

# Introduction

## 1. Aspects of Normal Communication

### 1.1. Definition of Communication, Language, and speech.

#### What is Communication?

- is the exchange of information through various verbal or nonverbal actions.
- It is the process of exchanging knowledge, ideas, opinions, and feelings.

#### How does communication relate to language, and, speech?

- is the broadest of the three terms (communication, speech, and language)
- ***Language and Speech*** are the major tools of communication.

# A. What is Language?

Language is a socially shared code or **conventional** system that represents ideas through the use of **arbitrary symbols** and **rules** that govern combinations of these symbols.

- **Conventional system:** it is a matter of agreement between people to relate **expression** and **meaning**.
- **Arbitrary symbols:** no rational for assigning certain **sounds** or **words** to represent a certain **message**
- **Rules:** the combination of these **arbitrary symbols** is not random they are governed by rules to convey meaning for the audience.

# Three-Domain System of Language

## 1. Form of language:

- Form – the organization and arrangement of words, sentences, and sounds.

**A. *Phonology*:** *is the sound system of a language and the rules that govern the sound combinations.*

- Phonology – organization of sounds (phonemes)
- Each language employs a variety of speech sounds or phonemes.
- A phoneme is the smallest linguistic unit of sound that can signal a difference in meaning.

## ***B. Morphology:***

- *is the system that governs the structure of words and the construction of word forms.*
- **Morphology is concerned with the internal organization of words.**
- **Words consist of one or more smaller units called morphemes.**
- **A morpheme is the smallest grammatical unit**
  - Therefore, *dog is a single morpheme because **d** and **og** are meaningless alone.*

**C. *Syntax*:** *is the system governing the order and combination of words to form sentences.*

- Syntax – organization of sentences
- **Syntax** refers to the rules of word function and word order.

**2. Content (semantics) of language** : is the information being communicated. Study the meaning attached to words and sentences.

- such as *man and woman; a human being is not usually* classified as both. Other units overlap somewhat, such as *female, woman, and lady*.
- *Not all* females are women and even fewer could be called ladies. The actual words or symbols used represent not reality itself but our ideas or concepts about reality.
- Words with almost identical features are **synonyms**. **Some examples are *abuse and misuse, dark and dim, heat and warmth*, and *talk and speak*.**
- **Antonyms are words that differ only in the opposite value of a single important feature.** Examples include *up and down, big and little, and black and white*. (*Big and little, for example, both describe size but are opposite extremes.*)

**3. Function pragmatic/ use/ of language** : *addresses the social context in which the communication occurs.*

- **Context**, both situational and linguistic, determines the language user's communication options
- **Use** – the function of language for personal and social needs
- **Pragmatics** – language use for social purposes
- Pragmatics is concerned with the way language is used to communicate
- Successful pragmatics requires understanding of the culture and of individuals.
- speech must involve the appropriate persons and circumstances,

**Example:** “May I have a donut, please” is valid only when speaking to a person who can get you in a place where donuts are found.

- Sometimes the very act of saying something makes it so:

## B. What is speech?

- Speech is the **physical production** of language.
- Speech is a verbal means of communicating.
- Oral expression of thoughts, feelings, and ideas.
- Each spoken language has specific **sounds**, or **phonemes**, and **sound combinations that** are characteristic of that language

**Speech includes (Articulation, Fluency, & Voice).**

1. **Articulation** is the clear pronunciation of words. The formation of speech sounds by the **lips, tongue**, and other structures
2. **Fluency** refers to the appropriate flow of the words.
  - Fluency – effortless and smooth speech
3. **Voice** is the quality of voice production (pitch, loudness, and resonance).
  - Voice – appropriate intensity and pitch
  - **Resonance** - the means by which sound is changed as it travels through the cavities of the neck and head
  - **Respiration** - the breathing that supports speech



# Elements of Effective Communication

1. Sender
2. Receiver
3. Message
4. Channel
5. Interpretation and
6. Giving response

# Modalities of Communication

- Human communication is unique because of the use of language and speech

## Common Modalities:

- Speech
- Sign language
- Reading/writing

# **THE IMPORTANCE OF COMMUNICATION**

- Is the corner stone of the teaching learning process
- Allowing for full participation in society
- Establish and maintain social relationships
- Allow the acquisition of cognitive development.

