children with speech and language disorders should also have their hearing tested.

1.13.1 Helping the Child

Children learn speech and language skills by listening to the speech of others, and practicing as they talk to others. Parents are the most important teachers for their child in the early years. They can help the child by giving lots of opportunities to listen and talk. This can be done by frequently pointing out and naming important people, places, and things. They can also read and talk to the child during the day, especially during daily routines, interactive play, and favorite activities.

Parents can give the child models of words and sentences to repeat. Parents can also set up opportunities for the child to answer questions and talk. Listening to music, singing songs, and sharing nursery rhymes are also great ways to build speech and language skills while having fun with your child.

1.14 What is a language delay?

A language delay is a type of communication disorder. Your child may have a language delay if they don't meet the language developmental milestones for their age. Their language abilities

may be developing at a slower rate than most children's. They may have trouble expressing themselves or understanding others. Their delay may involve a combination of hearing, speech, and cognitive impairments.

Language delays are quite common. According to the University of Michigan Health System, delayed speech or language development affects 5 to 10 percent of preschool-aged children.

1.14.1 Types

A language delay can be receptive, expressive, or a combination of both. A receptive language deficit happens when your child has difficulty understanding language. An expressive language disorder happens when your child has difficulty communicating verbally.

1.14.2 Symptoms

If your child has a language delay, they won't reach language milestones at the typical age. Their specific symptoms and missed milestones depend on their age and the nature of their language delay.

Common symptoms of a language delay include:

- not babbling by the age of 15 months
- not talking by the age of 2 years
- an inability to speak in short sentences by the age of 3 years
- difficulty following directions
- poor pronunciation or articulation
- difficulty putting words together in a sentence
- leaving words out of a sentence

1.14.3 Causes

Language delays in children have many possible causes. In some instances, more than one factor contributes to a language delay. Some common causes include the following:

- Hearing impairment: It's common for children who have a hearing impairment to have a language impairment as well. If they can't hear language, learning to communicate can be difficult.
- Autism: While not all children with autism have language delays, autism frequently affects communication.
- Intellectual disability: A variety of intellectual disabilities can cause language delays. For instance, dyslexia and other learning disabilities lead to language delays in some cases.
- Several psychosocial issues: These can cause language delays, as well. For example, severe neglect can lead to problems with language development.

1.15 Risk factors for language delay

According to the U.S. Preventive Services Task Force, potential risk factors for speech and language problems include:

- being male
- being born prematurely
- having a low birth weight
- having a family history of speech or language problems
- having parents with lower levels of education

1.15.1 How it's diagnosed

After conducting a thorough medical assessment, your child's doctor will refer you to a speech-language pathologist. They will perform a comprehensive assessment of your child's expressive and receptive language to determine if your child has a language delay. The exam will focus on various forms of verbal and nonverbal communication and use standardized and informal measures.

After completing a speech and language evaluation, the language pathologist may recommend other exams. For example, a hearing exam can help them determine if your child has a hearing impairment. Your child may have hearing problems that have been overlooked, especially if they're very young.

1.15.2 Treatment

After diagnosis, your child's treatment plan will likely involve speech and language therapy. A licensed speech-language pathologist will complete an evaluation to determine the types of problems that your child is facing. This information will help them develop and implement a treatment plan.

If your child has underlying health conditions, their doctor may recommend other treatments as well. For example, they may recommend an evaluation by a neuropsychologist.

1.16 What is the outlook?

Your child's outlook will vary depending on their specific condition and age. Some children catch up to their peers and meet future language milestones. Other children have more difficulty overcoming language delays and may face problems in later childhood. Some children with language delays have reading or behavior problems as a result of their delayed language development.

If your child is diagnosed with a language delay, it's important to start treatment quickly. Early treatment can help prevent other problems from developing, such as social, learning, and emotional problems.

1.17 Tips for encouraging language development

It may not be possible to prevent all language delays. Hearing impairments and learning disabilities may not always be preventable. Follow these tips to encourage language development in your child:

- Talk to your child from the time they're born.
- Respond to your child's babbling when they're a baby.
- Sing to your child, even when they're a baby.
- Read aloud to your child.
- Answer your child's questions.

1.18 Terminology

1. **Hyponosality**: This is when not enough sound comes through the nose, making the child sound "stopped up."

1.19 Activity

1. Discuses causes of communication disordered.
2. Examine symptoms of language delay.

1.20 Reflection

What challenges do you think a child with communication disorders may face?

1.21 Summary

In this unit, you have learnt about the following communication disorders; voice disorder, fluency disorder, receptive language disorder and resonance disorder. You have also learnt about causes, symptoms and treatment of children with communication disorders. In the next unit, you will learn about gifted and talented children.

UNIT 2: GIFTED AND TALENTED CHILDREN

2.1 Introduction

In this unit, you will learn about common characterises of gifted individuals, traits of giftedness, types of giftedness, and tests for gifted children.

2.2 Learning Outcome

By the end of this unit you are expected to;

- Discuss common characteristics of gifted individuals.
- Explain various tests for gifted children.

2.3 Time frame

You need about two (2) hours per week to interact with this material

2.4 Content

- Common characteristics of gifted individuals.
- Traits of giftedness.
- Types of giftedness.
- Tests for giftedness.

2.5 Common Characteristics of Gifted Individuals

Because gifted children are so diverse, not all exhibit all characteristics all of the time. However, there are common characteristics that many gifted individuals share:

- Unusual alertness, even in infancy
- Rapid learner; puts thoughts together quickly
- Excellent memory
- Unusually large vocabulary and complex sentence structure for age

- Advanced comprehension of word nuances, metaphors and abstract ideas
- Enjoys solving problems, especially with numbers and puzzles
- Often self-taught reading and writing skills as preschooler
- Deep, intense feelings and reactions
- Highly sensitive
- Thinking is abstract, complex, logical, and insightful
- Idealism and sense of justice at early age
- Concern with social and political issues and injustices
- Longer attention span and intense concentration
- Preoccupied with own thoughts—daydreamer
- Learn basic skills quickly and with little practice
- Asks probing questions
- Wide range of interests (or extreme focus in one area)
- Highly developed curiosity
- Interest in experimenting and doing things differently
- Puts idea or things together that are not typical
- Keen and/or unusual sense of humor
- Desire to organize people/things through games or complex schemas
- Vivid imaginations (and imaginary playmates when in preschool)

2.6 Traits of Giftedness

No gifted individual is exactly the same, each with his own unique patterns and traits. There are many traits that gifted individuals have in common, but no gifted learner exhibits traits in every area. This list of traits may help you better understand whether or not your child is gifted.

Cognitive	**Creative**	**Affective**	**Behavioral**
Keen power of abstraction Interest in problem-solving	Creativeness and inventiveness Keen sense of humor	Unusual emotional depth and intensity	Spontaneity Boundless enthusiasm

and applying concepts Voracious and early reader Large vocabulary Intellectual curiosity Power of critical thinking, skepticism, self-criticism Persistent, goal-directed behavior Independence in work and study Diversity of interests and abilities	Ability for fantasy Openness to stimuli, wide interests Intuitiveness Flexibility Independence in attitude and social behavior Self-acceptance and unconcern for social norms Radicalism Aesthetic and moral commitment to self-selected work	Sensitivity or empathy to the feelings of others High expectations of self and others, often leading to feelings of frustration Heightened self-awareness, accompanied by feelings of being different Easily wounded, need for emotional support Need for consistency between abstract values and personal actions Advanced levels of moral judgment Idealism and sense of justice	Intensely focused on passions—resists changing activities when engrossed in own interests Highly energetic—needs little sleep or down time Constantly questions Insatiable curiosity Impulsive, eager and spirited Perseverance—strong determination in areas of importance High levels of frustration—particularly when having difficulty meeting standards of performance (either imposed by self or others) Volatile temper, especially related to perceptions of failure Non-stop talking/chattering

Source: Clark, B. (2008). *Growing up gifted (7th ed.)* Upper Saddle River, NJ: Pearson Prentice Hall.

