



Intervention for Children from Birth to 12 Months Old



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- As a result of effective early hearing detection and diagnosis, more children and their families are enrolling in early intervention services at ages much younger than thought possible just a few years ago.





- The early interventionist is now called upon to assist the families in taking advantage of the crucial first 12 months of life to maximize the child's development in support of the communication option the family has chosen.



- This presentation will describe several components of an effective program for families of children from birth to 12-months old who have chosen listening and spoken language for their child.

Components for Effective Listening and Spoken Language



- Committed Family to Listening and Spoken Language
- Working Hearing Aids or Cochlear Implant
- Knowledgeable Parent Educator
- Listening and Spoken Language Program
- Supportive Professional Team



Parent Educator



- Be a good listener and observer. Don't judge, many parents are grieving due to their child's diagnosis.
- Remember, parents are the experts ~ Ask the parent about their child's abilities, needs, etc. How can you help them?

Family Experiences and Routines



- Use the parent's experiences to build upon your lessons (keep it simple and sweet).
- Utilize daily routines to make the time spent with the child predictable and easy for the family to do throughout the week.



The Home is the Child's First Learning Environment



- Make home visits when possible (home layout, acoustics of the home, materials within the home, family dynamics, etc.)
- Utilize what is in the home or use everyday objects found in most homes. Don't bring in your bag of toys and take them back when the session is finished
- There is more language variety in a family routine than playing with a child's toy.



Parent Educator should



- Know child development in all areas and utilize them throughout your lesson.
- The child is more than his/her hearing loss.



Parent Coaching



- Teach the parents how to dialogue natural language throughout their day.
- Model, then coach the parent through the activity in a non-threatening way. Don't just talk about the activity...do it with them so they can replicate it when you leave.
- Reinforce the parent during each session.
- Encourage parent support groups.
- Encourage play groups too.



TYPICAL LISTENING SKILLS

Birth to 3 months



Your child may:

- Smile when you appear
- Startle upon hearing loud sounds
- Make "cooing" sounds
- Quiet or smile when spoken to
- Seem to recognize your voice.
- Cry differently for different needs



3 to 6 Months



Your child may:

- Make gurgling sounds when playing with you or left alone
- Babble repetitive syllables, such as "ba, ba, ba"
- Use his or her voice to express pleasure and displeasure
- Move his or her eyes in the direction of sounds
- Respond to changes in the tone of your voice
- Notice that some toys make sounds
- Pay attention to music



6 to 12 months



Your child may

- Try to imitate words
- Say a few words, such as "dada," "mama" and "uh-oh"
- Understand simple instructions, such as "Please drink your milk"
- Understand "no"
- Turn and look in the direction of sounds



Degrees of Hearing Loss and its Effect on the Child



- 26-40 dB – Mild Loss

Without amplification the child will have difficulty hearing faint or distant speech, misses 25 – 40 % of the speech signal depending upon the noise level of the room and the distance of the speaker.

Degrees of Hearing Loss and its Effect on the Child



- 41-55 dB – Moderate Loss

The child will miss 45% to 75% of speech signals without hearing aid technology.

The child will likely have limited vocabulary and imperfect speech production

Degrees of Hearing Loss and its Effect on the Child



- 56-70 dB – Moderately Severe Loss

Without amplification the child will only hear loud speech that is spoken close to the child

The child's speech will be unintelligible and demonstrate delayed language development.

Degrees of Hearing Loss and its Effect on the Child



■ 71-90 dB – Severe Loss

Without hearing technology the child will be unable to hear conversational speech. However, he / she may hear some vowels but consonants difficult to perceive.

Speech and language development will be greatly impaired.

Degrees of Hearing Loss and its Effect on the Child



- 90 dB and above – Profound Loss

A person with a profound loss will not hear sounds without amplification.

Adapted from Flexer, Hall, Mueller (1997-9)



Technology



- Hearing Aids
- Cochlear Implants



Developmental Stages of Listening



- Detection-Awareness
- Suprasegmental-Discrimination / Association
- Segmental-Association/Identification
- Identification
- Processing Comprehension



Identifying a Child's Auditory Responses



- Help the parents identify their child's auditory responses.
- Children with additional conditions (AN, CP, PDD, Extreme prematurity, etc.) may need a longer stimulation and a longer response time to show auditory awareness.



Auditory Responses in Children from Birth to 12 Months



- Birth to 6 weeks – Eye widening, eye blink, arousal from sleep, startle
- 6 weeks to 4 months – Eye widening, eye shift, eye blink, quieting, beginning a rudimentary head turn by 4 months
- 4 to 7 months – Head turn on lateral plane toward sound; listening attitude

Auditory Responses in Children from Birth to 12 Months



- 7 to 9 months – Direct localization of sounds to side; indirectly below ear level.
- 9 to 13 months – Direct localization of sounds to side, directly below ear level, indirectly above ear level.

Adapted from M. Downs' Auditory Behavior Index for Infants

Eliciting Listening in Infants



- Reduce background noise in the child's environment.
- Stay close to the child's hearing aid or cochlear implant's microphone to receive the purest signal.
- Cue the child with "LISTEN", show a listening response, then point to the sound source to make it meaningful.



Strategies for Stimulating Listening in Infants that are Deaf or Hard of Hearing



- Determine what a child can hear by using sounds with varying pitch, loudness, and duration.
- If the child does not hear speech, stimulate his/her hearing using environmental sounds that are easier to hear and produce.
- Remember the importance of stimulating the auditory centers of the brain for listening and spoken language.

Listening for Speech



- If the child can hear speech, utilize the LING Speech Sounds to determine their auditory ability.

ah, oo, ee, m, sh, s (f, th, ____)

- Work within the child's listening ability to develop his or her residual hearing.



My Mantra

Use my mantra when stimulating a child's listening skills...stimulate ...

- HEARING – 1st (once she responds)
- Then add VISION – 2ND
- Then add TOUCH – 3RD

Review



- Keep an open dialogue to discuss parent/child's progress or lack of progress. If the lesson is not working, change the plan...so be flexible.
- Help the parents understand their child's listening age.

Professional Collaboration:



- Stimulate the child to respond consistently to sounds
- Foster active collaboration among parents and professionals to adequately inform educational and therapeutic decisions

Necessary Components for Collaboration



- Record what the parent reports about their child's listening and their experiences in home.
- Write what you see during your lesson.
- Share your observations with parents, audiologists, ENT's
- A parent needs to be their child's advocate but also needs to collaborate with their child's team of professionals. (HA, CI, AN)

Auditory Based Curricula



- Spice
- CASSLS
- SKI*HI
- W*A*S*P*
- Learn to Talk Around the Clock
- CAST
- Listening Games for Littles
- Cochlear Implant Training Guide with CD's-Second Edition
- Listen Learn and Talk
- AuSpLan

Additional Training



- Professional Preparation in Cochlear Implants (PPCI) is an intensive program for professionals providing early intervention services for children (0-5) or school age (5 to 10 years) with cochlear implants.
- It is specifically designed for teachers of deaf children, speech-language pathologists and educational audiologists with beginning-to-limited experience in providing (re)habilitation services to children with implants.
- PPCI on-site course work is supplemented by rigorous advance study and long term follow-up culminating in a three-day summer meeting to fulfill requirements of the program.
- Nine graduate credits from Smith College, ASHA CEUs and or LSLSC E hours are awarded upon successful completion of all elements of PPCI.











