Understanding the Impact of Racial Inequities in Audiology

Logan Faust, AuD
Understanding the Impact of Racial Inequities in Audiology

- Lecture 1 (9-9:45am): How to discuss and reflect upon impactful subject matter
  Break 9:45am - 10:00am
- Lecture 2 (10-11:30am): Foundational Concepts and Personal Application
  Q&A 11:30am - 11:40am
  Lunch Break 11:40am - 1:00pm
- Lecture 3 (1-2:30pm): Student and Professional Implications
  Break 2:30pm - 2:45pm
- Lecture 4 (2:45-3:45pm): Impacts on Patient Care and Services
  Q&A 3:45pm - 4:00pm
- Closing Remarks (4-4:10pm)
Lecture 4:
Impacts on Patient Care and Services

2:45 - 3:45pm
Q&A: 3:45 - 4:00pm
Lecture 4 Agenda

1. **Slido** Activity
2. Critical Consciousness (Lecture 3 End-Slide Review)
3. Global Repercussions of Bias (with **Slido** Activity)
4. Underrepresentation in Research
5. Clinical Manifestations of Bias (with **Slido** Activity x2)
6. Our work moving forward
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Lecture 4, Q1: How are you feeling this morning?
Lecture 3 Review

• Strive to identify and understand the Root Cause Analysis

• Identify Representation (and lack there of) and what it means

• Participate in Critical Self-Reflection and Critical Thinking

• Work towards Anti-Racism
Global Repercussions of Bias

(Futerism, 2017).
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Lecture 4, Q2: Why do you think the soap dispenser doesn't work for darker skin tones?

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Global Repercussions of Bias example

• Why didn’t the soap dispenser work for darker skin tones?

• Using root-cause-analysis, what can you identify as the underlying issue with the design of this product?
Global Repercussions of Bias example

“The less diversity there is in a workplace environment, the more likely major design flaws will be present that only affect people of color” (Synclair Goethe, 2019).
Research

(Ctsiatucsf, 2018).
Research

- Research encouraged to achieve a racial diversity of +30% of minority groups
  - Only 4% of hearing research meets that recommendation (Pittman et al., 2021).

- Video buzz words regarding diversity inclusion:
  - Initiatives, Push-for, Taking note of importance, etc.
  - What word is missing?

- Why aren’t we meeting the +30% standards?
  - There is no central organization that provides accountability for research to meet diversity requirements.
  - Limiting factor: geographical area where research is conducted
Research

• What is the harm of underrepresentation in research?
  • Lack of equitable treatments

• Cognitive Distortions:
  Overgeneralizations and Labeling/Mislabeling

• Products and resources that are not made for all people
  • Automatic Soap Dispensers
  • Band-Aids
Clinical Manifestations of Bias

“Minority patients reported that they were often stereotyped to be of lower intelligence, elaborating on how providers doubted their ability to understand information and did not provide sufficient information regarding their treatment, leaving them feeling uninformed” (Sim et al., 2021).
Clinical Manifestations of Bias

“Most minority patients recalled being stereotyped as having low socioeconomic status, less educated, having poor living conditions, or needing financial support. They also recounted being judged more harshly for their appearance and felt compelled to dress well for better treatment”

(Sim et al., 2021).
Implicit Racial Bias permeates all interactions within patient care.

- Time spent with patients
  - “White patients saw their physician face time increase by nearly 25 minutes, face time only increased by 15 minutes for Black people and 23 minutes for Hispanic people” (Gaffney et al., 2022)
  - “Providers high in implicit bias were less supportive of and spent less time with their patients than providers low in implicit bias” (DeAngelis, 2019).

- Answering questions/ Talking to Patients (DeAngelis, 2019)
  - “Physicians high in implicit bias were more likely to dominate conversations with black patients than were those lower in implicit bias, and that black patients trusted them less, had less confidence in them, and rated their quality of care as poorer.”
  - Use of words we, ours, and us signals implicit bias when speaking to Black Patients; “physicians who scored higher in implicit bias spoke more of these words than colleagues lower in implicit bias, using language such as, “We’re going to take our medicine, right?”
Clinical Manifestations of Bias

- Implicit Racial Bias permeates all interactions within patient care.
  - Treatment plans and follow-up (Chapman et al., 2013)
    - Black patients less likely to receive pain medications vs. White patients in EDs
    - Black and Hispanic patients are less likely to receive opioids in ER than non-Hispanic patients with similar injuries.
    - “They found that physicians could accurately judge patients’ pain severity regardless of ethnicity yet still provided less analgesia to Hispanic patients with severe injuries.”

- Use of interpretation
Clinical Manifestations of Bias

• Healthcare Literacy/ Advocacy
  • How do you judge patient understanding?
  • Language needs: do you use interpretation for the entirety of your appointment?
  • Do you provide resources in writing?
Clinical Manifestations of Bias

• Appointment Expectations
  • Appointment Frequency
  • Paneling appointments
  • Travel/transportation needs
  • Salaried vs. Hourly patient demographics
  • Childcare
Clinical Manifestations of Bias

• What do we consider success with Pediatric Hearing Aids?
  • Wear-time
  • Ability to troubleshoot at home individually
  • Establishing IEP/ 504 Plan and obtaining hearing accommodations
  • “They should be willing to do anything for their children.”
Clinical Manifestations of Bias

Cochlear Implantation Disparities (Pediatric Focus)

• 15-year retrospective

• Large gaps in insurance coverage and implantation rate (private pay vs. Medicare vs. children from two lowest income brackets)

• White and Asian children ~2x more likely to be implanted than Black and Hispanic Children

• Children receiving implantations were more like to live in zip codes associated with higher median incomes

(Tampio et al., 2018)
Cochlear Implantation Disparities (Pediatric Focus in Florida)

• “Children from racial/ethnic minority groups and those with Medicaid appear to be at an increased risk for delay in cochlear implantation in the management of their sensorineural hearing loss.”