1.7 Characteristics of the Gifted Child

The term "gifted" has been thrown around in public education circles for decades – often misused, misdiagnosed and misunderstood. Gifted children may present in various ways; some are positive characteristics and some, are not as desirable. When determining giftedness in a student, it is essential to take a number of factors into consideration, since not all gifted children

will exhibit the same characteristics at the same time. This list offers 10 of the most common characteristics seen in gifted students.

1.7.1 Verbal Ability

Gifted children often begin communicating verbally at an early age, and they use vocabulary far beyond their age. These children are often referred to as "precocious" because of their language usage. The website for Amend Psychological Services list some of the verbal features of gifted children as "avid storytellers," early talkers or those with and extensive and precise vocabulary. These children often choose their words carefully, but tend to use a lot of them. They can also get frustrated with children in the same age group who are unable to understand them and often turn to older children or adults for conversation.

1.8.2 Information Processing

Education.com states that gifted children often have an "unusual capacity for processing information" and are often able to process that information more quickly and accurately than their peers. These children typically master subjects like reading and math much more quickly than their peers, which can make it difficult to keep them challenged in a regular school setting. Bright Hub Education explains that some gifted children become disruptive in classrooms – often because they are bored with the material that is taught over and over again.

1.9.3 High Curiosity Level

Gifted children often have a high curiosity level and dive into subjects with a passion not seen in most children their age. Amend Psychological Services says it is not unusual for a gifted child to learn the names of all the dinosaurs or the stats for every player on a baseball team at a very young age. Beth Israel Deaconess Medical Center calls this characteristic a "deep absorption in activities that interest them," and parents of gifted children learn quickly just how saturated that absorption can go, when they have to take a child to the library or help them find facts on the Internet over and over again.

2.7.4 Memory Retention

Gifted children are often able to retain information faster and for longer periods of time than average children of the same age. Their rapid learning ability allows them to process facts quickly and retain them for efficient recall later on. High memory retention combined with fast information processing often means these children learn subjects at a rapid-fire rate that can make it challenging for parents and teachers to present information to gifted children as fast as they like.

2.7.5 Intensity and Persistence

Many gifted children are intense in the way they learn, which is often why they pick up large amounts of information so quickly. They can also be intense socially, with acute sensitivity to the needs and feelings of others, according to Education.com. These children are able to show compassion to others at a much deeper level than other children their age. However, the intensity and persistence can also work against a gifted child on occasion, when the child encounters a problem he cannot easily solve or a topic he cannot seem to master as quickly.

2.7.6 Sense of Humor

Gifted children are enjoyable to be around because many exhibit a sense of humor that goes well beyond their years. Bright Hub Education states that these children often have a special appreciation for more subtle types of humor like satire. They also enjoy plays on words, such as puns, and are particularly adept at using these comic techniques themselves. Whether their sense of humor comes out in their conversation or their writing, these students can be a joy to converse with.

2.7.7 Sense of Justice

Gifted children often have an acute sense of justice, which can translate to high expectations of themselves and others. While their strong moral compass can make them effective leaders, and ensure good choices in many situations, this characteristic can also make it difficult for them to forge long-lasting relationships with others. These children often become interested in justice and fairness at a very early age, which continues throughout their lives.

2.7.8 Strong Imagination

Gifted children often exhibit a strong imagination, with an ability to spin tales that parents and teachers do not necessarily expect. Education.com says these children often show originality in their oral, written or artistic expression and are viewed as highly creative. Gifted children may spend time fantasizing, and are often categorized as independent thinkers.

2.7.9 Keen Observation

Children who fall into this group may have the ability to pick on details much more acutely than other children in the same age bracket. Whether reading a book, watching a movie, gifted students often notice seemingly nonessential pieces of information that others might miss. Their attention to detail often results in long, drawn out renditions of situations or conflicts – a frequent source of frustration for parents and teachers at times.

2.7.10 Problem Solving Capabilities

Often perceived as effective problem solvers, gifted children typically relish nothing more than breaking down a complex issue and finding a solution that no one else has every thought of. These children, according to Education.com, have an "advanced cognitive and affective capacity for conceptualizing societal problems" – the potential leaders of the future.

Labeling a child as "gifted" is a somewhat complex process that involves careful observation and objective testing in most cases. While this list is not an exhaustive one, it does provide insight into some of the most common characteristics of gifted children to help teachers and parents know whether further assessments are warranted.

2.8 Characteristics of the Gifted Child

The gifted child can exhibit many unique characteristics, or none at all. And even those who seemingly exhibit none of these characteristics may feel many of them, hidden just below the surface.

Everyone is concerned about the **social and emotional** well-being of the gifted child, but many teachers and parents disagree about the best ways to facilitate healthy social and emotional development in the gifted child. **nature and gifted children** supports the correlation between healthy children, especially gifted children, and time spent out-of-doors in nature.

And like other characteristics of gifted children, the social-emotional aspects of life often seem extreme. When you need more information, Suicide can help provide resources and information, but first and foremost, seek professional help. g**rief & mourning** can also be very strong emotional reactions in gifted children; these books and resources can help you through difficult times.

Learning Styles vary from individual to individual, but the majority of children and the majority of educators share a common learning style. Some gifted children have very unique learning styles, which further differentiates them from other children, and further frustrates the relationships between teacher and student. **visual-spatial learners** often cause great concern to the classroom teacher, and the parent at home.

Personality Type is another variable to consider. Is the ratio of introvert to extravert personalities higher in the gifted population than in the general population? How do the personality factors affect our lives?

Young Gifted Children present special challenges, because they are sometimes not yet able to explain the differences they feel, and the pressures and priorities of being a gifted child. **Gifted Adolescents** often find they don't fit as gifted children, gifted adults, or "normal" adolescents. **Highly Gifted Children** often present an entirely different set of characteristics; sometimes they can be simplified by just saying they are "More!" And **Gifted Adults**... do they exist? Yes!

What We Have Learned About Gifted Children 1979-2007 gives a concise summary of those characteristics noted in clinical study of gifted children at the Gifted Development Center... some are intuitive, some may come as a surprise!

2.9 Common Traits and Characteristics of Gifted Children

2.9.1 Gifted youth have distinct cognitive and social features

What are the traits and characteristics that make gifted children stand out from their peers? Identifying these unique cognitive, social, emotional and linguistic traits isn't necessarily difficult. In fact, to the trained eye, it can be fairly easy to spot a gifted child. Even to the not-so-trained eye of a parent, it's easy to notice that a child is not quite like other children. Still, parents often question what these differences mean.

They know their child is smart, but could she actually be gifted? Reviewing this checklist of common characteristics found in gifted children is a quick first step parents can use to determine whether a child is gifted. If a child has many of these traits, you should consult her teacher or school administrator about getting testing done to determine if your child is gifted.

