Counseling During Real Ear Measurements: The Clients' Perspective

Lorienne M. Jenstad[1], PhD, John Pumford[2], AuD, Angela Ryall[1], MSc, Tami Howe[1], PhD, Garnet Grosjean[1], EdD

[1] The University of British Columbia [2] Audioscan Inc

Introduction: What we know and don't know about REM

Matching to target through REM leads to:

- Better speech recognition in quiet & noise (1,2)
- Increased self-reported benefit (3)
- Fewer client-initiated appointments (4)
- Higher self-perceived value, satisfaction with clinician, and willingness to pay (5)

Proposed advantages of informational counselling during REM:

- Learn about hearing aid (HA) processing
- Increase health literacy
- Incorporate attributes of client-centered care

Prior research has focused on the clinician's perspective or objective data, with very little understanding of the client's perspective of REM

Purpose

Gather perspectives of first-time hearing aid users regarding content and format of informational counseling during REMs

Methods

Qualitative research methods using focus groups and content analysis

Participants

- 16 adults (12 female, 4 male)
- Age (19-89 yrs; most 60+ yrs old)
- All first-time hearing aid users
- All remembered REM from their own HA fitting

Procedure

REM demonstration with informational counselling:

1) Live action: *actor-clinician and actor-client*

- *Semi-structured script from audiologists*
- *Demonstrated best practice REM methods*

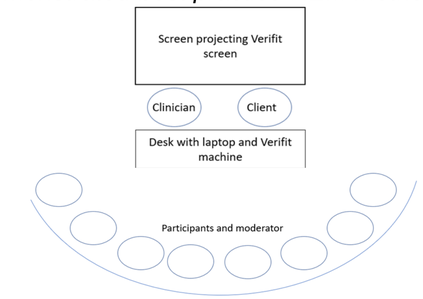

Figure 1. ***Demonstration setup for the four focus groups.***.

2) Video: *Verifit 2 screen projected onto screen*

- Group discussion with experienced moderator
- Elicited thoughts on **verbal and visual content**

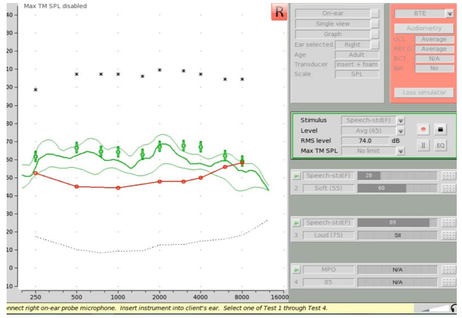

Figure 2. ***Demo video image of REM with accompanying script.***

"This line is the hearing aid response in your ear through that tube. The targets are based on a prescription for your hearing. We can see that we need to make some adjustments for the line to match more closely. These sounds are above your hearing thresholds (this line) so you can hear it, but it is not loud enough for you to get full benefit. I am going to increase the volume at these frequencies."

Results

Data analysis approach: Interpretive description.

Analysis revealed:

- What was done well (Positive aspects)
- Areas for improvement (Negative aspects)
- Ideas for change (Suggested changes)

Most participants were interested in learning more about REM if the information was accessible.

SUGGESTIONS FOR CLINICIANS

- ✓ *Explain the testing procedure multiple times*
- ✓ *Check in with the client*
- ✓ *Explain each step*
- ✓ *Repeat important information*
- ✓ *Describe and demonstrate the equipment and tools*
- ✓ *Speak slowly and provide times for questions*
- ✓ *Talk with client to see how much they want to learn*
- ✓ *Prove an outline of the REM procedure*
- ✓ *Use simplified terminology*
- ✓ *Make the procedure meaningful to the client*

SUGGESTIONS FOR REM SYSTEM MANUFACTURERS

- ✓ *Include a legend and labels on the display*
- ✓ *Create a simplified client-oriented screen*
  - ✓ *2 lines only: target and current HA response*
  - ✓ *Remove unnecessary information*
  - ✓ *Separate screens for each stimulus test*
- ✓ *Provide visual accessibility options*
- ✓ *Create preview screen or video*
- ✓ *Display familiar sounds*

Discussion/Conclusions

Explanation and visuals should be simple and meaningful (client-centred care)

Future directions:

- If we incorporate client centered informational counselling will this affect client outcomes?
- Resource development for clinicians

Knowledge Implementation

Study findings have informed the development of a "Counseling" tool for one REM system manufacturer

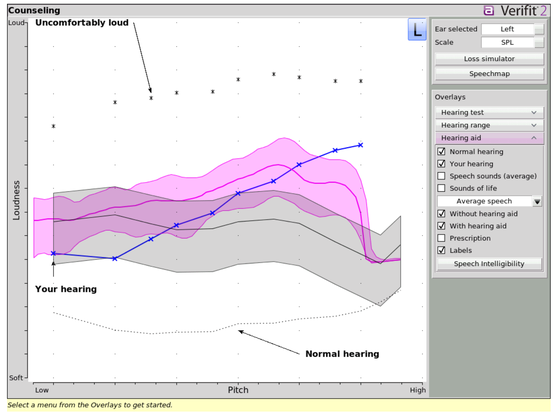

Figure 3. ***Counseling tool image from one REM system manufacturer.***

References

1. Leavitt & Flexer (2012). Hear Rev, 19(13):20–23
2. Valente et al. (2018). J Amer Acad Audiol, 29(8), 706-721
3. Abrams et al. (2012). J Amer Acad Audiol, 23(10), 768-778.
4. Kochkin, S. (2011). Hear Rev, 18, 10.
5. Amlani et al. (2016). Hear Rev, 23(12), 12.

Ryall, A., Jenstad, L. M., Pumford, J., Howe, T., & Grosjean, G. (2021). Counseling during real ear measurements: The clients' perspective. J Amer Acad Audiol. (Early online) DOI: 10.1055/s-0040-1718930

THE UNIVERSITY OF BRITISH COLUMBIA
School of Audiology & Speech Sciences

Acknowledgement

Funding provided by Mitacs Inc and Audioscan.