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- Experta en patología del habla y del lenguaje, maestra de sordos y certificada en terapia auditiva-verbal
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Impacto del tratamiento precoz en el desarrollo del lenguaje de los bebés: ¿es necesaria una terapia adicional?

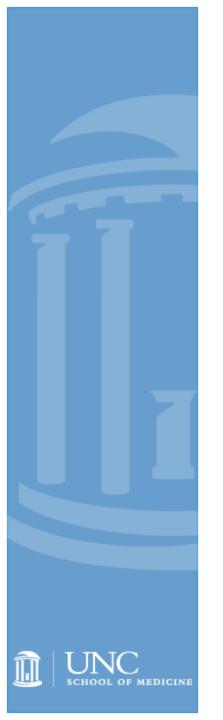
Impact of early treatment on language development of infants: is further therapy necessary?





The Impact of Early Treatment on Language Development of Deaf Infants Is Further Treatment Necessary?

II SIMPOSIO INTERNACIONAL
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A New Generation of Children...

- Identified at or near birth
- Hearing aids in the first months of life
- Enrolled in Early Intervention by 6 months of age
- Implanted in the first year of life
- Bilateral Implantation
- Bilingual families
- Some with additional learning difficulties
- Most families choose listening and spoken language.



Early identification and intervention...

- For children who are identified in the first few months of life and receive appropriate hearing technology (e.g., digital hearing aids and/or cochlear implants), numerous studies have shown language outcomes that are comparable to their same-age hearing peers when appropriate, well-coordinated early intervention services are provided (Houston, 2009).
 - » Children identified under 12 months of age demonstrated language in the average range at 5 years of age (Moeller, 2000)
 - Yoshinaga-Itano (2003) demonstrated positive outcomes in speech, language, and social-emotional development for those children who were early identified and enrolled in <u>comprehensive</u> early intervention services.

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Basic Principles...

Newborn hearing screening programs & 21st
 Century technology allow access to the auditory centers of the brain.

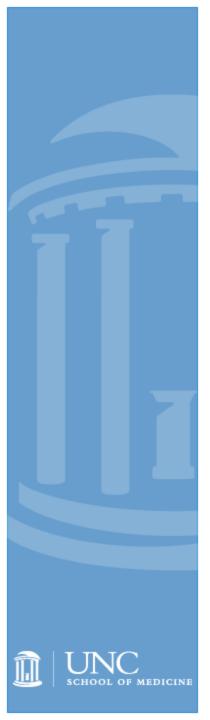
 Use of this hearing depends on the therapy that children receive once thy have been given hearing potential.



Meet Rachel...

- Referred following hospital screening
- First hearing aids at 3 months of age
- Enrolled in early intervention at 5 months of age
- Cochlear implant left ear at 11 months of age
- Cochlear implant right ear at 2 years, 8 months
- All standardized speech and language scores in the average to above average range at age three.





Rachel's Retell

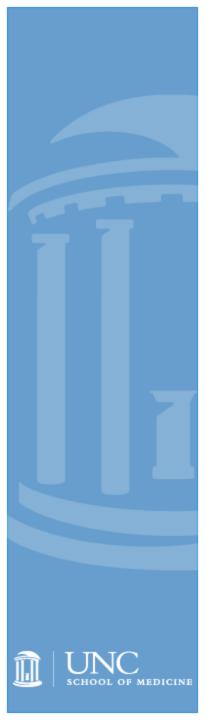
Rachel and her friend Cassandra were playing outside. Rachel said "let's go swing. The girls started running to the swings and then Cassandra fell down. She cut her leg. Rachel said "I will get my mommy." Mommy put a big Barbie band-aid on Cassandra's leg and then the girls got on the swings.



Family Centered Intervention

....a paradigm shift

Professionally-centered >>Family-allied>>Family-focused>>Family-centered



Family-Centered Intervention

collaborative rather than dependent

...a systematic way of creating a partnership with families that (a) treats them with dignity and respect, (b) honors their values and choices, and (c) provides supports that strengthen and enhance their functioning as a family (Dunst, Trivette & Hamby 2007)



Getting Started...

- Parent-to-parent support
- What are the parents' goals and expectations for the child?
- What mode of communication do they want their child to utilize? Parents should have information regarding ALL communication approaches.
 - » www.ncbegin.org
- AG Bell Academy for Listening and Spoken Language Principles of Auditory-Verbal Therapy
- "What It Takes" (Walker 2008)





Principles (AG Bell Academy)

Promote early diagnosis of hearing loss in newborns, infants, toddlers, and young children, followed by immediate audiologic management and Auditory-Verbal therapy.