Such testing may not be as reliable in young children, so parents of small children, such as toddlers, can review the list of common traits found in young gifted children.

2.9.2 Cognitive Traits That Signal Giftedness

Is your child very observant, extremely curious or prone to having intense interests? Then, he might be gifted. Think about whether your child notices things that fellow children, or even adults, would overlook. That's a sign of being observant. And if your child annoys you by constantly peppering you with questions about everything from whey he has to eat a particular meal to why there's war in the world, you might have a gifted kid on your hands.

Consider how passionate your child is about his interests as well. When he gets a new hobby can he spend hours on it? Does he seem to think or talk of nothing else? This indicates intense interest. Other cognitive traits that make gifted children stand out include having an excellent memory, long attention span, excellent reasoning skills and well-developed powers of abstraction, conceptualization, and synthesis.

Your child may also be able to quickly and easily see relationships between ideas, objects or facts and have fluent and flexible thinking. Gifted children's thinking tends to be elaborate and

original, and they have excellent problem-solving skills. They learn concepts quickly and with less practice and repetition than their peers need. And if your child has an unusual or vivid imagination that sometimes lands him in hot water, consider that another sign of giftedness.

2.9.3 Social and Emotional Traits

Gifted children stand out from their peers by developing interests in philosophical and social issues. They are also very sensitive, both emotionally and physically. They may cry over things that other children shrug off or complain about tags in their clothes or the seams in their socks irritating their skin.

In addition, gifted children exhibit deep concern about fairness and injustice. They tend to be perfectionistic, energetic and have a well-developed, if not quirky, sense of humor. They are usually intrinsically motivated, meaning they set goals and challenges for themselves rather than to get the approval of others. While they may relate well to parents, teachers, and other adults, they also question authority out of curiosity or when they believe an injustice has occurred.

2.9.4 Language Traits

The language traits of gifted children set them apart as well. They tend to have extensive vocabularies and may read earlier than their peers. Even if they read at the standard age, they tend to read rapidly and widely. They also love to ask "what if" questions.

2.9.5 Additional Traits of Gifted Children

The gifted child enjoys learning new things. She enjoys the intellectual activity and displays intellectual playfulness. She'll likely prefer books and magazines meant for older children and adopt a skeptical, critical and evaluative attitude. Gifted children tend to have asynchronous development, meaning they may be mentally very astute but emotionally react to situations like a child their age, or even younger, would.

2.10 Types of Giftedness

First, it's important to understand that giftedness is not just a matter of academic achievement. A child (or adult) may be gifted in several different domains:

- Intellectual
- Creative
- Artistic
- Leadership
- Academic

Thus, even if your child isn't an academic whiz, he may be gifted in other areas. While schools are most likely to be interested in intellectual and academic giftedness, parents should be supportive of their child's creative, artistic, or other gifts. These may become increasingly important as your child moves into higher grades or starts a career.

2.11 Tests for Giftedness

While "quick tests" (like the one below) may provide you with insights into your child's abilities, they aren't true tests for giftedness. Once a child has been identified as possibly gifted, she will go through a variety of carefully developed, benchmarked tests to determine whether and to what degree she is truly above average. Some of these tests may include:

- Standard IQ tests
- Non-verbal IQ tests
- Achievement tests

Results of these tests, administered by trained professionals, provide schools with the information they need to place, educate, and challenge your child.

2.12 Checklist of Traits of Gifted Children

Gifted children don't always behave in the ways you'd expect. For example, many gifted children appear to be "daydreaming" in class, while others may have a hard time controlling their tempers. As a result, they may not be classroom stars; in fact, they may be in trouble more often than not!

Some traits of giftedness overlap with traits of developmental disorders. It can thus be tough to determine whether a child is gifted or diagnosable with ADHD, high functioning autism, or

another related issue. And, of course, it is quite possible to be gifted and also have a developmental disorder.

You can answer the following questions and see how many of the behaviors apply to your child. Remember, though not all gifted children are alike, so not every gifted child will have all of these behaviors, but if some of these behaviors sound familiar, you might want to learn more about gifted kids!

1. Talk a blue streak, using an unusually high vocabulary
2. Ask a lot of questions
3. Appear unusually sensitive to injustice or unkindness
4. Wear you out with her endless questions
5. Exhaust you with his seemingly boundless energy
6. Get frustrated because her work is less than perfect
7. Get totally absorbed in activities and thoughts
8. Prefer to work independently rather than in a group
9. Find it difficult (or undesirable) to conform to others' expectations
10. Have an unusual level of interest in classifying and organizing objects or ideas

I Think My Child Is Gifted; Now What?

If the above checklist describes your child, you may want to consider having him screened or tested for giftedness.

Speak to your child's school psychologist or advisor to set up a battery of IQ and ability tests to see if your child's educational program is appropriate for his gifts.

Meanwhile, though, if your child is also having difficulty communicating with peers, limiting impulsive behavior, or completing work on time, you may want to raise questions about those issues as well. Your child may be gifted; at the same time, however, she may have challenges that should be addressed so that her gifts can shine through.

2.13 Activity

1. Examine characteristics of talented and gifted children.
2. Discuss tests used to asses' gifted children.

2.14 Reflection

What challenges do you think gifted children pose to their parents, and teaches?

2.15 Summary

In this unit you have learnt about characteristics of gifted and talented children. You have learnt that gifted children have unusual alertness, are rapid learns, usually have large vocabulary, have advanced comprehension of word nuances and that they are highly sensitive. In the next unit, we will learn about learning disabilities and disorders.

UNIT 3: LEARNING DISABILITIES AND DISORDERS

3.1 Introduction

In this unit, you will learn about learning disabilities that children may have that might make them have learning challenges.

3.2 Learning outcomes

By the end of this unit, you are expected to;

- Analyse learning disorders.
- discuss signs and symptoms of learning disabilities and disorders.
- Examine the diagnosis and testing process for learning disabilities.

3.3 Time frame

You need about two (2) hours per week to interact with this material.

3.4 Content

- Signs and symptoms of learning disabilities.
- Learning disabilities in reading (dyslexia).
- Learning disabilities in maths (dyscalculia).
- Learning disabilities in motor skills (dyspraxia).
- Auditory processing disorder.
- Visual processing disorder.
- The diagnosis and testing for learning disabilities.

3.5 Learning disabilities

Learning disabilities, or learning disorders, are an umbrella term for a wide variety of learning problems. A learning disability is not a problem with intelligence or motivation. Kids with learning disabilities aren't lazy or dumb. In fact, most are just as smart as everyone else. Their brains are simply wired differently. This difference affects how they receive and process information.

Simply put, children and adults with learning disabilities see, hear, and understand things differently. This can lead to trouble with learning new information and skills, and putting them to use. The most common types of learning disabilities involve problems with reading, writing, math, reasoning, listening, and speaking. While every kid has trouble with homework from time to time, if a certain area of learning is consistently problematic, it might indicate a learning disorder. Children with learning disabilities can, and do, succeed.

It can be tough to face the possibility that your child has a learning disorder. No parents want to see their children suffer. You may wonder what it could mean for your child's future, or worry about how your kid will make it through school. Perhaps you're concerned that by calling attention to your child's learning problems they might be labeled "slow" or assigned to a less challenging class.

But the important thing to remember is that most kids with learning disabilities are just as smart as everyone else. They just need to be taught in ways that are tailored to their unique learning styles. By learning more about learning disabilities in general, and your child's learning difficulties in particular, you can help pave the way for success at school and beyond.

