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A Hearing Aid Orientation Pamphlet for Clinical Use with First-Time Hearing Aid Users

by

Brian M. Kreisman

Supervisors: Nancy Tye-Murray, Ph.D. and Barb Richman, M.S.

Central Institute for the Deaf April, 1999

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A Hearing Aid Orientation Pamphlet for Clinical Use With First-Time Hearing Aid Users

INTRODUCTION

"You never told me that!" may be the most common five words spoken by a patient during a hearing aid check at almost every site that I have been associated with during my clinical training. Making sure that the patient receives all of the information about using and caring for his or her new hearing aids is an important task for the audiologist. Remembering all of the information is crucial for the client to benefit maximally from his or her hearing aids. Unfortunately, many clinics do not have a standard hearing aid orientation pamphlet or form that the audiologists use when fitting patients with a new hearing aid. It is possible that patients may not receive some important information during their hearing aid fitting/orientation, or they may forget the information since it is only given verbally. For this reason, a hearing aid orientation pamphlet may be helpful for instructing the patients about their hearing aids and giving them something in writing that they can take home and refer back to when using their hearing aids.

<u>PURPOSE</u>

The purpose of this project was to design a hearing aid orientation pamphlet that could be used clinically, especially with first-time hearing aid users.

EXPERIMENTAL QUESTIONS

Two questions were to be considered for this study:

- What aspects of a hearing aid orientation are cited in the literature?
- Is the new hearing aid orientation pamphlet something that other audiologists would find useful in their setting?

PROCEDURE

In order to answer these questions, this project consisted of three phases. The first phase was a review of the literature to find out what hearing aid orientations usually include. This information was then used in the second phase of the project. The second phase involved writing and designing a hearing aid orientation pamphlet that could be used in a clinical setting. The third phase was to survey 70 audiologists in the Midwest. These individuals are involved in the distribution of hearing aids; therefore, they can determine how useful the pamphlet would be in their setting.

REVIEW OF LITERATURE

Much of the literature that talks about hearing aid orientation does so only in general terms, mentioning the broad categories that need to be discussed with the patient. Specific information under these general categories must be obtained from other sources, generally the audiologist or hearing aid dealer that is dispensing the hearing aids. This implies that not only must the audiologist remember to tell the patient all of the information, but also that the patient must remember the information or have a reference to find the information. The hearing aid orientation generally takes place at

the time the patient picks up the hearing aid. The patient is instructed about the care and use of his or her hearing aids, so that maximum benefit and satisfaction will be achieved. In addition to this personal setting, many clinics offer a group hearing aid orientation class. This class discusses hearing aid use in further detail and provides information on related topics. Ideally, "During the orientation stage, the audiologist counsels the client on the use and care of the hearing aids, fosters the client's realistic expectations of performance from the hearing aids, and explores the candidacy for assistive listening devices and audiologic rehabilitation assessment and treatment" (ASHA, 1998, p. 5).

Specifically, any hearing aid orientation should include the following key topics:

- 1) battery management/safety (ASHA, 1998),
- 2) instrument features and landmarks (ASHA, 1998),
- 3) use and routine management (ASHA, 1998; House Ear Institute, 1993; SHHH, 1998),
- 4) working knowledge of hearing aid components—assistive listening device coupling, telephone use, storage, and usage pattern/adjustment (Pascoe, 1986; ASHA, 1998; House Ear Institute, 1993),
- 5) insertion and removal of instruments (ASHA, 1998; Pascoe, 1986),
- 6) troubleshooting (Palmer, 1998; SHHH, 1998), and
- 7) coping and conversational repair strategies (SHHH, 1998).

While the audiologist may use his or her personal preference in presenting the material during the hearing aid orientation, a reasonable order would be: "(1) parts of the hearing aid; (2) operation of the hearing aid (with simultaneous demonstration);

(3) maintenance; (4) placement and insertion of the earmold and aid; and (5) a specific program of phased usage" (McCollom and Mynders, 1984, p. 49-50).

Other articles and books are directed toward the patient. For example, Ross (1996) and House Ear Institute (1993) give helpful hints to the new hearing aid user. Smedley and Schow (1998) and Rezen and Hausman (1993) are excellent comprehensive sources for the patient or family member who likes to read. Wayner and Abrahamson (1996) provide very good information in a binder format so that the pages can be easily copied and disseminated.

