UNDERSTANDING AND SUPPORTING RELUCTANT FM USERS

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Bobby

- High School Jr
- Moderate-severe bilateral SN HL
- Previous FM user
- No longer uses FM because:
  - I don’t like having to wear it, I don’t like others seeing it, I don’t like that it makes me look different, I get teased if I use it, I don’t like how it sounds, I don’t like having to carry the equipment, it doesn’t help me hear better
  - Sabotaged use by taking it home and leaving it there
- School solution: classroom sound field system (CADS)

Kathy

- High School sophomore
- Moderate-severe bilateral SN HL
- Current FM user
  - HA with integrated FM
  - Everyday – all classes
  - If not in use, because teachers won’t use it
- Comments:
  - “Helps me a lot”
  - “FM systems are great to use”
What is the Problem?

- Student?
- School/Teacher/Staff?
- Technology?
- Support?
- Knowledge?
- Orientation and Training?
BRIDGE THE GAP BETWEEN CANDIDACY FOR HAT AND WILLINGNESS TO USE HAT WITH ASSESSMENT, CAREFUL PLANNING, & COUNSELING

TAKE-AWAY
Terminology

- HAT: Hearing Assistive Technology
- CADS: Classroom Audio Distribution System
- IEP: Individual Education Program
- 504: 504 Accommodations Plan to comply with Rehabilitation Act of 1973
SURVEY DATA
Why Do Students with Hearing Impairments Resist Wearing FM Amplification?

- Jennifer Franks
- Eastern Michigan University
- Participants: 68
  - 9 students, ages 8-18
  - 5 parents
  - 15 special educators
  - 11 general educators
  - 7 teachers of speech and language
  - 8 audiologists
  - 12 other personnel working with DHH students
Findings

• No correlation between type of hearing loss (unilateral vs bilateral)
• At least half of participants (53%) believe that a primary reason for non-use is social
• Students, more than any other group, did not see the value of the FM system

Limitations

• Small sample size
• Single survey (students and adults) limited specificity of questions
Students say:

- Students ask me “What is that?” I really dislike that.
- If students didn’t grow up using the FM units, they don’t feel comfortable with them.
- I don’t feel it makes a huge difference because I can just ask my friend if I think I missed something.
- I feel bad teachers have to use it.

General Education Teachers say:

- Students are self-conscious.
- Students don’t want to look different.
- Student doesn’t bring it to class, teachers don’t mandate.
- Student found it uncomfortable and sometimes it would squelch and it hurt his ears.
Sample Comments

Educational Audiologists say:

• Students don’t want to look different.
• In spite of inservice, teachers, staff and students misunderstand how the equipment works and why it is needed.
• Combination of lack of teacher enforcement and child motivation.
• Teachers do not want to wear the transmitter or feel they are loud enough.
• Teachers believe it takes too much time to put them on and check that they are working.

Parents say:

• Kids don’t want to feel different.
• Teachers will subtly discourage use by saying, “I speak loudly, it isn’t necessary in my class”. I’ve had numerous teachers say this and while they don’t refuse outright, they discourage a student who doesn’t want to impose upon their teacher.
• Poor maintenance.
Table 1
Opinion: Main Reasons FM System is Not Used Consistently

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<th>Gen Ed Tchrs</th>
<th>Sp Ed Tchrs</th>
<th>TSLI</th>
<th>Other</th>
<th>Parent</th>
<th>Audiologist</th>
<th>Student</th>
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<td>60</td>
<td>57</td>
<td>50</td>
<td>60</td>
<td>44</td>
<td>56</td>
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<tr>
<td>Mechanical</td>
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<td>13</td>
<td>14</td>
<td>8</td>
<td>20</td>
<td>11</td>
<td>22</td>
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<tr>
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<td>7</td>
<td>14</td>
<td>17</td>
<td>0</td>
<td>0</td>
<td>22</td>
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<tr>
<td>Support</td>
<td>9</td>
<td>0</td>
<td>14</td>
<td>25</td>
<td>40</td>
<td>22</td>
<td>11</td>
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<tr>
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<td>14</td>
<td>0</td>
<td>20</td>
<td>11</td>
<td>44</td>
</tr>
<tr>
<td>Convenience</td>
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<td>0</td>
<td>0</td>
<td>17</td>
<td>0</td>
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</tbody>
</table>
MDHC Teen Workshop – Oct 2012

Acknowledgements

• Sandra Gabbard, Ph.D., Director of Audiology, University of Colorado Hospital

• Zachary LaFratta, LEND AuD. Fellow, University of Colorado Hospital
MDHC Teen Survey (clicker)

- 36 students
- 9-12 grades (mostly 9-10th)
- All degrees of hearing loss, personal hearing instruments, and modes of communication

![Hearing Instrument Type Pie Chart]

