

Evaluation of Physician Understanding of Aphasia and the Role of the Speech Pathologist

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STATEMENT OF THE PROBLEM

Working in a hospital setting, we as speech pathologists depend very heavily on physician referral for our livelihood. Credibility of the service as viewed by hospital administrators rests primarily on the need and value perceived by the medical staff for the existence of such a service. Historically, speech therapy for the aphasic patient has not been seen by the general medical practitioner as a high priority or as a customary practice. However, in the past decade we have been able to demonstrate with some degree of scientific rigor that speech therapy may well be of benefit for these patients, while concomitantly we have also been able to provide data-based diagnostic-prognostic information to the medical and rehabilitative team.

Recently, our speech pathology staff was contracted to provide services to a neighboring inner city hospital that previously had a minimal speech pathology program. This particular facility has developed a notable reputation as a leader in the training of the family practice physician. In fact, the hospital inpatient population is managed primarily by the family practice residents. Thus, as we are proceeding to develop a program at this facility, we have attempted to evaluate the knowledge of these physicians with regard to our professional services.

METHOD

The subjects included 17 family practice residents enrolled in a three-year residency program at the Grant Hospital Family Practice Center in Columbus. A questionnaire was distributed to the residents by the Assistant Medical Director of the center. Each resident was asked to complete and return the questionnaire within a 48 hour period. Percentages of responses were tabulated and are illustrated in the appendix, along with some representative comments.

RESULTS

As can be seen in question number one (What kinds of patients do speech pathologists see?), the residents had some idea of the types of patients we see, but their list was not all-inclusive. Also, most named one or two of these items, none named more than four. Nineteen percent of the residents indicated that there was not a speech pathology program in the hospital, despite the fact that we were seeing patients daily and had presented inservice training and printed information to the staff. On the whole, they felt that speech pathologists should not be supervised by a physician, although all other rehabilitation services in this hospital are under physician supervision.

These residents, who were managing the majority of the inpatient caseload, were about equally split on whether or not they had ever made speech referrals. Forty-eight percent did not know the correct method for making a referral. All of the speech pathologists at the center have at least a master's degree. However, most of the residents believed that we were working with a bachelor's degree, and twelve percent thought a high school diploma was adequate training.

We included number eight (How long does speech therapy last?), because the other rehabilitation services are prescribed for a discrete number of sessions. This did not appear to generalize to speech therapy. In response to number nine (What types of skills do speech pathologists work on besides speech?), surprisingly only one person mentioned language. Few listed anything to do with comprehension, reading, or writing, and no one mentioned memory or cognition. Answers to number ten were diverse and suggested that some of the residents were trying to employ vocabulary they had heard somewhere (e.g. agnosia). An equal number of people put "unknown" as put "stroke" in response to the question "What types of neuropathologies do speech pathologists see?" Speech disorder was most frequently listed as the most serious aftereffect of a stroke, but the physicians' understanding of the true impact of this problem on the patient's environment was vague. Regarding when a referral should be given, the majority of the physicians felt that aphasic patients should be referred immediately post onset.

Taking into consideration that we were asking for short definitions, about half had some idea of what aphasia is and slightly more took a stab at dysarthria. The most varied answers came in defining apraxia. Forty-one percent did not know what it meant, and the others' responses included inability to read, write, attach words to objects, and associate words to thought. It appears that the basic vocabulary we use to write consults and progress notes are not clearly understood by physicians who generally assume the role of coordinating case management activities.

The vast majority replied in question fifteen that a speech pathologist may be helpful in a case of degenerative disease. In the past, referrals on this type of patient have been infrequent at this hospital. Seventy-three percent thought that the amount of information provided to family and hospital staff about aphasic patients was inadequate. When asked who should supply this information, the speech pathologist was viewed as the best qualified to perform this function. All but one of the residents thought that the site of lesion does correlate with the type of speech disorder produced. Alternate forms of communication were overwhelmingly favored. Therapy was generally recommended to begin soon after onset.

The doctor usually is the first person that the family turns to with questions about what is going to happen next and how. Most of the physicians were unable to say how much therapy would cost and disagreed on who pays for it. This in itself may be inhibiting patients and families from making an initial contact with speech pathologists. Why does speech therapy work? This question was included both out of curiosity as to what they thought and out of a desire to see how our services are most likely to be explained (if at all) to patients, family, and staff. Half either did not know or did not hazard a guess. Other comments included general stimulation, use of remaining abilities, practice, reassurance, retraining use of nuclei, and skill plus will.