Recommend immediate assessment and use of appropriate, state-of-the-art hearing technology to obtain maximum benefits of auditory stimulation.

"What It Takes"

Extra time for audiologic management. This may mean more trips to the audiologist than parents who choose a different approach.

Commitment to establishing full-time use of optimal amplification.



Principles (AG Bell Academy)

Guide and coach parents¹ to become the primary facilitators of their child's listening and spoken language development through active consistent participation in individualized Auditory-Verbal therapy.

"What It Takes"

At least weekly early intervention therapy sessions.

Travel may be necessary.

On-time attendance.

» Entire family must support the communication choice.

At home, daily individual time with child in a quiet environment.



Getting Started...

- What questions and concerns regarding their child's audiogram, communication development, and services?
- With parent, administer assessments in speech, language, audition, cognition, play/social skills, etc
 - » Review with parents:
 - What tests were given, why, what each score represents, where child's scores are in relation to chronological peers
 - With the parent(s) use assessment information to develop a plan including both short and long term goals.



Developing Spoken Language in Infants & Toddlers









Year 1: Goals

Parents:

- » demonstrate understanding of child's hearing loss, auditory potential, learn to check amplification, manage equipment, establish full-time use of amplification, and report on child's functional use of hearing.
- work in tandem with therapist to identify goals and assess progress
- w use a variety of strategies and techniques to promote the auditory learning of spoken language.
 - Parentese
 - Self talk
 - Close proximity to child
 - Repeat child's vocalizations
- » provide appropriate carry-over at home
- » establish daily read-aloud practices



Year 1: Goals & Milestones

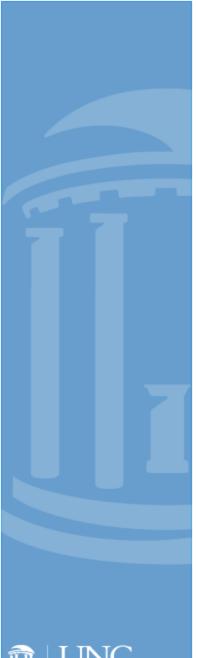
Child:

- » detects loud, medium, and soft environmental sounds.
- » detects Ling sounds.
- imitates and produces suprasegmentals, range of vowels and babbles consonant-vowel combinations
- demonstrates understanding of many common phrases.
- » identifies songs and nursery rhymes.
- » imitates motions of songs and rhymes with accompanying vocalization.
- » identifies and imitates Learning to Listen Sounds.
- » recalls 2 items from memory.
- » understands early developing vocabulary.



Year 2: Goals

- Parents:
 - » continue with Year 1 competencies.
 - » accurately document and report progress.
 - » demonstrate working knowledge of models of normal speech, language, and auditory development.

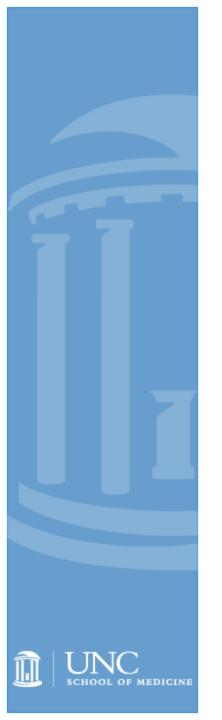


Year 2: Goals

Child:

- » performs a conditioned response.
- » identifies incidental environmental sounds.
- recalls 3 items from memory.
- Follows 2-step related commands without visual cues.
- follows a conversation with the topic disclosed.
- » identifies items by function and when given a description.
- » produces all vowels/diphthongs and early developing consonants
- » uses single words and 2-3 word phrases.





Conclusions

- Early identification in combination with early & appropriate technology, and appropriate intervention by parents & professionals during the period of maximum neural plasticity optimizes potential for the achievement of high levels of speech, language, reading, literacy & success in school.
- Family-centered intervention is collaborative and recognizes that parents are the key decision makers and primary teachers.
- Early intervention services for infants with confirmed hearing loss should be provided by professionals who have expertise in hearing loss, including educators of the deaf, speech-language pathologists, and audiologists (JCIH 2007).

