If you are viewing this course as a recorded course after the live webinar, you can use the scroll bar at the bottom of the player window to pause and navigate the course.

This handout is for reference only. Non-essential images have been removed for your convenience. Any links included in the handout are current at the time of the live webinar, but are subject to change and may not be current at a later date.
Technical issues with the Recording?

- Clear browser cache using these instructions
- Switch to another browser
- Use a hardwired Internet connection
- Restart your computer/device

Still having issues?

- Call 800-753-2160 (M-F, 8 AM-8 PM ET)
- Email customerservice@AudiologyOnline.com
A New Generational Approach: Integrating Psychology and Audiology Care

Michael Hoffman, PhD
Millennial Matters & Generational Issues in Audiology

Learning Outcomes

After this course, participants will be able to

- Describe a model for integrating psychology and audiology services.
- Discuss research on psychopathology within patients with hearing loss.
- Discuss strategies for counseling complex families.
Overview

- Review of psychological literature on hearing loss
- Model for integrating psychology and audiology
- What audiologists can do when they don’t have access to psychology
- Counseling difficult families
- Summary, Q&A

About Me

- Ph.D. in Clinical Psychology with a specialization in Pediatric Psychology
  - Graduate training at University of Miami
  - Residency and fellowship at Nemours/AI duPont Hospital for Children
- Born with severe to profound hearing loss (Connexin 26)
  - Dx at 4 mo
  - Aided at 5 mo
  - Implanted at age 28
Psychosocial Research

- Mean age of awareness is around age 3

- Children first perceive that others may be looking at them differently by age 4

- Therefore, children with hearing loss begin experiencing psychosocial effects at an early age and, in many cases, before being able to make decisions about their own care

Studies from Gallaudet estimate that 40-50% of children with hearing loss have a comorbid diagnosis

- Increased rates of ADHD (20% vs. 6.9%)

Children with hearing loss often experience difficulties academic performance, behavior, feelings of being different/teasing, increased rates of psychopathology, and social withdrawal

NHANES Data:

- 16.6% have seen a doctor for social emotional problems (vs 4.4%)
- 11.5% have been medicated for emotional difficulties (vs 6.9%)
Hearing Loss and Autism (ASD)

- Children with hearing loss have higher rates of Autism
- Risk-ratio of ASD is 14.1 times greater in hearing loss vs general population
  - 1 in 59 children with hearing loss have ASD (vs. 1/68 in general population)
- Making a dual diagnosis is extremely challenging!
  - Social difficulties can be explained by hearing loss or ASD
  - Hallmarks of ASD: hand-flapping, toe walking, self-stimulatory behaviors
- Another common overlap: increased rates of auditory processing disorder

Maternal Sensitivity

- Hearing mothers of children with hearing loss tend to be:
  - More controlling
  - More directive
  - More intrusive during interactions with their children
- Maternal sensitivity:
  - Maternal responsivity
  - Respect for child’s autonomy
  - Positive regard
  - Hostility
- Quittner et al (2012): 188 children with CIs vs typically developing children
Maternal Sensitivity

A

Child Age at Implantation

B

Maternal Sensitivity

C

Maternal Sensitivity & Linguistic Stimulation
Effects of Hearing Loss in Adults

Adults with hearing loss often display social withdrawal (Sung et al, 2016)

30% of adults with severe hearing loss who do not wear their devices report depressive symptoms (National Council on the Aging, 2011)

- Also more likely to report: worry, anxiety, paranoia and emotional insecurity

- Odds of depression in the elderly were 1.5 greater per 25 dB of hearing loss in the better ear (Mener et al, 2013)
In elderly adults, hearing loss contributes to cognitive decline and dementia (Ameiva et al, 2015)
- Link between cortical amyloid plaques in Alzheimer's disease and loneliness, which can be exacerbated by hearing loss

- Hearing loss contributes to brain tissue loss, affecting the ability to process sound and speech (National Council on the Aging, 2011)

- Other studies have linked hearing loss to cardiovascular disease and diabetes

In sum:

HEARING LOSS HAS SIGNIFICANT PSYCHOSOCIAL EFFECTS ACROSS THE LIFESPAN!!!
Integrating Psychology and Audiology