- Digital: 56%
- None: 24%
- Baha: 40%
- CI: 16%
MDHC Teen Survey: FM Use

Written Survey
- 28% use personal FM
- 58% did not know their type of hearing loss,
- 39% did not know degree of HL
- 22% did not know how to describe their general hearing loss

Clicker Survey
- I haven't like it in the past but I might try something new.
- I wear it because it is in my IEP.
- Never tried it, and I don’t want to.
- I haven't used it but tell me more.
- I love my FM
MDHC Teen Survey (clicker): Connectivity

“Connectivity” allows me to…

<table>
<thead>
<tr>
<th>Activity</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Dial up the phone old-school style using a clunky handset</td>
<td>0%</td>
</tr>
<tr>
<td>2. Talk “hands-free” on my cell using Bluetooth</td>
<td>8%</td>
</tr>
<tr>
<td>3. Listen to my iPod through my hearing aids</td>
<td>29%</td>
</tr>
<tr>
<td>4. Listen to the TV and play video games with the best possible audio signal</td>
<td>15%</td>
</tr>
</tbody>
</table>

2-4 – Connectivity Rocks! 52%
MDHC Teen Survey (written): Why FM is not used…

I do not like that it makes me look different: 3
I do not like having to wear my equipment: 8
I do not like how my equipment feels on my body: 5
I do not like having equipment on my desk: 1
I do not like others seeing my equipment: 5
I do not like how my equipment looks: 1
I get teased if I use my equipment: 1
I do not like how my equipment sounds: 7
I do not like having to give my teacher the micr/trans: 4
I think my teacher does not want to use the equipment: 0
I don’t like having to carry the equipment: 5
I don’t like having to charge it: 2
MDHC Teen Survey (written): Why FM is not used…

- I do not like that it makes me look different
- I do not like having to wear my equipment
- I do not like how my equipment feels on my body
- I do not like having equipment on my desk
- I do not like others seeing my equipment
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- I don’t like having to carry the equipment
- I don’t like having to charge it
MDHC Teen Survey (written) Why FM is not used...

Problems that can audiologists can address

- I do not like that it makes me look different 3
- I do not like having to wear my equipment 8
- I do not like how my equipment feels on my body
- I do not like having equipment on my desk 5
- I do not like others seeing my equipment 5
- I do not like how my equipment looks 1
- I get teased if I use my equipment 1
- I do not like how my equipment sounds 7
- I do not like having to give my teacher the micr/trans 4
- I think my teacher does not want to use the equipment 0
- I don’t like having to carry the equipment 5
- I don’t like having to charge it 2
MDHC Teen Survey (written): Other comments for non-FM use

- I think kids with hearing loss are already embarrassed about having the disability, that giving the FM system to a teacher is more embarrassing because kids start asking questions.
- It might annoy the students.
- I think I don’t need it.
- I need to hear clear-better with only CI.
- I don’t need an FM.
- My hearing is different, more fuzz, not clear.
- I hate it!
- I don’t like it.

CLICKER SURVEY: 66% of the students responded that they had been made fun of or bullied because of their hearing loss; another 6% said they were not sure...
MDHC Teen Survey (written)

Other comments about FM from teens:

- I like it but it makes me stand out which I don’t like.
- I need an FM for school in a big classroom.
- FM systems are great.
- There should be a convenient place for it. There should be more thought in making the FMs better for kids.
MDHC: Teacher Technology Seminar (Oct 2012)

- Participants: 9 TODs serving 172 students
- All degrees of HL, communication mode mostly LSL
- Personal Hearing Instruments: 50% (44% HAs, 5% CIs, .6% Bimodal)
- 54% use HAT; of those not using HAT, another 34% would benefit
  - All reported to be consistent daily users
  - 77% of teachers report HAT helps a lot, 22% helps somewhat
- Average age of HAT (in order from most frequent response to least)
  - 1-3 years
  - 3-5 years
  - <1 yr
  - 5-10 yrs
MDHC: Teacher Technology Seminar (Oct 2012)  N=96 students

Reported HAT arrangements (most frequent to least frequent)

- CADS with personal hearing instrument
- FM booted to personal hearing instrument
- CADS only
- Telecoil/teleloop
- Hearing aids with integrated FM
- Desktop only
- Desktop with personal hearing instrument
MDHC: Teacher Technology Seminar (Oct 2012)

• Teachers say most common problem for inconsistent or non-use
  • 21%: Student embarrassed, does not want to be different
  • 21%: Student does not understand the value
  • 21%: Responsibility issue (e.g., student or teacher’s responsibility to get the mic)
  • 16%: Teacher buy-in
  • Other: feedback, student doesn’t like the sound, inconvenient, feedback, training in troubleshooting

• Other comments from teachers:
  • I love them
  • CI students don’t like how FM sounds
  • Students will get used to having “teacher on my shoulder” and not learn to listen in noise and filter through important information.
SOLUTIONS!
The problems that are solvable with aggressive management

Technology Function
- Provides more flexibility to hear peers
- No bulk or less bulk
- Connectivity options
- Cool technology
- Aggressive troubleshooting is a must!