One reviewing the literature can easily see that excellent resources concerning the use of hearing aids are available for both the audiologist and the patient. The audiologist must be aware that the interested patient may need some references for further reading. A list of references that can be handed out to patients might be helpful.

RATIONALE FOR PAMPHLET DESIGN

The goals were to make this pamphlet as concise and complete as possible. It should be user-friendly. Simple language was to be used, so that as many people as possible could understand it. The font would be large so that older patients can read it more easily than the very small print found in user's manuals provided by the manufacturers. The pamphlet was to be a tool for the audiologist to use in their orientation of patients, not a substitute for the hearing aid orientation session. The pamphlet was to be given to the patient so that he or she could take it home for future reference.

METHOD

The hearing aid orientation pamphlet was completed (see Appendix 1 for a copy of the pamphlet, "Using My New Hearing Aids"). Packets were mailed out to 70 audiologists practicing hearing aid dispensing in the Midwest (Missouri, Illinois, Kansas, Nebraska, Iowa, Indiana, and Wisconsin). The audiologists were selected randomly from the American Academy of Audiology Membership Directory. Each mailing packet included a cover letter explaining this project, a copy of the hearing aid orientation pamphlet, "Using My New Hearing Aids," and a questionnaire regarding the pamphlet (see Appendix 2 for a copy of the Hearing Aid Orientation Pamphlet Questionnaire). The audiologists were asked to return the questionnaire by a given date so that the responses could be analyzed.

DISCUSSION OF SURVEY RESULTS

Forty-three of the seventy questionnaires (61%) were returned. The first part of the survey asked the audiologists to rate each section of the "Using My New Hearing Aids" pamphlet on a scale of 1 to 5, where 1 is poor and 5 is excellent. Survey #33 did not answer for several sections. Therefore, N=42 was used for calculating the mean and standard deviation of those sections. The "My Hearing Aids" section was inadvertently omitted from the questionnaire, so no ratings for this section were obtained. Results from the first part of the survey are shown in Figure 1 on the following page.

Figure 1: Section Ratings

Figure 1	: Section Ratings									
	Getting Started	Parts	Insert & Remove	Main- tenance		Batteries	Listening Exper.	Tele- phone	Active Listening	Comm Strateg.
Survey #	(N=43) 3	(N=43) 3	(<i>N=43</i>) 3	(N=43) 4	<u>(N=42)</u> 4	(N=42) 4	(N=42) 3	(N=42) 3	(N=42)	(N=42)
2	4	4	5	4	4 5	5	4		4	4
3	5	4	2	2	4	3	4 5	4 4	4 5	4
4	5	4	4	4	4	4	5	4	5	4 5
5	5	5	4	5	5	4 5	5 5		5	5
6	3	4	5	4	5	5	5 5	5 5	5 5	5 5
7	4	4	2	3	3	4	3	4	3	3
8	4	3	3	4	4		4	4		
9	4	4	4	4		5 4	4	4	4 4	4
10	5	4	4	3	4 4	5	4 5	4	4 5	4
11	4	4	3	4	5	4	5 5	4	5	5 5
12	3	4	3	3	4	3	4	2	4	4
13	3	3	3	3		3	3			
14	3	3	3	3	3			3	3	3
15	3	3	3 4	4	3	3	3 4	3	3	3
16	3 5	3 5	3	3	5	5		4	4	4
17	3	3	3 3	3	2 3	2 3	4	3	4	3
18	4	3	3 2	4	3 4	3 4	3 4	3	3 4	3
19	4	4	4	4	4		4	4		4
20	5	4	5	4 5	4 5	4 5	4 5	4	3	3
21	4	4	5	5	5 5			5	5	5
22	3	3	3	3	3	5	4	4	5	5
23	5	4	5 5	5 5	3 5	3	3 5	3	3	3
23	4	4	4	4	4	5		5	5	5
25	3	3	3	3	3	4 3	4 3	4	4 3	4
26	4	3	3	3	4	4	4	3	4	3
27	5	4	5	5	5			4	-	4
28	4	3	2	4	3	4	4	4	5	5
29	4	4	4	4	4	4	4 5	4	5	5
30	3	3	3	3	3	5		4	5	5
31	2	5	2	4	4	4	3 5	3	4	3
32	4	4	3	4	4	4		5	4	4
33	4	4	3	3	-	5	4	3	4	4
34	4	4	4	5	3	3	4	4	4	4
35	3	3				_		_		
36	4	4	4 3	5 5	4	4	3 4	4 3	4 5	4 5
37	5	5	5 5	5	5	4 5	4 5	3 5	5 5	5
38	5	4	4	5	3	4	5 5	5 5	5 5	5
39	5	5	5	5	5 5	4 5	5 5	5 5	5 5	5
40	5	5	5	5	5 5	5 5	5 5	5 5	5 5	5
41	4	5	3	5	5	5 5	5 5	5 5	4	5
42	4	4	3	4	3	5 5	4			5
43	5	5	5 5	5	3 5	5 5	4 5	3 5	5 5	5
-3	3	J	5	J	J	5	5	5	5	5
Totai	172	167	155	172	169	175	175	166	180	178
Mean	4.00	3.88	3.60	4.00	4.02	4.17	4.17	3.95	4.29	4.24
SD	0.82	0.70	0.98	0.85	0.84	0.82	0.76	0.79	0.74	0.79
	-							VI. V	··· · ·	0., 0

