

Opportunities for Audiologists to Use Patient-Centered Communication during Hearing Device Monitoring Encounters

Corinne K. Coleman, B.S.,¹ Karen Muñoz, Ed.D.,¹
Clarissa W. Ong, B.A.,² Grayson M. Butcher, B.A.,³
Lauri Nelson, Ph.D.,¹ and Michael Twohig, Ph.D.²

ABSTRACT

Patient-centered care incorporates patient's priorities, values, and goals. Audiologists can increase patient engagement when they use patient-centered principles during communication. Recent research, however, has revealed counseling gaps in audiology that could be detrimental to the intervention process. The present study sought to understand the extent patient-centered communication strategies were used during hearing device monitoring visits by analyzing audio recordings. Counseling portions of the appointments were transcribed using conversation analysis. Missed opportunities were observed, including not validating patients' emotional concerns, providing technical responses to emotional concerns, providing information without determining patient desire for the information, and not engaging the patient in a shared planning process. Training opportunities to enhance audiological services will be discussed.

KEYWORDS: Counseling, audiology, patient-centered care

Learning Outcomes: As a result of this activity, the participant will be able to (1) describe elements of patient-centered care; (2) describe strategies that can be used to increase patient-centered interactions in audiology; and (3) describe opportunities to enhance graduate training in audiology to include strategies for patient-centered care.

¹Department of Communicative Disorders and Deaf Education, Utah State University, Logan, Utah; ²Department of Psychology, Utah State University, Logan, Utah; ³Department of Behavior Analysis, University of North Texas, Logan, Utah.

Address for correspondence: Corinne Kathleen Coleman, B.S., Department of Communicative Disorders and Deaf Education, Utah State University, 2620 Old Main

Hill, Logan, UT 84322

(e-mail: Corinnecoleman@gmail.com).

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Three hundred sixty million people worldwide, thirty-two million of whom are children, live with a disabling hearing loss.¹ The physical and psychological consequences of hearing loss can negatively impact quality of life,² as well as functioning in social, work, and home settings.³ Other adverse effects include social isolation, depression, and anxiety; for older adults, they can include cognitive decline,⁴ and for children, hearing loss may lead to delays in speech and language development.⁵ Identification of a permanent hearing loss can be overwhelming and bring forth emotions that may make coping with the diagnosis difficult, interfering with effective management.

Unresolved challenges, such as denial of the hearing loss or lack of confidence managing hearing needs, can contribute to detrimental outcomes. For example, many adults who could benefit from hearing aids do not obtain them, and for those who do, as many as 40% have been found not to wear them.⁶⁻¹⁰ Hearing aid use is also a problem for children,¹¹ and even when hearing loss is identified early, some children wear their hearing aids inconsistently and have delays in language development.^{5,12} Audiologists play a key role in hearing loss identification and intervention. By implementing patient-centered care, they can support patients and families in adjusting to, and learning how to effectively manage, hearing loss.

PATIENT-CENTERED CARE

There has been a gradual shift in health care interactions since the 1970s, impacting how professionals approach communication with patients, from a focus on the disease or disorder to a focus on the patients and their experience with the condition.^{13,14} This shift embraces the role of the patient in the encounter to achieve more balanced conversations. A patient-centered philosophy emphasizes trust, respect for patients, assessment of and responsiveness to their needs, shared decision making, and emotional support, improving patients' ability to act on intervention recommendations.^{15,16} Adherence to treatment recommendations is a critical component in achieving desired functional outcomes. Patient-centered relationships improve both clinicians' and patients' ability to identify

underlying barriers as well as solutions that support effective self-management.

Central to patient-centered care is attending to and addressing patients' psychological concerns.¹⁷ For individuals with hearing loss, the provision of hearing devices may improve communication but does not remove the experience of living with hearing loss. To adequately support individuals and their families, understanding what hearing loss means to them and how it is impacting their life are critical areas of inquiry during audiological encounters. Attending to emotional concerns allows patients to feel valued, increases the likelihood of treatment adherence, and eventually improves patients' overall well-being.