- *Instrumental* – to ask for something
- *Regulatory* – to direct others
- *Interactional* – for social interactions
- *Personal* – to express feelings
- *Heuristic* – to ask for information
- *Imaginative* – to tell stories and role play
- *Informative* – to provide descriptions of events or objects

## 1.2. Aspects of Normal Language and Speech Development

### How Do Children Learn Language?

- The first three years are “**critical periods**” for speech and language development of children.
- Within first month - respond to human voices
- 3 months - turn, smile, and coo
- By **6 months of age**, most children recognize the **basic sounds** of their native language.
  - an infant usually babbles or produces repetitive syllables such as “ba, ba, ba” or “da, da, da.”
- By **8 months** of age, most children can say 8 to 10 words.
- By the end **first year**, most children have mastered the ability to say a **few simple words**

- ✓ By age 2, children start putting words together in crude sentences such as “more milk.”
  - Children learn words symbolize /represent objects, actions, and thoughts.
  - Engage in representational or imaginary play.
- ✓ At ages 3, 4, and 5, a child’s vocabulary rapidly increases, and begins to master the **rules of language**.
  - Children begin first grade with a 6,000 spoken word vocabulary
  - Children learn 36,000 more words by 12th grade (spoken language)
  - Children learn 5 words a day

- Communication skills are learned through social interactions
- Language development is the outcome of a child's drive for attachment with his or her world
- Vgotsky: children learn by doing with more experienced partners (guided learning)
- In order to develop typical language skills, infants require a language-rich environment,
- Difficulties with the acquisition of language affect children academically, socially and personally.

# ***Language and Speech Developmental Milestones/Time table***

## **Group Activity**

- Discuss in group the language and speech developmental milestone which is given in the table below.



## **Hearing and Understanding**

- **Birth-3 Months**
- Startles to loud sounds
- Quiets or smiles when spoken to him/her
- Seems to recognize your voice and quiets if crying
- Increases or decreases sucking behavior in response to sound

## **Talking**

- **Birth-3 Months**
- Makes pleasure sounds (cooing, gooing)
- Cries differently for different needs
- Smiles when sees you

## 4-6 Months

- Moves eyes in direction of sounds
- Responds to changes in tone of your voice
- Notices toys that make sounds
- Pays attention to music

## 4-6 Months

- Babbling sounds more speech-like with many different sounds, including *p*, *b* and *m*
- Chuckles (laugh quietly) and laughs
- Vocalizes excitement and displeasure
- Makes gurgling (make bubbling water) sounds when left alone and when playing with you

## 7 Months-1 Year

- Enjoys games like touch/hit, cover
- Turns and looks in direction of sounds
- Listens when spoken to
- Recognizes words for common items like "cup", "shoe", "book", or "juice"
- Begins to respond to requests (e.g. "Come here" or "Want more?")

## 7 Months-1 Year

- Babbling has both long and short groups of sounds such as "tata upup bibibibi"
- Uses speech or non crying sounds to get and keep attention
- Uses gestures to communication (waving, holding arms to be picked up)
- Imitates different speech sounds
- Has one or two words (hi, dog, dada, mama) around first birthday, although sounds may not be clear

## One to Two Years

- Points to a few body parts when asked.
- Follows simple commands and understands simple questions ("Roll the ball," "Kiss the baby," "Where's your shoe?").
- Listens to simple stories, songs, and rhyme (eg ushururu...).
- Points to pictures in a book when named.

## One to Two Years

- Says more words every month.
- Uses some one- or two-word questions "Go bye-bye?" "What's that?").
- Puts two words together ("more cookie," "no juice," "mommy book").
- Uses many different consonant sounds at the beginning of words.

## Two to Three Years

- Understands differences in meaning ("go-stop," "in-on," "big-little," "up-down").
- Follows two requests ("Get the book and put it on the table").
- Listens to and enjoys hearing stories for longer periods of time

## Two to Three Years

- Has a word for almost everything.
- Uses two- or three-words to talk about and ask for things.
- Uses k, g, f, t, d, and n sounds.
- Speech is understood by familiar listeners most of the time.
- Often asks for or directs attention to objects by naming them.