The next part of the survey asked which section(s) of the pamphlet were the most and least helpful. When more than one section was listed on a questionnaire, each section was counted. If the question was left blank, it was considered "None/Did Not Answer." If all sections were indicated as being helpful or unhelpful, "All" was considered the answer; each individual section was not counted separately for "All" answers. Results are shown in Figure 2. "Hearing Aid Maintenance," "Getting Started Using My Hearing Aids," and "Hearing Aid Troubleshooting" were the sections ranked most helpful. The least helpful section was clearly "Hearing Aid Insertion and Removal." Several audiologists commented that it is much easier to demonstrate insertion and removal with the patient than it is to put the instructions into words and illustrate them.

Figure 2: Most and Least Helpful Sections

Title	Most Helpful	Least Helpful		
Getting Started	7	3		
Parts	2	3		
Insertion & Removal	0	10		
Maintenance	8	1		
Troubleshooting	7	4		
Batteries	2	0		
Listening Exp.	2	1		
Telephone	3	0		
Active Listening	5	0		
Comm. Strategies	6	0		
All	4	0		
None/Did Not Answer	14	23		

Figure 3 shows the level of education for which the audiologists thought the pamphlet was appropriate. The lowest level chosen on each survey was recorded. This data showed that the goal of making the wording of the pamphlet simple was achieved.

Figure 3: Appropriate Educational Level

Minimum Level of Education	Total (N=43)	%		
Elementary	9	20.9		
Middle School	14	32.6		
High School	14	32.6		
College	2	4.7		
Graduate School	0	0.0		
Did Not Answer	4	9.3		

The audiologists then rated how helpful the pamphlet would be for them to use as they are working with their patients. Results are shown in Figure 4. A total of fifty-eight percent of the audiologists rated the pamphlet "Very Helpful" or "Helpful," while only one person (2%) said it was "Not Helpful." These results demonstrate that the pamphlet would be useful as a clinical tool.

Figure 4: Helpfulness of Pamphlet while working with Patients

	Total			
How Helpful	(N=43)	%		
Very Helpful	12	27.9		
Helpful	13	30.2		
Somewhat Helpful	7	16.3		
Slightly Helpful	7	16.3		
Not Helpful	1	2.3		
Did Not Answer	3	7.0		

The next section of the questionnaire asked if the audiologist currently uses a hearing aid orientation pamphlet in his or her practice. This turned out to be a poorly worded question, because some audiologists considered the user's manual produced by the manufacturer as being a hearing aid orientation pamphlet and answered "Yes." Others, however, did not consider the user's manual to be a hearing aid orientation pamphlet and answered "No." Then, in the following question, "If you answered 'No' would you use this pamphlet? Why or why not?" they said, for example, "No, I use the manufacturer's booklet." A better worded question for the questionnaire would have

been, "Do you currently use a hearing aid orientation pamphlet *other than the user's manual* in your practice?" Because the question was not specific enough, the results of this section of the survey (see Figure 5) are questionable.