Even though patient-centered care is essential for comprehensive audiological services and is valued by audiologists,^{18,19} patient-centered interactions are rare in practice. Recent research related to communication during audiology encounters, although limited, has found that audiologists inadequately address patients' emotional concerns, responding instead by focusing primarily on providing technical information,²⁰ and minimally involving patients in the management planning process.²¹ Audiologists verbally dominate consultations,^{21,22} and this can lead to an agenda that is driven by audiologists' priorities rather than clients' needs. Similarly, there are concerns related to conversations during patient education, with patients reporting that information provided is often vague and/or complex,^{23,24} which suggests that audiologists do not frequently individualize information sharing or check patient understanding. Furthermore, a study with older adults reported that many wanted more information and support than they had received, lacked confidence in how to use their hearing aids, and desired more psychological, practical, and problem-solving support.²⁵ Thus, there appears to be a gap between services provided to patients accessing audiology and services required or desired by patients.

HEARING DEVICE MONITORING AND SUPPORT

Patient encounters following hearing device fitting provide important opportunities for audiologists to support patients as they learn to

accept and manage their hearing loss. Adults' use of hearing aids has been associated with their acceptance of the need to use hearing aids.²⁶ In addition, counseling following hearing aid fitting is cost-effective and increases average hours of hearing aid use.^{27,28} Still, further research is needed to understand how counseling is being implemented in audiology encounters to monitor hearing device management and to identify methods that may improve provision of effective and individualized support to patients.

Muñoz et al explored communication behaviors of audiologists during encounters with adult patients and parents of pediatric patients.²² Audiologists received counseling training and were audio-recorded pretraining, post-training, and at 6 months' follow-up. A positive outcome of the training was a statistically significant decrease in the audiologist's relative speaking time at post-training and follow-up compared with pretraining, indicating that patients were contributing more to the conversation. There were no changes in the frequency of use for any of the communication categories analyzed (i.e., small talk, education, general assessment, reflection, assessing psychological variables, addressing psychological variables, clarifying treatment goals, planning behavior change). However, the analysis did not explore whether audiologists' communication was patient centered or used qualitative data. The aim of the current study was to provide a qualitative analysis of counseling behaviors after training, by examining (1) the extent to which patient-centered communication occurred, (2) the frequency of missed counseling opportunities, and (3) counseling skills that warrant attention in training opportunities.

METHODS

Participants

Participants were recruited from a convenience sample at a graduate audiology training program. The sample comprised four audiology clinical instructors (one man), and six graduate students in their second or third year of the program (three men). Adult patients and parents of children previously diagnosed with permanent hearing loss and fitted with hearing

aids or cochlear implants were recruited at the time of their appointment by a member of the research team. Participants spoke English and were being seen for a regularly scheduled hearing device monitoring appointment. Institutional Review Board approval was obtained prior to initiation of the study, and all participants provided informed consent.

Data Collection

Client participation included a written agreement to have the appointment audio-recorded. No client demographic information was obtained. Audio recordings were obtained using two lapel microphones, one attached to client and the other attached to the audiologist. AudioBox software (PreSonus Audio Electronics, Inc., Baton Rouge, LA) was used to connect the computer and PreSonus Audio recording equipment (PreSonus Audio Electronics, Inc., Baton Rouge, LA). StudioOne software (PreSonus Audio Electronics, Inc., Baton Rouge, LA) was used to create and manage recordings. The PreSonus Audio Recording equipment was connected to the VocoPro UHF PLL Wireless system (VocoPro, La Verne, CA) with a frequency scan to allow wireless microphones to be used. Thirty-four audio recordings were obtained post-training. Four recordings were excluded due to poor audio quality. Thus, 30 audio recordings were analyzed.