3.6 Signs and symptoms of learning disabilities and disorders

Learning disabilities look very different from one child to another. One child may struggle with reading and spelling, while another loves books but can't understand math. Still another child may have difficulty understanding what others are saying or communicating out loud. The problems are very different, but they are all learning disorders.

It’s not always easy to identify learning disabilities. Because of the wide variations, there is no single symptom or profile that you can look to as proof of a problem. However, some warning signs are more common than others at different ages. If you’re aware of what they are, you’ll be able to catch a learning disorder early and quickly take steps to get your child help.

The following checklist lists some common red flags for learning disorders. Remember that children who don’t have learning disabilities may still experience some of these difficulties at various times. The time for concern is when there is a consistent unevenness in your child’s ability to master certain skills.

3.6.1 Signs and symptoms of learning disabilities: Preschool age

- Problems pronouncing words
- Trouble finding the right word
- Difficulty rhyming
- Trouble learning the alphabet, numbers, colors, shapes, days of the week
- Difficulty following directions or learning routines
- Difficulty controlling crayons, pencils, and scissors, or coloring within the lines
- Trouble with buttons, zippers, snaps, learning to tie shoes

3.6.2 Signs and symptoms of learning disabilities: Ages 5-9

- Trouble learning the connection between letters and sounds
- Unable to blend sounds to make words
- Confuses basic words when reading
- Slow to learn new skills
- Consistently misspells words and makes frequent errors

- Trouble learning basic math concepts
- Difficulty telling time and remembering sequences

3.6.3 Signs and symptoms of learning disabilities: Ages 10-13

- Difficulty with reading comprehension or math skills
- Trouble with open-ended test questions and word problems
- Dislikes reading and writing; avoids reading aloud
- Poor handwriting
- Poor organizational skills (bedroom, homework, desk is messy and disorganized)
- Trouble following classroom discussions and expressing thoughts aloud
- Spells the same word differently in a single document

Paying attention to normal developmental milestones for toddlers and preschoolers is very important. Early detection of developmental differences may be an early signal of a learning disability and problems that are spotted early can be easier to correct.

A developmental lag might not be considered a symptom of a learning disability until your child is older, but if you recognize it when your child is young, you can intervene early. You know your child better than anyone else does, so if you think there is a problem, it doesn't hurt to get an evaluation. You can also ask your pediatrician for a developmental milestones chart.

3.7 Problems with reading, writing, and math

Learning disabilities are often grouped by school-area skill set. If your child is in school, the types of learning disorders that are most conspicuous usually revolve around reading, writing, or math.

3.7.1 Learning disabilities in reading (dyslexia)

There are two types of learning disabilities in reading. Basic reading problems occur when there is difficulty understanding the relationship between sounds, letters and words. Reading comprehension problems occur when there is an inability to grasp the meaning of words, phrases, and paragraphs.

Signs of reading difficulty include problems with:

- letter and word recognition
- understanding words and ideas
- reading speed and fluency
- general vocabulary skills

3.7.2 Learning disabilities in math (dyscalculia)

Learning disabilities in math vary greatly depending on the child's other strengths and weaknesses. A child's ability to do math will be affected differently by a language learning disability, or a visual disorder or a difficulty with sequencing, memory or organization.

A child with a math-based learning disorder may struggle with memorization and organization of numbers, operation signs, and number "facts" (like 5+5=10 or 5×5=25). Children with math learning disorders might also have trouble with counting principles (such as counting by twos or counting by fives) or have difficulty telling time.

3.7.3 Learning disabilities in writing (dysgraphia)

Learning disabilities in writing can involve the physical act of writing or the mental activity of comprehending and synthesizing information. Basic writing disorder refers to physical difficulty

forming words and letters. Expressive writing disability indicates a struggle to organize thoughts on paper.

Symptoms of a written language learning disability revolve around the act of writing. They include problems with:

- neatness and consistency of writing
- accurately copying letters and words
- spelling consistency
- writing organization and coherence

3.8 Other types of learning disabilities and disorders

Reading, writing, and math aren't the only skills impacted by learning disorders. Other types of learning disabilities involve difficulties with motor skills (movement and coordination), understanding spoken language, distinguishing between sounds, and interpreting visual information.

3.8.1 Learning disabilities in motor skills (dyspraxia)

Motor difficulty refers to problems with movement and coordination whether it is with fine motor skills (cutting, writing) or gross motor skills (running, jumping). A motor disability is sometimes referred to as an "output" activity meaning that it relates to the output of information from the brain. In order to run, jump, write or cut something, the brain must be able to communicate with the necessary limbs to complete the action.

Signs that your child might have a motor coordination disability include problems with physical abilities that require hand-eye coordination, like holding a pencil or buttoning a shirt.

3.9.2 Learning disabilities in language (aphasia/dysphasia)

Language and communication learning disabilities involve the ability to understand or produce spoken language. Language is also considered an output activity because it requires organizing thoughts in the brain and calling upon the right words to verbally explain something or communicate with someone else.

Signs of a language-based learning disorder involve problems with verbal language skills, such as the ability to retell a story and the fluency of speech, as well as the ability to understand the meaning of words, parts of speech, directions, etc.

3.9.3 Auditory and visual processing problems: the importance of the ears and eyes

The eyes and the ears are the primary means of delivering information to the brain, a process sometimes called “input.” If either the eyes or the ears aren’t working properly, learning can suffer.

Auditory processing disorder – Professionals may refer to the ability to hear well as “auditory processing skills” or “receptive language.” The ability to hear things correctly greatly impacts the ability to read, write and spell. An inability to distinguish subtle differences in sound, or hearing sounds at the wrong speed make it difficult to sound out words and understand the basic concepts of reading and writing.

Visual processing disorder – Problems in visual perception include missing subtle differences in shapes, reversing letters or numbers, skipping words, skipping lines, misperceiving depth or distance, or having problems with eye–hand coordination. Professionals may refer to the work of the eyes as “visual processing.” Visual perception can affect gross and fine motor skills, reading comprehension, and math.

Common types of learning disabilities

Dyslexia – Difficulty with reading

- Problems reading, writing, spelling, speaking

Dyscalculia – Difficulty with math

- Problems doing math problems, understanding time, using money

Dysgraphia – Difficulty with writing

- Problems with handwriting, spelling, organizing ideas

Dyspraxia (Sensory Integration Disorder) – Difficulty with fine motor skills

- Problems with hand-eye coordination, balance, manual dexterity

Dysphasia/Aphasia – Difficulty with language

- Problems understanding spoken language, poor reading comprehension

Auditory Processing Disorder – Difficulty hearing differences between sounds

- Problems with reading, comprehension, language

Visual Processing Disorder – Difficulty interpreting visual information

- Problems with reading, math, maps, charts, symbols, pictures

3.9 Other disorders that make learning difficult

Difficulty in school doesn't always stem from a learning disability. Anxiety, depression, stressful events, emotional trauma, and other conditions affecting concentration make learning more of a challenge. In addition, ADHD and autism sometimes co-occur or are confused with learning disabilities.

ADHD – Attention deficit hyperactivity disorder (ADHD), while not considered a learning disability, can certainly disrupt learning. Children with ADHD often have problems sitting still, staying focused, following instructions, staying organized, and completing homework.

Autism– Difficulty mastering certain academic skills can stem from pervasive developmental disorders such as autism and Asperger's syndrome. Children with autism spectrum disorders may have trouble communicating, reading body language, learning basic skills, making friends, and making eye contact.