School/Teacher/Staff
- Hearing loss awareness: hearing vs understanding, audibility vs intelligibility
- Positive attitude
- Classroom support for implementation
- Orientation and training
- Enforcement: If in IEP or 504 Plan - not a choice
  - (Bellingham. MA Public Schools, 69 IDLER 142 OCR 2012)
For Students

Technology Implementation

• This is about the person - Give the student a voice and choice
• Orientation and training on all functions – make it “cool” and relate to general telecommunications technology used by others (FBI, sports, television)
• Insure aggressive troubleshooting and back-up FM

Connect to information sources

• Hearing and hearing loss and its communication implications
• Communication accommodations
• Connectivity options
• Laws and rights
• Peer activities
Step 1. Potential Candidacy for HAT
Hearing Loss | Auditory Processing Deficit | Learning Disability
Auditory Neuropathy/Dys-synchrony
Language Deficit | Attention Deficit | English Language Learner

Documented evidence of listening or learning problems?

- No

Yes

Step 2. Considerations
[in and out of school]
• Acoustic environment
  • Social/emotional
• Functional
• Support

Contra-Indications?

- Yes

Reconsider

- No

Step 3. Device Selection

Step 4. Fitting and Verification

Step 5. Implementation and Validation
Step 2. Considerations [in and out of school]
- Acoustic environment
- Social/emotional
  - Functional
  - Support

Motivation: Student & teachers
Child & family
Attention & Fatigue
Self-image

Self-advocacy
Social acceptance
Classroom culture
Family support
Considerations before fitting HAT:
Classroom Listening Assessment

Classroom Observation

Acoustic Measurements (Noise, RT, Critical Distance)

Questionnaires: Teacher (CHAPS, LIFE), Student (Classroom Participation Questionnaire, Self-Assessment of Communication-A, Significant Other Assessment of Communication-A)

Functional Behavioral Assessment: Functional Listening Evaluation (FLE)
HAT Plan (IEP/504):

- **Device determination:** based on assessment considerations; Proceed with fitting, verification, & validation

- **Implementation:** when to use, training for student and teachers

- **Management:** monitoring device function

- **Goals:** knowledge, path to self-advocacy, peer activities
Other Strategies

• Agreements between student and teacher for accommodations, signals for need for clarification, use of FM
• Negotiate: use grades, acoustical environments, and class learning situations to determine when needed; discuss pros & cons with student for each situation
• Facilitate compliance from teachers & school staff
• Parent acceptance and support
• Determine student responsibility to advocate for needs
• Encourage but never force a student to use FM
• Counseling
Counseling: The Self-Discovery Process

- Connect to information
- Guide discovery process with opportunities to talk, problem solve, connect with peers, adult role models
- Do, Debrief, Decide
- Involve parents

Self-Efficacy
Self-Advocacy
Empowerment
Confidence
Self-Esteem
Peer Support Group Hints

• Let teens be teens first
• Carefully insert topics about communication challenges and accommodations
• Keep it fun and active – let students help design the agenda and invite guests
• Use role models that are young – high school students for elementary and middle school; college students for high school
• Role play common situations (see GAP Scenarios)
I prefer not to use FM

- Meet with others w/HL to validate feelings
- Embarrassed
- Role play situations

- I don't like giving the teacher the mic
- Put it on the teacher's desk
Teen Day
Marion Downs Hearing Center, Denver
GAP: Guide to Access Planning
www.phonakonline.com/MyGap/GapMain.html
GAP is...

A Learning Guide:
- Self-Assessment
- Rights
- Self-Advocacy
- Hearing Access Technology
- Activities
- Resources

FOR:
- Teens & Young Adults
- Teachers & Professionals
- Parents
Tools for Practice

• Questionnaires
• AAA HAT Guidelines
• Classroom Listening Assessment
• Guide to Access Planning (GAP)
• Ida Institute
  • My World
  • Living Well
• Self-Advocacy Curricula
  • Knowledge is Power, Mississippi Bend Area Education Agency, EAA
  • Self-Advocacy for Students who are Deaf or Hard of Hearing, K. English, GAP CD
BRIDGE THE GAP BETWEEN CANDIDACY FOR FM AND WILLINGNESS TO USE FM WITH ASSESSMENT, CAREFUL PLANNING, & COUNSELING

- Listen
- Fill knowledge gaps
- Arrange peer support/role models
References

- Ida Institute www.idainstitute.com

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Celebrating Marion’s Centennial Year

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Frontiers in Hearing
Beyond Newborn Hearing Screening
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