Questions twenty-five and twenty-six (How long does a patient remain in therapy? and, Should a physician prescribe a treatment plan for speech

therapy?), are again referring to the question of our independence in case management versus close physician supervision and treatment planning. Whereas in question three, ninety-three percent said that a speech pathologist should not be supervised by a physician, in number twenty-six, almost one-half thought that a physician should prescribe a treatment plan for speech therapy.

One hundred percent felt that biofeedback could be helpful in the treatment of communicative disorders. Specific instances or techniques were not discussed. Fifty percent were unable to describe a relationship between memory, cognition, comprehension, and speech, and only half recognized that a speech and language difficulty can affect self concept. Those who did recognize a relationship between speech and language deficits and self concept described it as loss of confidence, negativity, depression, and isolation.

The boundaries of the types of problems with which we deal appear to be unclear to the physicians. None of them seemed to be clear on whether or not a speech pathology referral is appropriate in cases of deficits in memory, reading, activities of daily living, or other areas which are not specifically and historically speech related.

Following distribution and scoring of this questionnaire, a family practice resident training elective was created, offering a twelve week rotation in our program. The family practice resident training experience may be elected by any second or third year resident. Its purpose is to provide the resident with an overview of the behaviors which characterize the various disorders of speech and language and their subsequent evaluation and treatment, in order to better enable him to make appropriate referrals. The resident is exposed to a variety of speech and language disorders and the differential diagnostic procedures used to determine the presence or absence of disability are presented. The resident may also serve as a member of the diagnostic and treatment team in planning intervention.

In addition to selected references, explanation of various topic areas are discussed by a speech pathology staff member. Videotapes and instrumentation are used to illustrate portions of the treatment program. Each resident decides on an independent study plan with emphasis on his own particular interests and project goals. The resident may observe team or individual assessment, family counseling, longitudinal treatment of one patient, and/or varied case management. The impact of the patient's problem on his family and his general environmental interactions is emphasized.

Whereas in the past, following inservices to staff physicians and dissemination of handouts and brochures, no significant increase was noted in the average number of referrals, following participation in the speech pathology elective by a few of the residents, there was a significant increase in the number of inpatient referrals. The new referrals came not only from those residents we had seen, but also from their colleagues. The family practice residents are a close-knit group. It appears that in exposing a few of them to our services, we are infiltrating into the whole group by having the physicians spread the word to each other. In addition, as physicians were exposed to our services and became aware of more types of speech disorders, we began to interact with them in more and varied ways. We are now developing a program with the same group of family practice residents, involving infant and preschool screening and early intervention on an outpatient basis.

DISCUSSION

- Q: I think it would be helpful to test the knowledge of numerous groups, for example: psychologists and social workers, rather than to just target one group.
- A: I think that would be great. However, these are the people who are giving us the referrals and who are talking to the family. Everyone looks to them for advice, so it's important to know what they're thinking.
- Q: Do you have the data to say, of these residents, who were in which year of residency? Perhaps their experience might affect your results.
- A: I don't have any data about who was in which year. Prior to the time that we started going over there, they didn't have much of a speech pathology program; so even the people who had been there three years hadn't had much exposure.
- Q: Have you found that you're now getting fewer inappropriate referrals?
- A: I think I'd rather get an inappropriate referral and have me decide that it's inappropriate than to have the doctor do it.

APPENDIX

SPEECH PATHOLOGY SERVICES

PHYSICIAN BASELINE ASSESSMENT

Please answer the following questions and comment where indicated.

General

L. What kinds of patients do speech pathologists see?

Aphasia	Apraxia	Stuttering	Hearing-Impaired
47%	6%	29%	18%
Children	Trauma	Cleft Palate	Family
24%	12%	6%	6%
Speech Difficulties		Unknown	Degenerative Diseases
18%		18%	6%

2. Does your hospital have a speech pathologist?

Yes	No
81%	19%

3. Should a speech pathologist be supervised by a physician?

Yes	No
7%	93%

4. Have you ever made a referral to a speech pathologist?

Yes	No
58%	42%

5. How would you refer a patient to a speech therapist?

Contact therapist/Consult	52%
School	6%
Social Worker	12%
Local Center	12%
Don't Know	18%
Yes	12%