Hope for learning disabilities: The brain can change

How does understanding the brain help a learning disorder?

Using a telephone analogy, faulty wiring in the brain disrupts normal lines of communication and makes it difficult to process information easily. If service was down in a certain area of the city, the phone company might fix the problem by re-wiring the connections. Similarly, under the right learning conditions, the brain has the ability to reorganize itself by forming new neural connections. These new connections facilitate skills like reading and writing that were difficult using the old connections.

Science has made great strides in understanding the inner workings of the brain, and one important discovery that brings new hope for learning disabilities and disorders is called *neuroplasticity*. Neuroplasticity refers to the brain's natural, lifelong ability to change. Throughout life, the brain is able to form new connections and generate new brain cells in response to experience and learning. This knowledge has led to groundbreaking new treatments for learning disabilities that take advantage of the brain's ability to change. Innovative programs, such as the Arrow smith programme, use strategic brain exercises to identify and strengthen weak cognitive areas. For example, for children who have difficulty distinguishing between different sounds in a word, there are new computer-based learning programs that slow down the sounds so that children can understand them and gradually increase their speed of comprehension.

These discoveries about neuroplasticity provide hope to all students with learning disorders, and further research may lead to additional new treatments that target the actual causes of learning disabilities, rather than simply offering coping strategies to compensate for weaknesses.

3.10 Diagnosis and testing for learning disabilities and disorders

As you've already learned, diagnosing a learning disability isn't always easy. Don't assume you know what your child's problem is, even if the symptoms seem clear. It's important to have your child tested and evaluated by a qualified professional. That said, you should trust your instincts. If you think something is wrong, listen to your gut. If you feel that a teacher or doctor is minimizing your concerns, seek a second opinion. Don't let anyone tell you to "wait and see" or "don't worry about it" if you see your child struggling. Regardless of whether or not your child's problems are due to a learning disability, intervention is needed. You can't go wrong by looking into the issue and taking action.

Keep in mind that finding someone who can help may take some time and effort. Even experts mix up learning disabilities with ADHD and other behavioral problems sometimes. You may have to look around a bit or try more than one professional. In the meantime, try to be patient, and remember that you won't always get clear answers. Try not to get too caught up in trying to determine the label for your child's disorder. Leave that to the professionals. Focus instead on steps you can take to support your child and address their symptoms in practical ways.

3.11 The diagnosis and testing process for learning disabilities

Diagnosing a learning disability is a process. It involves testing, history taking, and observation by a trained specialist. Finding a reputable referral is important. Start with your child's school, and if they are unable to help you, ask your insurance company, doctor, or friends and family who have dealt successfully with learning disabilities.

Types of specialists who may be able to test for and diagnose learning disabilities include:

1. Clinical psychologists
2. School psychologists
3. Child psychiatrists
4. Educational psychologists
5. Developmental psychologists

6. Neuropsychologist
7. Psychometrics
8. Occupational therapist (tests sensory disorders that can lead to learning problems)
9. Speech and language therapist

Sometimes several professionals coordinate services as a team to obtain an accurate diagnosis. They may ask for input from your child's teachers. Recommendations can then be made for special education services or speech-language therapy within the school system. A nonpublic school that specializes in treating learning disabilities might be a good alternative if the public school is not working out. For a list of nonpublic schools in your area go to the website for your state's Department of Education.

Integration, sequencing and abstraction: Technical terms for how the brain works

A professional learning disorders specialist might refer to the importance of "integration" to learning. Integration refers to the understanding of information that has been delivered to the brain, and it includes three steps: sequencing, which means putting information in the right order; abstraction, which is making sense of the information; and organization, which refers to the brains ability to use the information to form complete thoughts.

Each of the three steps is important and your child may have a weakness in one area or another that causes learning difficulty. For example, in math, sequencing (the ability to put things in order) is important for learning to count or do multiplication (as well as learn the alphabet or the months of the year). Similarly, abstraction and organization are important parts of numerous educational skills and abilities. If a certain brain activity isn't happening correctly, it will create a roadblock to learning.

Getting help for children with learning disabilities

When it comes to learning disabilities, it's not always easy to know what to do and where to find help. Turning to specialists who can pinpoint and diagnose the problem is, of course, important. You will also want to work with your child's school to make accommodations for your child and

get specialized academic help. But don't overlook your own role. You know your child better than anyone else, so take the lead in looking into your options, learning about new treatments and services, and overseeing your child's education.

Learn the specifics about your child's learning disability. Read and learn about your child's type of learning disability. Find out how the disability affects the learning process and what cognitive skills are involved. It's easier to evaluate learning techniques if you understand how the learning disability affects your child.

Research treatments, services, and new theories. Along with knowing about the type of learning disability your child has, educate yourself about the most effective treatment options available. This can help you advocate for your child at school and pursue treatment at home.

Pursue treatment and services at home. Even if the school doesn't have the resources to treat your child's learning disability optimally, you can pursue these options on your own at home or with a therapist or tutor.

Nurture your child's strengths. Even though children with learning disabilities struggle in one area of learning, they may excel in another. Pay attention to your child's interests and passions. Helping children with learning disorders develop their passions and strengths will probably help them with the areas of difficulty as well.

Social and emotional skills: How you can help

Learning disabilities can be extremely frustrating for children. Imagine having trouble with a skill all of your friends are tackling with ease, worrying about embarrassing yourself in front of the class, or struggling to express yourself. Things can be doubly frustrating for exceptionally bright children with learning disabilities–a scenario that's not uncommon.

Kids with learning disabilities may have trouble expressing their feelings, calming themselves down, and reading nonverbal cues from others. This can lead to difficulty in the classroom and with their peers. The good news is that, as a parent, you can have a huge impact in these areas. Social and emotional skills are the most consistent indicators of success for all children—and

that includes kids with learning disorders. They outweigh everything else, including academic skills, in predicting lifelong achievement and happiness.

Learning disabilities, and their accompanying academic challenges, can lead to low self-esteem, isolation, and behavior problems, but they don't have to. You can counter these things by creating a strong support system for children with learning disabilities and helping them learn to express themselves, deal with frustration, and work through challenges. By focusing on your child's growth as a person, and not just on academic achievements, you'll help them to learn good emotional habits that set the stage for success throughout life.

3.12 Finding support while helping a child with learning disabilities

All children can be both exhilarating and exhausting, but it may seem that your child with a learning disability is especially so. You may experience some frustration trying to work with your child, and it can seem like an uphill battle when you don't have the information you need. After you learn what their specific learning disability is and how it is affecting their behavior, you will be able to start addressing the challenges in school and at home. If you can, be sure to reach out to other parents who are addressing similar challenges as they can be great sources of knowledge and emotional support.

3.14 Activity

1. Discuss various learning disabilities.
2. Examine symptoms of learning disabilities.

3.15 Reflection

What is visual processing disorder?

3.16 Summary

In this unit, you have learnt the following learning disabilities; dyslexia, dyscalculia, dyspraxia, aphasia dysphasia, auditory processing disorder and visual processing disorder. You have also learnt about how to diagnose and have to test learning disabilities.

UNIT 4: VISUALLY IMPAIRMENT

4.1 Introduction

In this unit, you are going to learn about visual impairment, you will cover this topic in the area of cause of visual impairment, early signs and symptoms of visual impairment and effect of blindness. You will finally learn about early intervention services for children with vision impairment.