## **Three to Four Years**

- Hears you when you call from another room.
- Hears television or radio at the same loudness level as other family members.
- Answers simple "who?", "what?", "where?", and "why?" questions.

## **Three to Four Years**

- Talks about activities at school or at friends' homes.
- People outside of the family usually understand child's speech.
- Uses a lot of sentences that have 4 or more words.
- Usually talks easily without repeating words.

## **Four To Five Years**

- Pays attention to a short story and answers simple questions about them.
- Hears and understands most of what is said at home and in school.

## **Four To Five Years**

- Uses sentences that give lots of details ("The biggest peach is mine").
- Tells stories that stick to topic.
- Communicates easily with other children and adults.
- Says most sounds correctly except a few like l, s, r, v, z, ch, sh, th.
- Says rhyming words (with lines that end in similar sounding words)
- Names some letters and numbers.
- Uses the same grammar as the rest of the family.

# 1.3. Definition and Types of Communication Disorders

What is a communication disorder?

- *is an impairment in the ability to receive, send, process, and comprehend concepts of verbal, nonverbal, and graphic symbol systems.*
- is an inability to understand or use speech and language
- Range in severity from mild to profound.
- It may be developmental or acquired.
- Individuals may demonstrate one or any combination of communication disorders.
- A communication disorder may result in a primary disability, or it may be secondary to other disabilities.



# Communication Disorders vs. Communication Differences

- Differences in language usage are not treated as disorders.
- The use of a dialect is not a sign of a speech disorder but is part of the linguistic diversity of society
- A **dialect** is a **variety** of language that differs in pronunciation, vocabulary, or syntax from the literary form of the language

## **Prevalence of Communication Disorders**

- From about 1 million children identified for special education- one-fifth of all children are children with speech & language disorder.
- Speech and language impairment affected over 1 million children
- Communication disorder of all kinds are predicted to increase during the coming decades
- Children with speech and language disorders are more likely than children with other disabilities to be served in the regular classroom.
- Communication disorders are relatively common (1 out of every 6 persons are affected)

# Types of Communication Disorder

## 1. Speech disorder

- Articulation disorder
- Fluency disorder
- Voice disorder

## 2. Language disorder

- **Language form** (*phonology, morphology, & syntax*) disorder
- **Language Content (semantics) disorder**
- **Language function** (pragmatics) disorder

# 1. Speech Disorder

- Is specific form of language disorders that affect a child's ability to produce oral language.
- is an impairment of the articulation, fluency, or voice.

# 1. Articulation disorder

An **articulation disorder** is uncommon production of speech sounds characterized by **substitutions, omissions, additions, or distortions.**

## Types of Articulation disorder

- **Substitutions**

Eg. **W** for **r**, **Wed** for **red**, or **b** for **v**, ‘**b**ery’ for **very**’

- **Omissions**

Eg. —oat for goat, po- y for —pony’

- **Additions**

Eg. ‘buhrown’ for brown, ‘balack’ for black

- **Distortions**

For instance, ‘nam’ for man.

## 2. Voice Disorders

- A **voice disorder** is the abnormal production of vocal **quality, pitch, loudness, resonance**, and/or **duration**, which is inappropriate for an individual's age and/or sex.

### Types of Voice Disorder

- **Loudness:** is the strengthen or weakness of the voice
  - Too loud/weak voice can disturb communication
- **Voice Flexibility-** using flexible voice. When the voice is monotonous, the message lacks precision.
- **Voice Quality:**

Four groups of voice quality disorders can be identified.

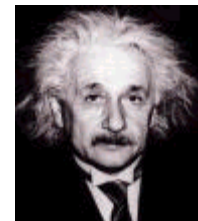
- **Breathiness-** similar to a low voice.
- **Harshness** – discordant, raspy, low pitched and louder than normal.
- **Hardness** – typical of Laryngeal irritation resulting from excessive yelling and throat infections.
- **Nasality** – too much of the sound passes through the nasal cavity and out through the nose.
- **Duration**
  - Disorder occur when phonation periods are either too long or too short speech sounds