6. In your opinion do the patient's communicative abilities change as a result of speech therapy?

Yes	Unknown
76%	24%

7. How much education must a speech pathologist have?

High School	12%
College	57%
Graduate	31%

8. How long does speech therapy last?

Week	Month	6-12 months	More than 12 months	Other
0	7%	50%	31%	12%

9. What types of skills do speech pathologists work on besides speech?

Alternative Communication	Identification	Communication		
6%	6%	6%		
Psychological	Environment	Orientation	Breathing	
6%	6%	6%	6%	
Reception	Visual-Motor	Language	Reading	Eating
12%	6%	6%	18%	6%
Sign	Unknown			
18%	23%			

Neuropathologies

10. What types of neuropathologies do speech pathologists see?

Word/Number Agnosia	Brain Damage	Stuttering	Dysarthria	
6%	6%	6%	6%	
Dyslexia	Dysphonia	Stroke	Trauma	Unknown
6%	6%	41%	6%	41%

11. What are the most serious after effects of a stroke?

Dysarthria	Depression	Paralysis	Personal	Aphasia
6%	6%	18%	6%	18%
Visual	Speech	Motor	Death	Unknown
6%	29%	6%	18%	29%

12. How can these problems affect the patient's personal and vocational aspects of his life?

Unable to Communicate	Emotion Lability	Job-Related	Self-Esteem	
18%	6%	12%	12%	
Frustration	Depression	Cognition	Severely	Unknown
12%	6%	12%	12%	41%

13. How soon should an aphasic patient be referred for speech therapy post onset?

Immediately	Week	Month	More than a month
63%	37%		

14. Define:

Aphasia: Inability to speak 18%
 Inability to verbalize thoughts . . . 24%
 Other comments Included:
 Broca's or Wernicke's
 Difficulty Understanding
 Nonsense

Apraxia: Inability to: Form speech 13%
 Attach words to
 objects 7%
 Form Syllables 18%
 Write 7%
 Read 7%
 Associate words
 to thought . . . 7%
 Unknown 41%

Dysarthria: Inability to:
 Mechanically/Physically speak. . 12%
 Pronounce/Articulate sounds. . . 36%
 Use speech muscles 12%
 Form words 6%
 Other: Verbalization disconnected
 from organized thought;
 see dictionary

15. Can a speech pathologist be helpful in a case of degenerative disease?

Yes	No
93%	7%

16. How much information does the physician give the family about the patient's communication disorder?

Less than speech pathologist	Not Much	Lots	Unknown
7%	53%	20%	20%

17. Should hospital staff be instructed about how to deal with a communicatively disordered patient? If so, by whom?

Speech pathologist	Physician	Either	Unknown	Yes
47%	12%	12%	29%	100%

18. Does site of lesion correlate with type of speech disorder?

Yes	No
94%	6%

19. Can any alternate forms of communication be utilized?

Yes	No
100%	

20. How soon post onset should therapy begin?

Immediately	Week	Month	More than a month
50%	50%		

21. Who pays for speech therapy?

Patient or their family	Medicare	Private Insurance
59%	53%	53%

22. How much does it cost?

Per session	Per week	Per month	Unknown
\$10-15			76%

23. How long does spontaneous recovery occur?

Week	Month	More than 1 month	Other
5%		74%	21%

24. Why does speech therapy work?

Comments:	General Stimulation	Use remaining abilities
	Reassurance	Skill + Will
	Retraining use of Nuclei	Unknown 53%
	Practice	

25. How long does the patient remain in therapy?

Long time	Until Plateau	3 months	1 hour	Depends	Unknown
18%	12%	6%	6%	12%	46%

26. Should a physician prescribe a treatment plan for speech therapy?

Yes	No
44%	56%

27. What should the role of the family be in post-stroke rehabilitation?

Supportive	Active	Unknown
50%	28%	22%

28. Can biofeedback be helpful in the treatment of communicative disorders?

Yes
100%

29. What do memory, thinking and understanding have to do with talking?

Interrelated/Deficit affects speech	Unknown	See Neuro text
45%	50%	

30. How can a speech-language difficulty affect self concept?

Lose confidence	Negatively	Depression	Isolates	Unknown
25%	12%	6%	6%	50%

31. If you saw a patient with any of the following: Memory deficits, reading, writing deficits, problems with daily activities (e.g. balancing a checkbook, shopping) would you refer them to a speech pathologist?

No	Yes	Maybe	Unknown
18%	30%	17%	17%

18% broke it down into:	Memory	Reading	ADL
	Yes...3%	Yes...6%	Yes...3%
	No ...3%	No ...0	No ...3%