4.2 Learning Outcomes

By the end of this unit, you are expected to:

- Discuss various visual impairment disorders.
- Examine causes of visual impairment.
- Analyse early intervention series for children with vision impairment.

4.3 Time frame

You need about two (2) hours per week to interact with this material.

4.4 Content

- Low vision.
- Causes of vision impairment.
- Early signs and symptoms of vision impairment.
- Diagnosis of vision impairment.
- Effects of blindness.

4.5 What is vision impairment?

Vision impairment means lots of different things. It can range from no vision – blindness – or very low vision to not being able to see particular colours. Vision impairment can happen at any age. Most vision conditions in children will stay the same throughout their lives. Some conditions might result in vision problems for only a short time, but others might get worse over time, resulting in much poorer vision or blindness as the child gets older.

What is low vision?

Low vision is when your child can't see all the things he should be able to see for his age. Your child might have low-to-no vision, blurred vision or loss of side vision. Or his eyes might not be able to see some colours – this is called colour blindness.

What is blindness?

A child is considered legally blind if she can't see at 6 m what a child with normal vision can see at 60 m, or if her field of vision is less than 20 in diameter (a person with normal vision can see 180°).

4.6 Causes of vision impairment

Babies might have vision impairment at birth. It can also happen later as a result of disease, injury or a medical condition.

The most common causes of vision impairment are:

- neurological conditions that affect the parts of the brain that control sight (cortical vision impairment)
- genetic conditions like albinism and retinitis pigmentosa
- illnesses that happen to some very premature babies or babies that have particular problems during their birth
- conditions like paediatric glaucoma or cataracts and cancers like retinoblastoma

- infections with particular viruses during pregnancy – for example, rubella, cytomegalovirus, sexually transmitted infection, toxoplasmosis and so on
- structural problems with the eyes that limit vision – for example, microphthalmia or anophthalmia
- damage or injury to the eye, to the pathways connecting the eye to the brain, or to the visual centre of the brain.

4.7 Early signs and symptoms of vision impairment

Children who have vision impairment might have normal-looking eyes. Often, it will be something about a child's behaviour or the way he uses his eyes that makes you think there might be a problem with the way he sees.

Most **babies** start to focus on faces and objects by 4-5 weeks of age. By about 6-8 weeks, most babies will start smiling at the familiar faces and things they see. But if a baby has a vision impairment, you might notice she has trouble doing this.

Other signs that a baby might have a problem with his vision are if his:

- eyes move quickly from side to side (nystagmus), jerk or wander randomly
- eyes don't follow your face or an object, or he doesn't seem to make eye contact with family and friends
- eyes don't react to bright light being turned on in the room
- pupils seem white or cloudy rather than black
- eyes don't appear straight but turn towards the nose or drift outwards.

An older **child** might:

- hold things up close to her face
- say she is tired or rub her eyes a lot
- turn or tilt her head or cover one eye when looking at things up close
- get tired after looking at things up close – for example, reading, drawing or playing handheld games

- seem to see better during the day than at night
- seem to have crossed or turned eyes or a squint (lazy eye)
- seem clumsy – for example, she might knock things over or trip often.

4.8 Diagnosis of vision impairment

Getting a diagnosis is the first step to the right intervention.

If you're worried about your child's vision, you might want to see a GP or paediatrician to get your child's eyes checked. Your GP or paediatrician can send you to a children's eye specialist – a paediatric ophthalmologist. The ophthalmologist will examine your child and do tests to work out what the problem is.

If your GP or paediatrician doesn't think there's a problem but you're still worried, it's OK to get a second opinion.

4.9 Effects of blindness

Blindness can affect lots of areas of your child's development, some of which you might not expect.

Your child might have extra challenges with:

- communicating – for example, your child might not see someone waving and smiling at him or not be able to make eye contact
- playing and socialising with others – for example, your child might be clumsy, not be able to read non-verbal cues and gestures, get lost in a crowd or have trouble making friends
- talking – for example, your baby might not point to objects, so that the people around him won't name these objects, and he'll miss the chance to learn the names
- telling the difference between day and night
- sitting, crawling and walking – for example, your child might not try to move because he can't see the interesting objects you put out for him
- learning to read and write

- playing – for example, your child might be afraid to touch certain textures or explore areas he can't see.

Severe vision loss or blindness can mean that some parts of your child's development and learning will be slower than for other children. For example, you might notice that your child is slower in learning to roll over, crawl, walk, speak and be social with others. Your child's ability to do all these things should come with time.

4.10 Early intervention services for children with vision impairment

Once your child has a diagnosis of vision impairment, you can get access to early intervention services and specialists.

Children with all kinds of vision loss can **get a lot out of early intervention**. Early intervention services can do further assessments and help your child learn new skills. And they can help you learn how to do things to support your child's development in your everyday play and communication together. Children learn the most from the people who care for them and with whom they spend most of their time.

There are several specialists who are trained to work specifically with children who have severe vision loss. These might include orthoptists, physiotherapists, orientation and mobility specialists, occupational therapists and special education teachers.

4.11 Looking after yourself and your family

Although it's easy to get caught up in looking after your child, it's important to look after your own wellbeing too. If you're physically and mentally well, you'll be better able to care for your child.

Some agencies offer child and family counselling to help you work through the challenges and celebrate the triumphs that you'll encounter in your life as the parent of a child with vision impairment.

Talking to other parents can be a great way to get support. You can connect with other parents in similar situations by joining a face-to-face or online support group.

If you have other children, these siblings of children with disability need to feel that they're just as important to you – that you care about them and what they're going through. It's important to talk with them, spend time with them, and find the right support for them too.

4.12 Activity

1. discuss causes of vision impairment
2. examine early signs and symptoms if vision impairment

4.13 Reflection

What other ways except those discussed in this unit do you think can help detect early signs of vision impairment

4.14 Summary

In this unit, you leant about how vision, causes of vision impairment, early signs and symptoms of vision impairment diagnosis of vision impairment and effects of blindness in the next unit, you will learn about intellectual disabilities.

UNIT:5 INTELLECTUAL DISABILITY

5.1 Introduction

If your child has an intellectual disability (ID), their brain hasn't developed properly or has been injured in some way. Their brain may also not function within the normal range of both intellectual and adaptive functioning. In the past, medical professionals called this condition "mental retardation."

5.2 Learning outcome

By the end of this unit, you are expected to;

- Discuss causes of intellectual disabilities.
- Examine symptoms of intellectual disability.
- Examine treatment options for intellectual disability.

5.3 Time frame

You need about two (2) hours per week to interact with this material.

5.4 Content

- Four basic levels of intellectual disability.
- Symptoms of intellectual disability.
- Treatment option for intellectual disability.

5.5 There are four levels of ID:

- mild
- moderate
- severe
- profound

Sometimes, ID may be classified as:

- “other”
- “unspecified”

ID involves both a low IQ and problems adjusting to everyday life. There may also be learning, speech, social, and physical disabilities. Severe cases of ID may be diagnosed soon after birth. However, you might not realize your child has a milder form of ID until they fail to meet common developmental goals. Almost all cases of ID are diagnosed by the time a child reaches 18 years of age.