• Intersectionality of Disparity
  • Ex: Black children with Medicaid were found to have less early access to cochlear implantation

• “These racial and insurance inequalities emphasize the need for multidisciplinary care teams—comprising otolaryngologists, pediatricians, audiologists, speech-language pathologists, psychologists, nurses, social workers, and educators—to address the full spectrum of the social and medical determinants of health in children with hearing loss.”

(Liu et al., 2021)
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Lecture 4, Q3: What do you think attributes to these pediatric CI findings?
Clinical Manifestations of Bias

Cochlear Implantation Disparities: Objective vs. Subjective Criteria (Pediatric Focus)

• Objective criteria is largely quantifiable, clear, concise.
  • Age considerations, degree of hearing loss requirement, radiology reports, etc.

• What about the subjective criteria?
  • Hearing aid wear-time
  • Appointment Follow-up
    Geographic location/ Access to Resources
  • Family Dynamics
  • Social Commentary
Clinical Manifestations of Bias

INTENT versus IMPACT
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Lecture 4, Q4: What is the difference between INTENT versus IMPACT?
Clinical Manifestations of Bias

Cochlear Implantation Disparities: (Pediatric Focus)

• What do we think the INTENT of subjective cochlear implant criteria is?
  • Hearing aid wear-time
  • Appointment Follow-up
  • Geographic location/Access to Resources
  • Family Dynamics
  • Social Commentary

• What do we think the IMPACT of subjective cochlear implant criteria is?

• What do we need to do about it?
Clinical Manifestations of Bias

Social Determinants of Health (SDH)

1. Education Access and Quality:
   Educational attainment, health literacy, & early childhood education impact hearing healthcare.

2. Health Care Access and Quality:
   Lack of access to hearing healthcare services & providers and insurance coverage influences outcomes.

3. Social and Community Context:
   Racism, discrimination, & marginalization of populations influences hearing healthcare access and outcomes.

4. Neighborhood and Built Environment:
   Neighborhood conditions, access to transportation, & housing stability affect access & utilization of hearing healthcare.

5. Economic Stability:
   Socioeconomic position intersects with other SDOH domains that shape hearing healthcare.

(Schuh & Bush., 2021)
Clinical Manifestations of Bias

Cochlear Implantation Disparities: Subjective Criteria (Adult Research)

Social Determinants of Health (SDH)

“It is difficult to address SDH-rooted disparities without measuring SDH factors and these measures are not part of cochlear implant candidacy evaluations. Although it may not be a part of traditional evaluation of hearing healthcare specialists, providers can utilize a wide array of validated assessment tools to collect social determinant health data on cochlear implant candidates and users. For example, the Centers for Medicare and Medicaid Services Accountable Health Communities created the Health-Related Social Needs Screening Tool” (Schuh & Bush., 2021).
“May not be used as an official criteria for adults, however, these social/ socio-economic factors are often used as criteria for pediatric candidacy” (Schuh & Bush, 2021).
"Implicit racial and ethnic bias are deeply rooted within all of the SDH domains, explicit manifestations of bias based on sociodemographic identity and how that influences health are classified under this domain. Implicit bias refers to attitudes or beliefs one has toward people or populations that unconsciously affects decisions and actions such as clinical assessments or provider-patient relationships"
Combating Systemic issues in Healthcare: What has been proven to work?

- Early Childhood Development Initiatives
- Reducing Childhood Poverty
- Ensuring Access Care for All
- Enhancing Income and Employment Opportunities among Youth and Adults
- Diversifying the Healthcare Workforce
- Improving Neighborhood and Housing Conditions
- Emphasize Primary Care
- Addressing Patients’ Social Risk Factors and Needs
- Eliminating Inequities in the Receipt of High-Quality Care

(Williams & Cooper, 2019)
Combating Systemic issues in Healthcare: Where do these Initiatives **FAIL**?

- Increasing Awareness that Racial Inequities Exist

- Building Political Support to Address Inequities
  - “There is also considerable partisan polarization on these beliefs with 72% of Republicans compared to 23% of Democrats reporting that social disparities are due to blacks not trying hard enough.”

- Increasing Public Empathy

(Williams & Cooper, 2019)
Our Work Moving Forward

• It starts with you
  • Be vigilant with Root-Cause Analysis

• Participate in Critical Consciousness
  • Critical Self-Reflection, Critical Thinking

• Work towards being an Anti-Racist
  • Being neutral or “not racist” is not enough.

• Identify systemic issues that directly impact your patients, your students, and your colleagues.
Inequality
Unequal access to opportunities

(Addressing Imbalance, 2019)
Equality?

Evenly distributed tools and assistance

(Addressing Imbalance, 2019)
Equity

Custom tools that identify and address inequality

(Addressing Imbalance, 2019)
Justice
Fixing the system to offer equal access to both tools and opportunities
Inequality
Unequal access to opportunities

Equality?
Evenly distributed tools and assistance

Equity
Custom tools that identify and address inequality

Justice
Fixing the system to offer equal access to both tools and opportunities

(Addressing Imbalance, 2019)
Question & Answer
3:45 – 4:00pm

Closing Remarks
4:00pm – 4:10pm