Figure 5: Use of Pamphlet in Clinic

Currently use a pamphlet?	Total (N=43)	%	If "Yes," would use this one?	Total (N=26)	%	If "No," would use this one?	Total (N=17)	%
Yes	26	60.5	Yes	11	42.3	Yes	5	29.4
No	17	39.5	No	13	50.0	No	9	52.9
Did Not Answer	0	0.0	Did Not Answer	2	7.7	Did Not Answer	3	17.6

It was somewhat surprising that only 60.5% of the audiologists use a hearing aid orientation pamphlet. Additionally, it was surprising that 45.8% of those audiologists that responded to the question would switch to "Using My New Hearing Aids." Seven audiologists who currently use a hearing aid orientation pamphlet and would switch to "Using My New Hearing Aids" said it was "more comprehensive." Other comments about the pamphlet included "user friendly," "more personal," and "reads well." Among those who do not use hearing aid orientation pamphlets and said they would not use the "Using My New Hearing Aids" pamphlet commented with the following, "I do not dispense hearing aids but I would share with my classes – excellent teaching tool," and from another survey, "Would probably use parts of it."

Lastly, the question "Comparing this to other hearing aid orientation pamphlets you use or may have seen, would you rate this pamphlet as excellent, good, fair or poor." Results of this question are in Figure 6. 86% of those completing the survey responded that "Using My New Hearing Aids" is "Excellent" or "Good" compared to the other pamphlets.

Figure 6: Rating of Pamphlet vs. Other Pamphlets

Rating	Total (N=43)	%
Excellent	13	30.2
Good	24	55.8
Fair Poor	4	9.3
Poor	1	2.3
Did Not Answer	1	2.3

CONCLUSION

The purpose of this project was to design a hearing aid orientation pamphlet that could be used clinically, especially with first-time hearing aid users. Based on the feedback from the audiologists who responded to the questionnaire, many of them thought that "Using My New Hearing Aids" was concise, complete and user-friendly. Part of its user-friendliness comes from the simple language and large font that was used throughout the pamphlet. The pamphlet provides the audiologist with a tool to use during hearing aid orientations, and it provides the patient with a written resource that can be consulted at any time. "Using My New Hearing Aids" appears to be a clinically useful tool for audiologists working with new hearing aid users. A new version of the pamphlet is planned that will incorporate some of the suggestions from the audiologists who were surveyed. These suggestions will make the new version of "Using My New Hearing Aids" even better.

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APPENDIX 1

Hearing Aid Orientation Pamphlet "Using My New Hearing Aids"

APPENDIX 2

Hearing Aid Orientation Pamphlet Questionnaire

Hearing Aid Orientation Pamphlet QUESTIONNAIRE

of the "Using My New Hearing Aids" pa	5 = excel amphlet:	lent, pl	lease ra	te the fo	ollowing s	sections
· -	Excellent		ā	_	Poor	
Getting Started with Hearing Aids	5	4	3	2	1	
Parts of a Hearing Aid Hearing Aid Insertion and Removal	5	4	3	2	1	
Hearing Aid Maintenance	5	4	3	2	1	
Hearing Aid Troubleshooting	5 5	4 4	3	2		
Batteries	5		3	2	1	
Listening Experiences	5 5	4 4	3	2 2	1	
Using the Telephone	5	4	3	2	1	
Practicing "Active" Listening	5	4	3	2	1 1	
Communication Strategies	5	4	3	2	1	
What section did you find most helpful for What section did you find least helpful for Comments:	or your cli	ients? _				
What level of education is this pamphlet at Elementary Middle School High How helpful would this pamphlet be for your Helpful Helpful Somewhat I Do you currently use a hearing aid orientation.	h School you as you Helpful	Co u work Sligh	llege with yo tly Hel	Grad our patic pful	duate Scho ents? (Cir Not He	cle One) elpful
Yes No If you answered <u>yes</u> , would you us currently using? (Circle One) Ye Why or why not?	se this par s No	mphlet	instead	of the		·
If you answered <u>no</u> , would you be Yes No Why or why not?				·		·
Comparing this to other hearing aid orient would you rate this pamphlet as: (Circle O	ation pan	phlets	you use	e or may		en,
Please make any comments or suggestions	regardin	g this p	amphle	et on the	back.	
Your name (optional)	· · · · · · · · · · · · · · · · · · ·					
Thank you for narticinating in this survey	n Plaasa	ugo th	o addus	and		2.3

Thank you for participating in this survey. Please use the addressed, postage-paid envelope to return it to Brian Kreisman, CID, 818 S. Euclid, St. Louis, MO 63110.