Analysis

The audio recordings were analyzed using the standard conversation analytic convention developed by Jefferson (see Appendix for transcription notations).²⁹ Transcripts include details within conversational turns to reflect elements such as overlapping talk, pauses, and emphasized talk. Conversation analysis (CA) is well suited for spontaneous, naturally occurring conversations to identify and describe methods of communication.³⁰ CA is an approach that is established for studying communication in health care,^{31,32} and it has been used in empirical studies investigating audiology communication behaviors.²⁰ CA was completed for the counseling interactions within the session; conversational sequences that did not involve counseling

were not included (e.g., small talk, real ear measurement, device programming, discussion about paperwork/payment).

Emergent counseling elements were identified by three members of the research team. To achieve integrity in the analysis process, audio recordings were independently transcribed and microelements of communication were tracked (e.g., question type). The three researchers then jointly reviewed each transcription, ensuring consistency in analysis, and summarized the frequency of use of identified counseling elements and annotated missed counseling opportunities. Transcript excerpts are provided in the Results section to illustrate real-time conversation interactions; talk designated by *A* denotes the audiologist, and *P* denotes the patient.

RESULTS

The counseling elements identified fell into four categories (see Table 1): (1) asking questions, (2) responding to patients, (3) providing information, and (4) planning. Within each category, specific skills used and missed opportunities for

using counseling skills were observed in conversational turns of audiological follow-up appointments between audiologists and their patients.

Asking Questions

Questions are asked to assess patient needs, find out how patients are doing, and explore challenges. Question structure can influence patient responses, facilitating or impeding patient sharing and audiologist understanding. Audiologists asked questions in 100% of encounters. Closed-ended questions were asked in 97% of the sessions (29/30; range 1 to 20 questions), and open-ended questions were asked in 70% of the sessions (21/30; range 1 to 5 questions).

Many instances of problematic question asking were observed, including asking closed-ended questions, leading questions, or multiple questions consecutively before allowing the patient an opportunity to respond. Closed-ended questions were found to elicit shorter responses. Closed-ended questions limit audiologists' ability to more fully understand patients' experience and reduce opportunities for patients to feel

Table 1 Counseling Elements Identified in Sessions and Definition of Terms

Category	Counseling Elements Identified	Definition of Terms
Asking questions	Closed-ended question	Can facilitate obtaining specific information and can typically be answered in very few words. Closed-ended questions typically begin with <i>is</i> , <i>are</i> , or <i>do</i> .
	Open-ended question	Can facilitate a deeper exploration of issues, and typically cannot be answered in a few words. Open-ended questions typically begin with <i>what</i> , <i>how</i> , or <i>why</i> .
Responding to patients	Simple reflection	Involves identifying emotions of a patient and reflecting them back to clarify their affective experience.
	Complex reflection	Involves identifying emotions of a patient and expanding on what they have said to clarify their affective experience.
	Validation	Involves telling the patient what they are feeling is normal. Emotions are validated, not actions.
Providing information	Informing	The process of eliciting patients' informational needs and providing information to the patient.
Planning	Agenda setting	The process of determining what will be covered and addressed within the session.
	Action planning	The process of determining next steps, including homework, specific behavioral steps to accomplish the plan, a timeline, and a mechanism for accountability.

Table 2 Asking Multiple Questions at Once Example

1	Audiologist (A): How important are some of those↓ (.) Um ((throat clearing)) extra features. Those-those apps (.) those remote microphones? How important (.) um (.) you can get remote mic for either one
2	Patient (P): uh huh
3	A: One of them can be directly associated with your phone. One of them you'll have to get two accessories
4	P: uh huh

heard or to share useful information not immediately pertinent to the closed-ended question. For the example provided in Table 2, the audiologist asked multiple questions (line 1), then provided technical information, eliciting a minimal response from the patient. This may have been confusing to the patient, and the audiologist missed an opportunity to understand the patient's perspective. The first open-ended question alone (line 1) could have been used to obtain information from the patient on which software features she found most useful. However, the audiologist overrode it with a second question without allowing the patient to respond. Then, the clinician provided a solution without knowing if it was desired by the patient (line 3).