# 3. Fluency Disorders

3. A **fluency disorder** is an interruption in the flow of speaking. **Fluency disorders** include:

- **Cluttering**
  - Cluttering involves speaking in an extremely fast, disorganized and often unintelligible way.
- **Stuttering**
  - repetition, (eg “**cuh . . . . cuh . . . Candy**)
  - introjections (unconscious adoption of value/attitude of somebody),
  - reversions (changed to opposite direction),
  - tense pauses,
  - prolongation of sounds (eg “**s . . . . school||**)
  - abnormal hesitations
  - Related behaviors (foot tapping, eye blinks, head turns)
  - Fear & Embarrassment(shame)
  - Irregular breathing

- Most frequent type of fluency disorder
- Stuttering typically makes its appearance between the ages of 3 to 5
- Stuttering is more common among males than females. More boys than girls stutter (4:1 ratio)
- It is common in males, twins, and left-handed persons.
- Stuttering is much more commonly reported among children than adults,
- Prevalence about 1% of the population stutters (2-3 million people)
- estimates in school age populations are in the 5% range.
- Stuttering is situational, that is, it appears to be related to the setting or circumstances of speech.
- Most of the time people who stutter have at least one relative who also stutters
- No stuttering when singing, and whisper (speaking softly)
- Famous people that stutter
  - Thomas Edison
  - Charles Darwin
  - Albert Einstein





## 2. Language Disorder

- **Language disorder** is an impairment of comprehend, use of a spoken, written, and/or other symbol system.
- is the problem of comprehension & expression.

### **Types of Language Disorder**

- **Language form** (*phonology, morphology, & syntax*) disorder
- **Language Content (semantics) disorder**
- **Language function** (pragmatics) disorder

# I. Language Form Disorder

**A. Phonological disorder** is impairment in understanding the sound system of a language and the rules that govern the sound combinations.

- Difficulty in learning the relationship b/n letters & sound
- E.g.1. d&b, m&w, p&q, u&n,
- The phonology of language varies according to language. E.g. The way spelling “A” is called in English is d/t from that of A/Oromo. The way we pronounce “**U**” in Amharic is d/t from the alphabets of other languages.
- Phonemes (sound system) and have different meanings.
- E.g.2. **Bat, Hat, Pat**. These three words have d/t
- Phonemes are combined in specific way to form words.
- For example, Challenged to understand the meanings of **dog** and **log** are very different, as are those of **dock** and **lock** and **pad** and **pal**.

## B. Morphological Disorder

- Is inability in understanding the system that governs the *structure of words and the construction* of word forms. For instance,
- The problem of adding plurals, Prefixes and suffixes, affixes, and past tense markers to verb.
- **Happy** and **unhappy** (prefixes), and **tall** and **tallest** (suffixes);
- Notice the difference in the meanings **covered** and **uncovered**, etc.
- Changes “swim” to “swam”

## ***C. Syntax Disorder***

- Inability to understand the way words are joined together to structure meaningful sentences; grammars. Syntax determines where a word is placed in sentence.
- Like phonology rules, syntax rules vary in different languages. The rules within a language determine the meaning of communication for instance in English language noun generally precede **verbs** in a sentence.
- If the **verb** precedes the noun, the construction might be a question. The placement of words in sentences can change their meaning. **For example,**
  - **The car hit the boy,** has different meaning from
  - **The boy hit the car.**

- Having difficulties in grammatical remarks, such as articles (a,an,the), in using pronouns correctly (e.g. **her did it** instead of **she did it**)
- Difficulty with *wh* questions.

## II. Language Content/Semantic Disorder

- **Semantic Disorder** – difficulties in vocabulary, retrieving a word when it is needed, or multiple meanings and figurative language
- Children with problem in language content often do not understand the meaning of what is said to them; choose inappropriate words for their oral language communication.
- Using a word that is related, but which does not mean what is intended – **Chair** for **sit**
- Using the word that has exactly the opposite meaning to the word intended – **Fast** for **slow**

- E.g. Problems of understanding abstract concepts ("What is love?")
- Limited vocabulary especially in adjectives, adverbs, prepositions, or pronouns.
- Longer response time in selecting vocabulary words.
- Fail to perceive subtle changes in word meaning: incomplete understanding and misinterpretations.
- Figurative language problems.

