Patient Perception vs. Reality with Hearing Loss: Confident, but Often Wrong
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Disclosures
• Former Employee - Starkey Hearing Technologies

I have nothing to disclose relevant to this lecture.

Like all of our senses, hearing is a combination of objective function and subjective perception.

Would you recommend amplification for this patient?
• SNHL
• WRSs = 96% AU
• Normal Tympanograms

“I hear just fine”
“My wife mumbles”
What about this one?

• SNHL
• WRSs = 96% AU
• Normal Tympanograms

"I’m struggling."
"I feel like I’m missing out on life."

More than the audiogram

• Hearing is critically important for the majority of interactions with others.
• Communication affects a multitude of interactions.
• Changes in communication ability affect more than just the individual with hearing loss.
• The audiogram may not reflect the degree of difficulty experienced by the patient.

Effects of Hearing Loss

Communication challenges
Stress
Fatigue
Social withdrawal
Loss of confidence

"Confidence comes not from always being right, but from not fearing to be wrong."

-Peter T. McIntyre
Assessing Confidence

• How confident are you that your response was correct?

Value entered as ‘80’

Confidence is correlated with performance…

Comparison of Mean Confidence Ratings for Three Signal-Noise Ratios

Dundas, 2009

…but performance is not the only thing that affects confidence…

Rated Confidence at 50% Correct

Dundas, 2009

…normal hearing are more confident than hearing impaired…

Confidence/Performance Functions

Dundas, 2010
Consider…

• Communication challenges that arise from hearing loss may make HI listeners LESS likely to seek help for their hearing loss.
• Technology may be able to help...
• ...even when the hearing loss is not a ‘traditional’ candidate.

Audibility vs. Processing

Amplification:
Provides audibility for all sound

Directionality:
Improves Signal to Noise Ratio

Noise reduction:
Reduces *loudness* of sound that is NOT SPEECH

Cognitive Benefits

- Sarampilis et. al., 2009

Implications for Clinicians

Decreases in communication confidence occur with hearing loss.

Complaints of performance deficits do not always match up with the audiogram.

Contemporary amplification and signal processing techniques may result in both objective and subjective benefit even for borderline hearing loss cases.
Beyond audibility...

Improve confidence
Enhance quality of life
Reduce Fatigue
Improve Outcome

Hearing loss:
Think outside the audiogram.

References