Table 3 Open-Ended Question Example

1	A: OKAY So tell me (.) <what is the thing> you are having the <u>hardest</u> time understanding right now
2	P: I'm just concerned that I'm not going be able to hear↑
3	A: Okay=
4	P: =That's my biggest concern
5	A: Okay can I tell you >that I'm not worried about that<
6	P: But why >what if I just happen to be one in a million< Either they think it's terrible and it's not or they don't and it turns out to be something terrible.
7	A: <u>Yeah</u> so what you are experiencing right now is good↑ and I'm kind of basing my judgment on °how you did with your° hearing aid before we implanted you
8	P: Oh I love my hearing aids I just=
9	A: =Yeah and the fact that you can hear and the fact that you can understand speech with the right side even a little bit (.) even though it wasn't good (.) just a little bit, that tells me that it <has> potential
10	P: Well that's all I'm <u>hoping</u> for
11	A: So it will get there (.) >It'll get there<
12	P: °Cause if I can't hear through° this and I'm not able to hear through the right.
13	A: NOW I got you on the schedule for next week=
14	P: =Alright

Few open-ended questions were asked; however, when they were, patients were able to provide information they may not have raised if they were not given the space and opportunity. For the example provided in Table 3, when the audiologist asked an open-ended question (line 1), the patient stated being worried about not being able to hear with the new device, revealing an issue of concern to the patient. There was also a missed opportunity to validate the patient's concern. How audiologists respond to patients' concerns is important and will be discussed in the next section.

Responding to Patients

Responding to patients can take many forms. Counseling responses have an intentional purpose, including (1) encouragers to help people continue talking, (2) paraphrasing and summarizing to check understanding, and (3) reflecting feelings and validating patient emotions. How the audiologist responds can influence whether or not the patient feels heard, and the likelihood the patient will share concerns and struggles in the future. Counseling responses were found within some encounters. Simple reflections were used in 30% of encounters (9/30; 1 to 2 times); complex reflections in 17% (5/30; 1 to 2 times), and validation in 37% (11/30; 1 to 5 times).

Simple and complex reflections can be used to clarify patient concerns and reflect back to patients that they are being heard and valued. When audiologists used reflections, we observed that patients opened up and elaborated on their concerns or feelings. These reflections indicated to patients that they were heard and prompted deeper sharing of their concerns and experiences throughout the session. Missed opportunities for reflection can undermine therapeutic rapport if patients do not feel validated, or at the very least, heard. Yet, reflections were uncommon in our sample of recordings.

Audiologists often missed opportunities to validate patients' experiences and feelings. Validation entails normalization of experiences; that is, the feelings and thoughts that patients have are typical and make sense given their context. Validation is one way to communicate empathy and support to the patient and can foster development of a strong therapeutic relationship. In addition, audiologists tended to respond to emotional content with redirection to a technical solution, showing a mismatch between patient concern and audiologist response. In Table 4 line 1, the patient indicated difficulty adjusting to her new hearing aids. The audiologist could have reflected frustration related to inconsistent effectiveness of the hearing aids. However, the audiologist offered a technical solution of switching back to her old hearing aids in line 6, then minimized the patient's struggles in line 8. The patient's short responses implied disengagement in the conversation. In the following utterances, the audiologist

proposed adjusting the fit of the domes inside the patient's ear as another solution, without addressing the frustration expressed by the patient. Later in the appointment, the patient brought up her frustration with adjusting to new hearing aids again, suggesting that the audiologist's solutions did not adequately address the needs.