### III. Language Function Disorder

- **Pragmatics disorder** – significant difficulties fitting into social settings due to difficulties in language use
- Pragmatics also addresses the different expectations for communication in different settings.
- Children are asked to use very different rules when they communicate in the **classroom versus on the playground**, and **sometimes expectations for communication are different for the home and the school**.
- To be successful we must learn to adapt our communications to the specific expectations in a variety of settings. Eg. “Ato Yalew” to say “Professor Yalew”, “Miss. Biruk” to say “Mr. Biruk” etc can causes communication disorder.



- Problems understanding indirect requests (e.g., may say yes when asked “Must you play the piano?”).
- May enter conversations in a socially unacceptable fashion or fail to take turns talking.
- Difficulty staying on topic.

# Speech Disorder and Language Disorder

## Speech Disorder

- Problems in producing sound, Controlling sound, & controlling rate and rhythm of speech

## Language Disorder

- A child may have normal/acceptable speech but his talk may not give sense.
- Focuses on formulation and interpretations of meanings
- The problem of formulating well organized grammatical sentences.
- Are problems of proper form of language(Phonology, Morphology & syntax), using the content of language (Semantics) & function of language (Pragmatics)

## **1.4. Communication Disorder and Related Disability**

### **Intellectual Delay:**

- Delayed language is a universal characteristic; disorders may be present in all aspects of speech production and with both expressive and receptive language.

### **Cerebral Palsy:**

- Poor muscle control and impaired breathing of the child with cerebral palsy may result in communication difficulties ranging from speech disorders of articulation and voice to the inability to speak. For many individuals with cerebral palsy language delays will also be present.

# **Learning Disabilities**

- Language difficulties can cause major problems in learning to read, write, spell, and do arithmetic. Problems with communication include understanding social cues, contextual needs, and non literal language.

## **Autism**

- Communication difficulties can stem from an inability to “read” and interpret social cues, facial expressions, and gestures

## **Deaf/Hard of Hearing**

- Generalized language delays, alternative communication needs (e.g., sign language, cued speech/combinations of lip-reading & signing, etc.); may have articulation difficulties, voice problems, and limited speech.

## **Visual Impairments**

- Difficulties with language reception in reading; can require use of Braille or audio service. Communication difficulties may be present if individual is unable to see social cues, facial expressions, and gestures. Abstract ideas, e.g. colors, may be hard to communicate if child has no vision.

## **Emotional and Behavioral Problems**

- Communication difficulties can arise from the inability to appropriately “read” social cues and from problems with self-regulating emotions. Language delays lead to further frustration and can aggravate existing problems.

# 1.5. Causes of Communication Disorder

Some causes of speech and language disorders include

- Hearing loss, neurological disorders, brain injury, mental retardation, drug abuse, physical impairments such as cleft lip or palate, and vocal abuse or misuse.
- Frequently, however, the cause is unknown.

## **Organic /Physical/ Causes**

- Include causes that have physical origin
- Anatomical problem (physiological defect). Fore example,
  - Cleft palate,
  - Brain damage
  - Malfunction of the respiratory or speech mechanisms, or malformation of the articulators
  - Severely misaligned teeth
  - Cleft lip
  - Paralysis of speech muscles, and absence of teeth,
  - Craniofacial abnormalities,
  - Enlarged adenoids, and neurological impairment

## II. Non organic /Functional Cause

- The non-organic or functional disorders cannot be attributable to specific physical conditions and their origin is not clearly known.
- Some of the bad practices and psychological conditions (abuse of the voice by shouting, and straining can cause damage to the vocal cords and result in a voice disorder).
- **Environments deprivation**
  - Lack of stimulation
  - Lack of proper experiences for mental development and learning language
  - Inappropriate role model
  - Punishment for speaking or being ignored trying to communicate
- **Stress that creates stuttering** – lack of fluency in speaking may be characterized by severe hesitation or the repetition of sounds and words

## 2. Characteristics of Children with Communication Disorder

- Language acquisition is an integral component in the development of an individual and failure of the language system will have life-long negative impact on social, academic and vocational success
- As the language delayed child ages, the gap between themselves and their peers widens. Thus, the longer the child's problems remain unmanaged, the more pronounced the delay becomes and the more pervasive the impact



## **2.1. Physical Characteristics**

- Cerebral palsy, cleft palate or other kinds of oral facial disorders, may result communication difficulties
- But for most of students with communication disorder there is no specific correspondence between physical appearance and speech or language functioning.