Justification for Psychology Role

- Audiologists are very well trained to assess issues of speech/language
- However, individuals with hearing loss are impacted in many ways
- Providing holistic services that address the “whole child/person” improves patient care and helps align with patient-centered collaborative care
- Psychologists are well positioned to help manage these things!!!
A Broad Integration Model

**Cochlear Implant Team**
- Serial developmental assessments
- Assess family readiness

**CAPD Patients**
- Consult regarding psychoeducational evaluations
- Discussing other diagnoses

**Handouts**
- Handouts on typical psychosocial experiences
- Child development handouts

**Sound Sensitivities**
- Outpatient therapy involving biofeedback and CBT

**Ear Anomaly**
- Standardized screening and assessment of families
- Surgery prep

**Research**
- Tracking outcomes and publishing data

**General Audiology**
- Standardized screening
- Outpatient therapy
- Meet w/ new ID families
- Device compliance
- Booth testing
- Warm handoffs

---

**Cochlear Implant Team**

- Assessment of family readiness:
  - Understanding of surgical/rehabilitation process
  - Family perspectives of CIs/hearing loss
  - Concerns about appearance/surgery
  - Potential barriers/psychosocial complicating factors
  - History of parental mental health
  - Family stressors and relations
  - School/daycare setting

- Most critical areas to assess: Barriers to follow-up care and family understanding of the CI process

- Developmental assessment (Bayley)
  - Cognitive functioning, receptive/expressive language, and fine and gross motor
CAPD and Sound Sensitivities

- Many patients undergoing CAPD evals have history of psychological comorbidities
  - Ruling out ADHD, autism, other learning issues

- Misophonia, tinnitus, and hyperacusis
  - Outpatient psychotherapy to provide coping strategies
  - Conducting biofeedback to teach diaphragmatic breathing

Ear Anomaly Clinic

- Multidisciplinary clinic for children with conductive hearing loss/microtia/atresia
- Conduct psychosocial consultations

- Assess:
  - Family context/stressors
  - Psychosocial history
  - Appearance-related concerns
  - Developmental history/EI services
  - Academic functioning/IEP
  - Psychosocial concerns impacting physical health
Some medical conditions have clear demarcations for psych involvement
- E.g., diabetes, cancer, weight management
- Within our field, it is hard to know when to refer

Screening can standardize referrals while taking minimal time and allow for clearer identification of those who might benefit

Screening can also save you time!

Screening of permanent hearing loss patients occurs:
- At device selection OR fitting
- 1 month follow-up OR 3 month follow-up
- Every 6 month follow-up

Patient experiences and challenges change, repeated screening helps us to serve needs at different times

We can also track change over time
Screening Patients

- 3 age ranges:
  - 0-5: Parent report
  - 6-12: Parent and self-report
  - 13+: self-report
- Items: 6-8 questions

Sample Questions

- How often is your child bothered by his/her hearing loss?
- How often does your child feel different from other children because of his/her hearing loss?
- How often does your child wear his/her hearing devices?
- How often does your child feel down, depressed, or bad about him/herself?
- How often does your child feel nervous, anxious, or on edge?
- How often does your child have difficulty falling or staying asleep?
- How often do you feel stressed or worried about your child's development or behavior?
- How often do you feel stressed or worried about managing your child's hearing loss?
What can Psychology do?

- The issues do NOT have to be specific to hearing loss, but can include:
  - Sleep, feeding, behavior problems, anxiety, depression
  - Device usage, parental stress, parental decision-making
  - Identity formation around hearing loss
  - Brief assessments for ADHD
  - Adjustment for parents and children following initial diagnosis
  - Transition periods – adolescence/college/young adulthood
  - Improving family communication around hearing related issues
  - Brief developmental assessments for children
  - Warm handoffs or complex booth testing assistance
  - …and many more!

What Can Audiologists Do?