5.5.1 Symptoms of intellectual disability

Symptoms of ID will vary based on your child’s level of disability and may include:

- failure to meet intellectual milestones
- sitting, crawling, or walking later than other children
- problems learning to talk or trouble speaking clearly
- memory problems
- inability to understand the consequences of actions
- inability to think logically

- childish behavior inconsistent with the child's age
- lack of curiosity
- learning difficulties
- IQ below 70
- inability to lead a fully independent life due to challenges communicating, taking care of themselves, or interacting with others

If your child has ID, they may experience some of the following behavioral issues:

- aggression
- dependency
- withdrawal from social activities
- attention-seeking behavior
- depression during adolescent and teen years
- lack of impulse control
- passivity
- tendency toward self-injury
- stubbornness
- low self-esteem
- low tolerance for frustration
- psychotic disorders
- difficulty paying attention

Some people with ID may also have specific physical characteristics. These can include having a short stature or facial abnormalities.

5.5.2 Levels of intellectual disability

ID is divided into four levels, based on your child's IQ and degree of social adjustment.

5.5.3 Mild intellectual disability

Some of the symptoms of mild intellectual disability include:

- taking longer to learn to talk, but communicating well once they know how
- being fully independent in self-care when they get older
- having problems with reading and writing
- social immaturity
- increased difficulty with the responsibilities of marriage or parenting
- benefiting from specialized education plans
- having an IQ range of 50 to 69

5.5.4 Moderate intellectual disability

If your child has moderate ID, they may exhibit some of the following symptoms:

- are slow in understanding and using language
- may have some difficulties with communication
- can learn basic reading, writing, and counting skills
- are generally unable to live alone
- can often get around on their own to familiar places
- can take part in various types of social activities
- generally having an IQ range of 35 to 49

5.5.6 Severe intellectual disability

Symptoms of severe ID include:

- noticeable motor impairment
- severe damage to, or abnormal development of, their central nervous system
- generally having an IQ range of 20 to 34

5.6 Profound intellectual disability

Symptoms of profound ID include:

- inability to understand or comply with requests or instructions
- possible immobility
- incontinence
- very basic nonverbal communication
- inability to care for their own needs independently
- the need of constant help and supervision
- having an IQ of less than 20

5.7 Other intellectual disability

People in this category are often physically impaired, have hearing loss, are nonverbal, or have a physical disability. These factors may prevent your child’s doctor from conducting screening tests.

5.8 Unspecified intellectual disability

If your child has an unspecified ID, they will show symptoms of ID, but their doctor doesn't have enough information to determine their level of disability.

What causes intellectual disability?

Doctors can't always identify a specific cause of ID, but causes of ID can include:

- trauma before birth, such as an infection or exposure to alcohol, drugs, or other toxins
- trauma during birth, such as oxygen deprivation or premature delivery
- inherited disorders, such as phenylketonuria (PKU) or Tay-Sachs disease
- chromosome abnormalities, such as Down syndrome
- lead or mercury poisoning
- severe malnutrition or other dietary issues
- severe cases of early childhood illness, such as whooping cough, measles, or meningitis
- brain injury

5.9 How is intellectual disability diagnosed?

To be diagnosed with ID, your child must have below-average intellectual and adaptive skills. Your child's doctor will perform a three-part evaluation that includes:

- interviews with you
- observations of your child

- standard tests

Your child will be given standard intelligence tests, such as the Stanford-Binet Intelligence Test. This will help the doctor determine your child's IQ.

The doctor may also administer other tests such as the Vineland Adaptive Behavior Scales. This test provides an assessment of your child's daily living skills and social abilities, compared to other children in the same age group.

It's important to remember that children from different cultures and socioeconomic statuses may perform differently on these tests. To form a diagnosis, your child's doctor will consider the test results, interviews with you, and observations of your child.

Your child's evaluation process might include visits to specialists, who may include a:

- psychologist
- speech pathologist
- social worker
- pediatric neurologist
- developmental pediatrician
- physical therapist

Laboratory and imaging tests may also be performed. These can help your child's doctor detect metabolic and genetic disorders, as well as structural problems with your child's brain.

Other conditions, such as hearing loss, learning disorders, neurological disorders, and emotional problems can also cause delayed development. Your child's doctor should rule these conditions out before diagnosing your child with ID.

You, your child's school, and your doctor will use the results of these tests and evaluations to develop a treatment and education plan for your child.

5.10 Treatment options for intellectual disability

Your child will probably need ongoing counseling to help them cope with their disability.

You will get a family service plan that describes your child's needs. The plan will also detail the services that your child will need to help them with normal development. Your family needs will also be addressed in the plan.

When your child is ready to attend school, an Individualized Education Program (IEP) will be put in place to help them with their educational needs. All children with ID benefit from special education.

The federal Individuals with Disabilities Act (IDEA) requires that public schools provide free and appropriate education to children with ID and other developmental disabilities.

The main goal of treatment is to help your child reach their full potential in terms of:

- education
- social skills
- life skills

Treatment may include:

- behavior therapy
- occupational therapy
- counseling
- medication, in some cases

What is the long-term outlook?

When ID occurs with other serious physical problems, your child may have a below-average life expectancy. However, if your child has mild to moderate ID, they will probably have a fairly normal life expectancy. When your child grows up, they may be able to work a job that complements their level of ID, live independently, and support themselves. Support services are available to help adults with ID live independent and fulfilling lives.

5.11 Activity

1. Discuss causes of intellectual disability
2. Examine symptoms of intellectual disability.

5.12 Reflection

Do you think children with mild intellectual disability can learn well in a conventional school?

5.13 Summary

In this unit, you have learnt the causes, symptoms and treatment options for intellectual disability. It is helped that you now clearly understood this disability. In the next unit you will learn about learning impairment.

UNIT 6: HEARING IMPAIRMENT

6.1 Introduction

Hearing thresholds of 25 dB or better in both ears – is said to have hearing loss. Hearing loss may be mild, moderate, severe, or profound. It can affect one ear or both ears, and leads to difficulty in hearing conversational speech or loud sounds.

6.2 Learning Outcome

By the end of this unit, you are expected to;

- Discuss causes of hearing impairment.
- Examine symptoms of hearing impairment.
- Explain prevention of hearing impairment.
- Identify and manage children wild hearing impairment.

6.3 Time frame

You need about two (2) hours to interact with this material.

6.4 Content

- Causes of hearing loss and deafness
- Identification and management of hearing impairment.
- WHO’ response to hearing impairment.

'Hard of hearing' refers to people with hearing loss ranging from mild to severe. People who are hard of hearing usually communicate through spoken language and can benefit from hearing aids, cochlear implants, and other assistive devices as well as captioning. People with more significant hearing losses may benefit from cochlear implants.

'Deaf' people mostly have profound hearing loss, which implies very little or no hearing. They often use sign language for communication.

6.5 Causes of hearing loss and deafness

The causes of hearing loss and deafness can be congenital or acquired.

6.6 Congenital causes

Congenital causes may lead to hearing loss being present at or acquired soon after birth. Hearing loss can be caused by hereditary and non-hereditary genetic factors or by certain complications during pregnancy and childbirth, including:

- maternal rubella, syphilis or certain other infections during pregnancy;
- low birth weight;
- birth asphyxia (a lack of oxygen at the time of birth);
- inappropriate use of particular drugs during pregnancy, such as aminoglycosides, cytotoxic drugs, antimalarial drugs, and diuretics;
- severe jaundice in the neonatal period, which can damage the hearing nerve in a newborn infant.