## 2.2. Cognitive characteristics

- There is no clear agreement regarding the relationship between language and speech disorders with cognitive development.
- However, scholars are in argument with two schools of thought.
- Some of them believe that **cognitive difficulties have direct relation** ship with **communication disorder**.
  - Students with communication problems perform poorly on intelligence tests, particularly on verbal intelligence tests.
- On the other hand, it is believed that **students with communication disorders have normal or average intellectual functioning**.
- The research is not clear on explaining whether difficulties in communication cause cognitive difficulties or cognitive difficulties cause communication difficulties.
- Cognitive and linguistic development is related to each other.

## 2.3. Socio Emotional Characteristics

**Children with communication impairments are**

- Ignored /rejected by other children
- Withdraw from social situations,
- Suffer from a loss of self-confidence.
- isolated due to difficulties in **socializing**.
- have difficulty in getting and holding a **job**
- Play a passive role in communication
- **Fail to maintain friendships due to** hindered by weak language skills.

## 2.4. Academic characteristics

- Students who have communication disorder
  - Experience difficulties in writing & reading, social studies, language and other subjects
- Oral communication skills are the precursors to literacy skills.
  - Children with poor oral communication have great difficulty with literacy skills.

### **3. Identification and Assessment of Communication Disorder**

**Identification of Communication Disorder. Some of the symptoms may include:**

- Delayed language
- Academic issues/Learning difficulty
- Aphasia-loss of speech/language
- Physical indicator
- Communicative abilities
- Behavioral/Socio-emotional indicators

# Assessment of Speech Disorder

- **Articulation test** – the evaluation of child's ability to produce speech sounds in isolation, words, sentences, and spontaneous speech
- **Hearing test**
- **Auditory discrimination assessment** – the ability to tell the difference in different sounds
- **Fluency evaluation**
- **Voice evaluation**

# Assessment of Language Disorder

- *Understanding and Production Test*
  - to assess the understanding and production of language structures
- Language development test
- Tests of expressive and receptive language skills
- Observational checklists

# **Additional Source of Information for the Assessment of Communication Disorder**

- Teacher reports
- Interviews with the student
- A family history
- Case history
- Samples of the child's work
- Checklists or scales completed by parents and/or those who work with the child in the educational setting



## 4. Intervention Strategies for Children with Communication Disorder

- Intervention varies according to the extent and severity of the problem
- working with appropriate professionals for intervention are essential. Professionals from
  - Psychology, physiotherapy, speech pathology, occupational therapy, music therapy and special and Inclusive education.

## 1. Intervention of children with language impairment

- The process of improving a child's ability to communicate generally refers to as **Language Intervention**
- **Language Management** is the structuring of the child's environment so that the child can learn regardless of the language and speech disorders.

# **General considerations in the language intervention**

## **1. Selecting goal and program**

- This involves analysis of a child's specific communicative needs, detailed planning of intervention procedures, and ongoing assessment to evaluate progress

### **Includes six component**

- The program and goals expressed in terms of behavioral objectives
- Selection of content
- Specification and prioritize of the content in terms of objectives
- Specification of instructional and motivational strategies
- Identification of measures for evaluation of progress
- Procedures for stabilization and generalization

## 2. Structuring the program

- No one approach is best for all children
- Language intervention programs vary considerably in the degree of structure.
- Highly structured programs-
  - more successful with children who had limited cognitive ability or who had very poor syntax skills.
  - incorporate specific directions for presenting stimuli, scheduling reinforcement, and correcting errors
- Less structured/natural/conversational setting
  - more effective for children who had a higher level of intellectual functioning and who were not delayed in **syntax** functioning.