Providing Information

Providing information to patients is a necessary component of many hearing device appointments. How information is provided can influence patient understanding at the time, later recall, and what they do with the information. Informing occurred in 100% of encounters (5 to 53 times). Problems observed with informing included: (1) providing information before assessing patients' prior knowledge; (2) information was unsolicited and excessive, (3) failure to check for understanding after information was given. It seemed that audiologists were providing information consistent with their own session agenda, but irrelevant to the present concerns raised by patients.

In Table 5 line 2, the patient expressed prior knowledge about communication strategies. Yet, the audiologist continued to describe communication strategies, neglecting to assess the patient's extant understanding on the topic. This is an example in which the agenda of the audiologist was prioritized and patient input was not assessed. As seen in lines 2, 6, and 8, the patient responded confirming prior knowledge of the

Table 4 Technical Solutions Example

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- 1 P: It's just (.) it's always interesting getting them fitted because (0.2) yeah it sounds great when I'm sitting right here and talking to you (.) You [know] (.) yeah I can hear you but then it's like=
 2 A: [But] as soon as you go outside everything sounds horrible
 3 P: =Yeah I go to the store <or> (.) I go hehe I'm like what is going on.]
 4 A: °yep°
 5 P: °so°
 6 A: and if it is too much at first (.) um one thing you could do >wouldn't recommend doing it every time< (.) but (.) you can always switch back to your other hearing aids and just kind of get use to them being comfortable in that situation (.) and then only pull these out when you're in those difficult situations that [you're] really wanting to get back to (.) but
 7 P: [Kay] cool
 8 A: Since you're used to them (.) I don't imagine (.) [you're] going to have that difficulty
 9 P: [Yeah] (.) yeah]
-

Table 5 Providing Information Example

1	A: Well one of the things we talk about in the class is is↓ (.) Of course (.) uh there are strategies you can use in addition to hearing aids or *instead of hearing aids sometimes to communicate well*
2	P: You told us that at the center=
3	A: =at the center, talked about [some of those strategies]
4	P: [mmhm]
5	A: <u>Fantastic</u> =
6	P: =yes you did↓
7	A: Well the one that I want to focus on today is (.) is listening in background noise (.) And (.) uhh there's just a few commonsense types of things that we'll help <you> in a <restaurant> or in a crowded <room> to try to help yourself so you can hear better. A: Its uh (.) it's often the case that (.) when you get to a restaurant you have a choice between uh (.) a table out in the ↑middle or a booth over on the side, and this maybe something you've known already but choosing a booth is going to be ↑better. Especially if it comes up ↑behind you, so that you only have sound really coming from one direction. <When noise can get around you> and really surround you, can make it more difficult for you to focus in on (.) the people that you are talking↓
8	P: Mhm

strategies the audiologist planned to discuss. The audiologist continued talking about communication strategies for 5 more minutes after this conversational turn; during this time, the patient reported that he was already familiar with the information provided and showed minimal active responses. At the end of the conversation, the audiologist did not check patient understanding or ask about areas of confusion following a lengthy discussion of communication strategies. Moreover, the patient stated that he had not had any issues with hearing in the situations discussed by the audiologist, indicating that the nature of the information disseminated was irrelevant to his needs. This time could have been spent on addressing the patient's true concerns. The unilateral nature of such communication can lead to a gap between session content and patient needs, decreasing the likelihood of patient adherence to treatment plans.

Planning

Planning occurs at the beginning of the appointment when the agenda is being set for the session, or during the appointment if decisions need to be made. It also occurs at the end of the appointment when the audiologist and patient make action plans to address barriers or take next steps in the intervention process. The session agenda reflected the audiologist's plan

for 60% of encounters (18/30), reflected client-raised issues for 17% of encounters (5/30), and reflected both the audiologist's and patients' needs for 17% of encounters (5/30). A process of action planning occurred in 30% of encounters (9/30) with 100% of those encounters being audiologist directed.