5.6 Acquired causes

Acquired causes may lead to hearing loss at any age, such as:

- infectious diseases including meningitis, measles and mumps;
- chronic ear infections;
- collection of fluid in the ear (otitis media);
- use of certain medicines, such as those used in the treatment of neonatal infections, malaria, drug-resistant tuberculosis, and cancers;
- injury to the head or ear;
- excessive noise, including occupational noise such as that from machinery and explosions;

- recreational exposure to loud sounds such as that from use of personal audio devices at high volumes and for prolonged periods of time and regular attendance at concerts, nightclubs, bars and sporting events;
- ageing, in particular due to degeneration of sensory cells; and
- wax or foreign bodies blocking the ear canal.

Among children, chronic otitis media is a common cause of hearing loss.

5.7 Impact of hearing loss

5.7.1 Functional impact

One of the main impacts of hearing loss is on the individual's ability to communicate with others. Spoken language development is often delayed in children with unaddressed hearing loss.

Unaddressed hearing loss and ear diseases such as otitis media can have a significantly adverse effect on the academic performance of children. They often have increased rates of grade failure and greater need for education assistance. Access to suitable accommodations is important for optimal learning experiences but are not always available.

5.7.2 Social and emotional impact

Exclusion from communication can have a significant impact on everyday life, causing feelings of loneliness, isolation, and frustration, particularly among older people with hearing loss.

5.7.3 Economic impact

WHO estimates that unaddressed hearing loss poses an annual global cost of US$ 750 billion. This includes health sector costs (excluding the cost of hearing devices), costs of educational support, loss of productivity, and societal costs.

In developing countries, children with hearing loss and deafness rarely receive any schooling. Adults with hearing loss also have a much higher unemployment rate. Among those who are

employed, a higher percentage of people with hearing loss are in the lower grades of employment compared with the general workforce.

Improving access to education and vocational rehabilitation services, and raising awareness especially among employers about the needs of people with hearing loss, will decrease unemployment rates for people with hearing loss.

6.8 Prevention

Overall, it is suggested that half of all cases of hearing loss can be prevented through public health measures. In children under 15 years of age, 60% of hearing loss is attributable to preventable causes. This figure is higher in low- and middle-income countries (75%) as compared to high-income countries (49%).

Overall, preventable causes of childhood hearing loss include:

- Infections such as mumps, measles, rubella, meningitis, cytomegalovirus infections, and chronic otitis media (31%).
- Complications at the time of birth, such as birth asphyxia, low birth weight, prematurity, and jaundice (17%).
- Use of ototoxic medicines in expecting mothers and babies (4%).
- Others (8%)
- Some simple strategies for prevention of hearing loss include:
- immunizing children against childhood diseases, including measles, meningitis, rubella and mumps;
- immunizing adolescent girls and women of reproductive age against rubella before pregnancy;
- preventing cytomegalovirus infections in expectant mothers through good hygiene; screening for and treating syphilis and other infections in pregnant women;
- strengthening maternal and child health programmes, including promotion of safe childbirth;
- following healthy ear care practices;

- reducing exposure (both occupational and recreational) to loud sounds by raising awareness about the risks; developing and enforcing relevant legislation; and encouraging individuals to use personal protective devices such as earplugs and noise-cancelling earphones and headphones.
- screening of children for otitis media, followed by appropriate medical or surgical interventions;
- avoiding the use of particular drugs which may be harmful to hearing, unless prescribed and monitored by a qualified physician;
- referring infants at high risk, such as those with a family history of deafness or those born with low birth weight, birth asphyxia, jaundice or meningitis, for early assessment of hearing, to ensure prompt diagnosis and appropriate management, as required;
- implementing the WHO-ITU global standard for personal audio systems and devices. This can be done by governments and manufacturers of smartphones and MP3 players. If adhered to, the standard could help prevent hearing loss due to listening practices that are harmful to hearing; and
- educating young people and population in general on hearing loss, its causes, prevention and identification.

6.9 Identification and management

Early detection and intervention are crucial to minimizing the impact of hearing loss on a child's development and educational achievements. In infants and young children with hearing loss, early identification and management through infant hearing screening programmes can improve the linguistic and educational outcomes for the child. Children with deafness should be given the opportunity to learn sign language along with their families.

Pre-school, school and occupational screening for ear diseases and hearing loss is an effective tool for early identification and management of hearing loss.
Screening can be done using the hear WHO app. This app can be downloaded and used by adults to check and track their hearing regularly. It can also be used by health workers to screen people in the community with a view to referring them for hearing testing, when indicated.

People with hearing loss can benefit from the use of hearing devices, such as hearing aids, cochlear implants, and other assistive devices. They may also benefit from speech therapy, aural rehabilitation and other related services. However, global production of hearing aids meets less than 10% of global need and less than 3% of developing countries' needs. The lack of availability of services for fitting and maintaining these devices, and the lack of batteries are also barriers in many low-income settings.

Making properly-fitted, affordable hearing aids and cochlear implants and providing accessible follow-up services in all parts of the world will benefit many people with hearing loss.

People who develop hearing loss can learn to communicate through development of lip-reading skills, use of written or printed text, and sign language. Teaching in sign language will benefit children with hearing loss, while provision of captioning and sign language interpretation on television will facilitate access to information.

Officially recognizing national sign languages and increasing the availability of sign language interpreters are important actions to improve access to sign language services. Encouraging organizations of people with hearing loss, parents and family support groups; and strengthening human rights legislation can also help ensure better inclusion for people with hearing loss.

6.10 WHO response

WHO assists Members States in developing programmes for ear and hearing care that are integrated into the primary health-care system of the country. WHO's work includes:

- providing technical support to Member States in development and implementation of national plans for hearing care;
- providing technical resources and guidance for training of health-care workers on hearing care;
- developing and disseminating recommendations to address the major preventable causes of hearing loss;
- undertaking advocacy to raise awareness about the prevalence, causes and impact of hearing loss as well as opportunities for prevention, identification and management;

- developing and disseminating evidence-based tools for effective advocacy;
- observing and promoting World Hearing Day as an annual advocacy event;
- building partnerships to develop strong hearing care programmes, including initiatives for affordable hearing aids, cochlear implants and services;
- collating data on deafness and hearing loss to demonstrate the scale and the impact of the problem;
- launching and promoting the WHO-ITU global standard for personal audio systems and devices;
- promoting safe listening to reduce the risk of recreational noise-induced hearing loss through the WHO Make Listening Safe initiative;
- raising awareness on safe listening to reduce the risk of recreational noise-induced hearing loss through the WHO Make Listening Safe initiative;
- promoting social inclusion of people with disabilities, including people with hearing loss and deafness, for example, through community-based rehabilitation networks and programmes.
- launching and hosting the World Hearing Forum, which is a global advocacy alliance of all stakeholders in the field of hearing.
- In 2017, the 70th World Health Assembly adopted a resolution on the prevention of deafness and hearing loss. This resolution calls upon Member States to integrate strategies for ear and hearing care within the framework of their primary health care systems, under the umbrella of universal health coverage. It also requests WHO to undertake a number of actions for promotion of ear and hearing care at global level, including many of those noted above.

(1) Disabling hearing loss refers to hearing loss greater than 40dB in the better hearing ear in adults and a hearing loss greater than 30dB in the better hearing ear in children.

6.11 Activity

1. Discuss causes of hearing loss.
2. Examine symptoms of hearing impairment.

6.12 Reflection

Do you think people with hearing impairment can develop other psychological problems?

6.13 Summary

In this unit, you have learnt about hearing impairment, it's causes and symptoms, you have also learnt about how to identify and how to manage hearing impaired people.

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