### 3. Facilitating communication

- In order to use language effectively, children must practice their skills in a variety of settings.
- As a teacher in the classroom, facilitating communication may include:
  - When a child makes an error, the teacher can correct it by naturally rephrasing it
  - Become Model correct language by identifying a specific target
  - Give useful exercises for students. Eg. describing an item to someone who doesn't know what it is.
  - Discuss word associations, categories, similarities and differences, synonyms and antonyms, attributes and multiple meanings
  - Use joke books and dictionaries.
  - Make word lists. Examine homonyms (words with same spelling/sound)
  - Discuss abstract vocabulary, e.g., feelings, values, time.
  - Focus on listening skills.
  - etc

## 2. Intervention for Speech Disorder

- Various approaches for Speech Disorder
- Medical, dental or surgical procedures can help many children whose speech problems result from organic causes.
- Structured exercises and drills to correct speech sounds
- Speech production in natural language contexts
- work with children in individual/group therapy sessions
- encourage children to imitate the therapist's speech.
- have the child listen to tapes of his/her own speech
- Using behavioral approach, in which target speech behavior are precisely promoted, recorded and reinforced.
- Other works on child's expressive and receptive communication, self-confidence or interactions with parents and classmates.

- Collaboration with other professionals is key.
- Involve families.
- Encourage peer interaction.
- Model correct speech.
- Provide a motivating environment.
- Focus on quantity more than quality of speech
- Provide opportunities for practice.
- Environmental modifications
- Vocal rehabilitation focus
  - To helps the child in learning to produce more acceptable and efficient speech.
  - Exercise to increase breathing capacity, relaxation techniques to reduce tension or procedures to increase or decrease the loudness of speech
- Using applied behavior analysis
  - used to pinpoint abusive vocal behaviors and then to shape and modify them
  - Important for the treatment fluency disorder
- Organic causes often respond to surgery or medical treatment

- Articulation disorders
- four models of treatment are widely used for articulation disorder.
  - ***Discrimination model***- emphasis on developing the child's ability to listen carefully and detect the differences between similar sounds
  - ***Phonologic model***-seeks to identify the child's pattern of sound production and to teach him/her to produce gradually more acceptable sounds.
  - ***Sensori-motor model*** -give attention to the **motor skills** involved in articulation. Frequent exercises are employed to produce sounds with differing stress patterns.
  - ***Operant conditioning model***: present specific **stimuli** and shape articulator responses by providing reinforcing consequences



## **Ten guidelines which is found to be helpful in talking with someone who has language and communication disorder**

- Acknowledge your uncertainty and fear, and then try to relax.
- Maintain eye contact with the person.
- Give the person enough time and opportunity to talk.
- You may have to listen more carefully than you usually do
- Focus on what the person is saying rather than how he or she is saying it
- If you don't understand what the person is trying to say, tell him or her
- Never fill in a word or assist an individual unless he or she asks for help
- Speak directly to the person
- Speak slowly and simply
- Your language should put the person first, not disability

# The influence of culture and families in the intervention in the Intervention communication disorder

## The influence of culture

- Children's language development is influenced by cultural **beliefs, family values, expectations, experiences and child-rearing practices.**
- Cultural issues should be considered by speech-language therapists when delivering intervention
- An intervention program should be **culturally sensitive** and adaptive in order to provide effective language and speech intervention.

## The influence of Family

- They provide a back-up support at home
- Arrange setting of communication at home environment.

# **Bilingual/Bicultural Issues**

- When working with bilingual/bicultural children when need to consider culturally/ linguistically diverse groups.

# **The Need of Assistive Technology in the Process of Intervention**

- **Assistive Technology** is "any item, piece of equipment, or product system, whether acquired commercially “off the shelf”, modified, or customized, that is used to increase, maintain, or improve the functional capabilities of a child with a disability“
- **The Need of Assistive Technology include**
  - Increase student independence
  - Advance academic standing
  - increase participation in classroom activities
  - improve time-management skills
  - allow equal access to the school environment
  - resolve transportation issues
  - accomplish activities of daily living
  - advance considerations for continued training/education
  - improve job opportunities
  - allow equal access to the workplace
  - improve social interactions

# Common Technology used for Communication Disorder

## Augmentative and Alternative Communication (AAC)

- includes all forms of communication other than oral speech.
- ✓ refers to **aids, strategies, and techniques** designed to enhance a person's existing communication skills.
- ✓ it integrates a groups of components that supplement the communication abilities of individuals who cannot communicate effectively through gestures, speaking, and/or writing
- ✓ **AAC may include:**
  - ✓ Simple displays (pictures or words printed on cardboard),
  - ✓ Electronic devices (voice output devices with synthesized or digitized speech) or
  - ✓ Computer based systems (voice output in addition to traditional computer functions)