Agenda setting determines the focus of and tasks to be accomplished during the appointment. It is usually seen in the opening sequences of the appointment. We found that appointment tasks were most often dictated by the audiologist's agenda, independent of the patient's concerns.

Table 6 is the opening sequence of a hearing aid check appointment, which illustrates development of a shared agenda. The audiologist first asked the patient what she would like to focus on during their appointment. As the conversation progressed, the audiologist identified the patient's concerns and solutions to them. In Table 6, the patient expressed concerns about having to turn the TV volume up (lines 12 and 14) and said that she would like the hearing aids to be adjusted to resolve this issue. In response, the audiologist suggested creating a TV program (line 15). Later in the appointment, the patient said she had an issue understanding speech on the telephone. Again, the audiologist provides a solution to the concern raised by the patient (line 21), allowing the focus of the appointment to be shaped by the patient's needs. Shared agenda

Table 6 Shared Agenda-Setting Example

10	P: Well I have to turn it up pretty loud (.) to hear it=
11	A: =Oh okay
12	P: So its disturbing other people [hehe]
13	A: [I see] (.) [I see]
14	P: [So] I think (0.2) I don't know if you can adjust that or not
15	A: Uhh we ↑might be able to (.) We might be able to uhh >to create a TV program< that will be just a little bit louder (.) So that you don't have to turn the TV volume quite so loud.
16	P: Alright. Okay=
17	A: =that could work
18	P: The other (.) questionable one is (.) On the ↑telephone, I can hear women's voices very clear (.) but for some reason the men's voices don't come through as clear on the telephone.
19	A: ↓Interesting (.) Okay.
20	P: So that's my only (.) only (.) two things that I have, I'm having questions about hehe=
21	A: =↑Okay (.) Well we'll see what we can do about that=
22	P: =Okay

setting is sometimes difficult as audiologists may have predetermined agenda items they feel they need to address within the appointment. Open-ended questions and giving patients adequate time to express their concerns is a crucial step in establishing an appointment focused on the needs of the patient.

In addition, at the outset of appointments, as outlined in the previous example of developing a shared agenda (Table 6), action planning also occurs at the end of appointments, as clinicians assign patients tasks to complete between sessions. These tasks include things like homework, specific behavioral commitments, and a system for

accountability. In patient-centered care, action planning is a collaborative decision-making process between the patient and audiologist. Shared action planning facilitates development of a plan that is consistent with patients' goals and to which they will be motivated to adhere. There were no instances of collaborative, patient-centered action planning in any of the recorded encounters.

Table 7 presents an approximation of shared action planning, with crucial missed opportunities that could have impacted the patient's adherence to recommendations. In lines 1 and 9, the audiologist gives homework to the patient in preparation for her next appointment. Giving

Table 7 Audiologist-Directed Action-Planning Example

1	A: So next week we'll spend a little time with that machine to try to verify those things (.) and we will um (.) uh look at those targets and see where we are (.) and talk about that (.) Are you around next week (.) <finals week> =
2	P: =Yeah (.) I'll be around
3	A: You are going to be around (.)°okay° (.) so we can set up a time (.) I'll be around (.) For <homework> I'd like you to (.) work on using a couple of those [strategies]
4	P: [Okay]
5	A: especially the (.) I <u>heard</u> you say this (.) ↑what was the rest
6	P: Uh huh=
7	A: =You know I'll ask you some test at [the] end [hehe]
8	P: [hehe] mhmm okay
9	A: And then umm (.) um the other homework that <I'd like you to do> (.)° is to practice° (0.2) um when you are at work to see if you can use that (.) um control of the directional microphone to help you (.) um function a little bit better in that environment [I'm] interested to see if that-
10	P: [okay]

patients something to work on between sessions can be used to develop and maintain behaviors consistent with treatment goals outside of appointments, with the ultimate aim of improving patient well-being. However, in this example, the nature of the homework is decided by the audiologist alone without collaboration with the patient. Based on the patient's one-word responses, it is unclear if she will complete the given homework, or if the homework is relevant to her concerns and goals. It is possible that the audiologist-directed action planning decreased the likelihood of homework adherence. In addition, the homework is vague, which makes it difficult for the patient to determine steps to take and to determine if she is accomplishing the stated goals. These conversational turns indicate a missed opportunity for the audiologist to work with the patient to select an action plan best suited for the patient.