- What if I do not have access to psychology/work in private practice?
- Answer: You can do lots!
- Have about psychosocial functioning in individuals with hearing loss
- Generate a list of community mental health providers
- Screening for anxiety/depression

- But isn’t Psychology for crazy people?
- What if they say no?!?!?!?
### Personal Health Questionnaire
#### Depression Scale (PHQ-8)

Over the last 2 weeks, how often have you been bothered by any of the following problems? (Circle one number on each line)

<table>
<thead>
<tr>
<th>How often during the past 2 weeks were you bothered by...</th>
<th>Not at all</th>
<th>Several days</th>
<th>More than half the days</th>
<th>Nearly every day</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Little interest or pleasure in doing things</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Feeling down, depressed, or hopeless</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Trouble falling or staying asleep, or sleeping too much</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Feeling tired or having little energy</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Poor appetite or overeating</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Feeling bad about yourself, or that you are a failure, or have let yourself or your family down</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Trouble concentrating on things, such as reading the newspaper or watching television</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Moving or speaking so slowly that other people could have noticed. Or the opposite - being so fidgety or restless that you have been moving around a lot more than usual</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Generalized Anxiety Disorder 7-item (GAD-7) scale

Over the last 2 weeks, how often have you been bothered by the following problems? (Circle one number on each line)

<table>
<thead>
<tr>
<th>Over the last 2 weeks, how often have you been bothered by the following problems?</th>
<th>Not at all</th>
<th>Several days</th>
<th>Over half the days</th>
<th>Nearly every day</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Feeling nervous, anxious, or on edge</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2. Not being able to stop or control worrying</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3. Worrying too much about different things</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4. Trouble relaxing</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>5. Being so restless that it’s hard to sit still</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>6. Becoming easily annoyed or irritable</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>7. Feeling afraid as if something awful might happen</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

Add the score for each column

Total Score (add your column scores) =
Use Your Clinical Judgement

- Screening is not meant to be an “end all, be all” for referrals

- You all have wonderful clinical intuition and judgement

- If you think someone would benefit from referral for services even if their score is below the cut-off, proceed!

Counseling Difficult Families

- Families may be more open to term “Behavioral Health Specialist”

- Normalize first – “For many of our patients, it is not uncommon for children to have [poor compliance, anxiety, parental stress]”

- For very young patients – “We know that hearing loss can cause impact on other areas of development”

- “Psychologists are developmental experts and specializes in working with children with hearing loss. They can help with a lot of common issues such as [behavior challenges, anxiety, sleep, ADHD]”
New Diagnosis Families

- For families who just received a new diagnosis of hearing loss
  - Many are experiencing guilt/mourning change in expected trajectory of child's life course
  - Some of the most common concerns are about social functioning:
    - Will my child make friends?
    - What will others think about them?
    - Will they date/get married?

- Your goal should not be to “make them feel better”….it should be to “make them feel heard”
  - Ask what is going through their mind
  - Normalize and validate those thoughts/feelings (Even if it is not always normal)
  - When they are talking, use reflective language
    - “it seems” and “If I am understanding you correctly”

- Avoid:
  - Specific, targeted questions…this doesn’t pull for more information
  - Closed ended questions…pulls for “yes/no” responses
  - Telling the family about your previous professional experiences
Counseling Difficult Families

- The “I read this online” family (e.g., I want slim-tubes for 3 year old)
  - Trying to exert your expertise over the family is not likely to work
  - They will become defensive
- Ask open-ended questions to gather additional information
- Reflect the information back to them to create ambivalence
  - So on one hand…but on the other hand
  - I’m a bit confused..
  - Help me understand…
- Ask permission to provide information
- Granting permission to talk means the patient is much more likely to listen

Counseling Difficult Families

- The “I am not wearing my hearing aids” patient
- Again, your first step should be to gather as much information as possible
- You want the patient doing most of the talking
- Motivational interviewing strategies:

  Core Skills
  - Open Questions
  - Affirmations
  - Reflections
  - Summaries
Counseling Difficult Families

- The “I am not wearing my hearing aids” patient
- Get them engaged in change talk
- On a scale of 1 to 10
- Why are you a ___ and not a ___

- AVOID BEING THE FINGER WAGGER!

What Questions Do You Have?
Thank you so much!

- Please feel free to email me with any questions/concerns/feedback

- Michael.Hoffman@Nemours.org