

Changing Old Mindsets: The Truth About Unilateral Hearing Loss

> Presenters: Robin Bliven, M. Ed TODHH & Valerie James Abbott (parent)

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Presenters:



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Valerie James Abbott, Parent-Leader

Disclosures:

VALERIE JAMES ABBOTT

Relevant Financial Relationships:

- Receives royalties from a children's book about late onset hearing loss.
- Serves as director of Padapillo, PBLLC

Relevant Non-Financial Relationships:

 Serves as co-chair of the VA EHDI Advisory Committee

ROBIN BLIVEN

Relevant Financial Relationships:

• None

Relevant Non-Financial Relationships:

 Member: VA EHDI Advisory Committee

Learning Objectives

- Participants will be able to recite how today's research contradicts our prior understanding of how unilateral hearing loss impacts language acquisition and general childhood development
- ✓ Participants will be able to explain how unilateral hearing loss can change neurological pathways within the brain
- ✓ Participants will be able to provide examples of how to discuss the facts and impacts of unilateral hearing loss with families

That Was Then

Old theories led us to believe that strong speech/language development and consequently academic success could be achieved with one typical-hearing ear.



This Is Now

Research compiled over the last 15 years has radically changed the profession's viewpoint on Unilateral Hearing Loss (UHL) or Single Sided Deafness (SSD).



5 Myths We Need to Dispel About Unilateral Hearing Loss



Myth #1: It's just one ear...

Today's research tells us that:

- After a prolonged period of time with no hearing on one side, pathways in the brain are altered and other senses begin to use those pathways instead. This is called cortical reorganization.
- Interesting fact: UHL on the right has a larger neurological impact than on the left.



Myth #2: UHL does not impact language/vocab

Today's research tells us that:

- It was previously thought that students with UHL did not experience language delays in the same right as children with binaural losses.
- Newer research shows that is not the case. In a study completed in 2010 (Lieu, Tye-Murray, Karzon, & Piccirillo, 2010), sibling pairs were administered the OWLS. The sibling with the UHL consistently scored lower than the sibling with normal hearing.



Myth #3: UHL does not have educational impact

Today's research tells us that:

- Language delay will always impact academics
- Phonemic awareness is the most impacted.
- Working memory concerns
- Classroom noise
- Social Interactions
- Behaviors



Students with a UHL are <u>10 TIMES MORE LIKELY TO FAIL A GRADE</u> than their hearing counterparts.

Myth #4: UHL does not need amplification

Today's research tells us that:

- Many great options now!
- Hearing assistive technology
- Hearing aids
- Cochlear implants!!!!



• Amplification of the impacted ear is critical to be as soon as possible and worn with fidelity in order to reverse in changes in the cognitive pathways.

Myth #5:UHL does not qualify for an IEP

Today's we understand:

- Unilateral hearing loss is critical in a child's development
- It does qualify as a disabling condition with educational impacts under the IDEA
- One ear is not enough!!
- Request educational audiology as part of the IEP team to assist in advocating for students with UHL when facing barriers.

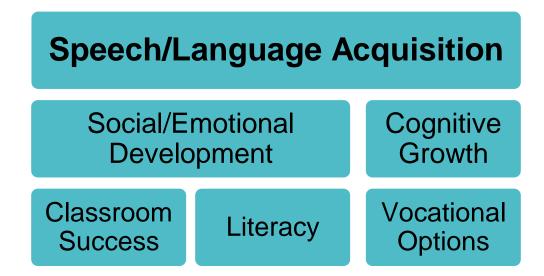
Common Signs of Unilateral Hearing Loss

- Limited or no speech
- Difficult to understand
- Not startled by sudden or loud noise
- Prefers high volume on TV, electronics
- Ignores questions or struggles/responds incorrectly

- Easily frustrated
- "Behavior problem"
- Short attention span
- Watches lips during conversation
- Has difficulty understanding if your face is out of view
- Difficulty hearing in noisy environments



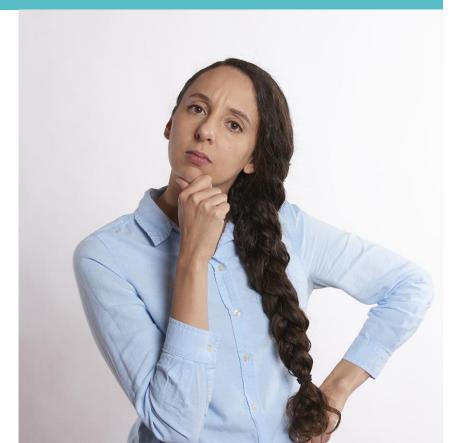
Left undetected or unaddressed, unilateral hearing loss in young children can negatively impact:



What Can YOU Do?

Question to Consider:

How will you use the new information you gained today when you return to your community?



Questions?



Contact Information

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References

- <u>https://www.asha.org/public/hearing/unilateral-hearing-loss-in-children/</u>
- <u>https://successforkidswithhearingloss.com/unilateral-hearing-loss/</u>
- https://www.audiologyonline.com/articles/unilateral-hearing-loss-in-children-19953
- https://jamanetwork.com/journals/jamaotolaryngology/fullarticle/647448
- https://www.mdpi.com/2077-0383/9/3/812/htm
- https://bmcneurosci.biomedcentral.com/articles/10.1186/1471-2202-10-23
- https://bmcneurosci.biomedcentral.com/articles/10.1186/1471-2202-10-23
- https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1357558/
- <u>https://successforkidswithhearingloss.com/wp-content/uploads/2014/06/Minimal-Hearing-Loss_-From-a-</u> Failure-Based-Approach-to-Evidence-Based-Practice-2016.pdf