The most common form of action planning observed was a brief exchange directed by audiologists regarding the plan for the next appointment. Typically, audiologists did not seek input from patients about their concerns or struggles. Audiologists mentioned their own appointment agenda (e.g., hearing test), without reviewing what was done in the current appointment or working with patients to create an action plan for what they could work on before the next appointment.

To summarize, the following themes were observed in counseling portions of device follow-up encounters: asking questions, responding to patients, providing information, and planning. Many of these encounters reflected missed opportunities to center on patients' needs. When patients brought up emotional concerns, audiologists rarely addressed or validated them. Audiologists instead provided technical solutions, showing a mismatch between patients' emotional and psychosocial needs and audiologists' response. Audiologists also did not make patients equal partners in the planning and management aspects of appointments. Overall, audiologists seemed to focus on a technical agenda (i.e., assessment and management of the device), rather than prioritize patients' objectives, undermining patient autonomy.

Patients' responses to missed opportunities included: (1) short, single-word utterances; (2) uninterested or disengaged tone of voice as evi-

denced by falling intonations; and (3) revisiting of concerns. These responses indicate a lack of connection between the patient and audiologist.

As illustrated by Tables 3 and 6, the use of counseling skills can be used to increase audiologists' understanding of patients' perspectives and lead to a more egalitarian relationship between audiologists and patients, which may ultimately improve treatment adherence and patient outcomes.

DISCUSSION

The present study examined conversational turns during counseling portions of hearing aid follow-up appointments. Our findings showed that audiologists commonly missed opportunities to address patients' emotional and psychological concerns, consistent with previous research.¹⁹⁻²² In addition, we identified deficits in specific counseling skills in conversational turns between patients and audiologists.

First, we observed infrequent validation of patients' expressed emotional concerns, such as social isolation, frustration, and discouragement. The lack of validation could have been due to several reasons, including the audiologist did not hear the concern, the audiologist may be concerned about running out of time, or the audiologist may have insufficient knowledge of how to address emotional concerns. Audiologists could be missing these opportunities due to their own discomfort. Their attempts to problem solve psychological concerns with technical information show that they recognize the concerns but either are unsure of the appropriate way to address the concerns or are uncomfortable venturing into emotional territory. Yet, a necessary part of audiologists' expertise is counseling patients about the emotional and psychosocial effects of hearing loss in all arenas of life.³³ The mismatch between patients' concerns and audiologists' solutions could imply insufficient counseling training in audiology graduate programs in the first place or lack of maintenance of counseling skills. These missed opportunities to validate emotional concerns are important to notice, because they can compromise the relationship between patient and audiologist, leading to less openness from the patient and failure to identify core

underlying barriers preventing effective self-management.

Second, audiologists generally did not assess or address patients' emotional and behavioral concerns, which can undermine patients' ability to cope with hearing loss when these concerns are the primary barrier. For example, if the key factor keeping a patient from wearing hearing aids is embarrassment, then even the savviest technical solutions will not work. Thus, being able to evaluate the effect of psychological variables and address them appropriately is a critical counseling skill. Inability to cope with hearing loss can manifest as poor adherence to treatment recommendations (e.g., not wearing the hearing device, not implementing conversational strategies), which ultimately results in poorer patient quality of life.

Third, audiologists tended to dominate treatment planning with little or no input from patients, which could have caused patients to feel unheard or disempowered. When patient autonomy is constrained, patients may be less likely to express their concerns. This is particularly problematic because audiologists need to understand patients' experiences to devise treatment plans that would maximally benefit them. It is arguably impossible to provide a solution if one does not grasp the nature of the problem.

The preponderance of missed counseling opportunities in our recordings shows that there is currently inadequate counseling training in audiology programs. Whicker et al conducted a syllabi review of counseling courses in audiology graduate programs across the United States and found a lack of critical content foundational to the basic understanding of audiological counseling.³⁴ Furthermore, Muñoz et al reported that although training programs decreased verbal dominance by audiologists, use of counseling skills did not significantly change.²² Thus, to improve the practice of patient-centered care in audiology, a fundamental restructuring of educational training programs with respect to audiological counseling is needed. The consistent presence of missed opportunities across graduate students and clinicians also highlights the importance of monitoring these skills throughout the entirety of an audiologist's career. This can be accomplished by making counseling skills train-

ing and supervision accessible to audiologists for continuing education purposes. Counseling training cannot only comprise didactic lectures; opportunities to continue skill development through practice, role-plays, observations, and other means are essential for establishing sustainable change in counseling behavior.

Limitations

The present study was conducted in a university setting, and its sample included four audiologists/supervisors and six audiology graduate students. Due to the small, homogeneous sample, generalizability is limited. Examining sessions from a more diverse sample may provide a more representative depiction of the average level of counseling skills.

Data comprised solely audio recordings, which limited the interpretations we were able to make. Analyzing nonverbal cues (e.g., body language, facial expressions) from audiovisual recordings might have increased the validity and reliability of our interpretations.

CONCLUSION

Our findings indicate that audiologists frequently miss opportunities to address psychological concerns of adults and parents of children with hearing loss, which can affect treatment adherence, and ultimately, patients' well-being. Audiologists have the ability to improve the quality of life of each patient with whom they interact by using both their technical training and counseling skills. Effective counseling means that patients feel validated and supported when they come into the clinic and that they will be empowered to independently problem solve and cope with their emotional concerns. These processes can eventually improve hearing aid uptake, adherence to treatment plans, and patient satisfaction. Thus, there is a need to emphasize patient-centered care in audiological practices and to identify methods to strengthen counseling skills in the field. As long as patient-centered care is not prioritized in the field of audiology and its training programs, counseling skills will continue to languish in audiologists' toolboxes. A paradigm shift in the field's perspective on the utility of applying counseling

skills in audiological sessions is paramount. The takeaway messages for audiologists are the following:

- Ask open-ended questions. The majority of questions asked should be open ended. Use of open-ended questions should continue until the topic is exhausted. Allow enough time after asking the question for the patient to consider and provide his or her response.
- Acknowledge and respond to emotions. Reflecting and validating how patients are feeling helps them feel heard, decreases the level of emotion, and allows them to move forward.
- Find out what patients already know and want to know. After providing information, check for understanding.
- Engage the patient in shared planning. Develop a shared agenda for the appointments. To address barriers, jointly develop an action plan.

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Appendix Jeffersonian Transcription System²⁹

Transcription Symbol	Meaning
(.)	Micro pause (less than a tenth of a second)
(2.0), (2.6)	Timed pauses (2.0 = 2 seconds)
A: [word]	Overlapping talk from differing speakers
P: [word]	
.	Falling intonation (such as a statement)
?	Raising intonation (such as a question)
Hehehe	Laughter
Wor-	Abrupt cutoff
(?)	Undiscernible speech
A: word= P: =word	No discernible pause between speakers
˘word˚	Utterance quieter than surrounding talk
WORD	Utterance louder than surrounding talk
>word<	Utterance faster than surrounding talk
<word>	Utterance slower than surrounding talk
<u>Word</u>	Vocal emphasis
↑word	Onset of noticeable pitch rise
↓word	Onset of noticeable pitch fall
((cough))	Transcriber's effort at representing something difficult to write phonetically
£word£	Words spoken with smiley voice