

Issues and Directions for the Future:  
Speech Pathology - a Physician's Perspective

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To understand the future of speech pathology and its relationship to medical practice, it is necessary to understand where medicine has been and will be going. Medicine is both an art and a science. In the past, it has emphasized the art and the humanistic aspects of patient care. In recent years, the emphasis has shifted to the science as improved treatment and diagnosis has developed. With the shift, the focus has changed to an emphasis on pathology rather than the humanistic aspects of the physician-patient relationship. This has resulted in changing expectations by the public for good health. In the future, the scientific aspects will continue to improve. A new emphasis on humanism will develop, but bureaucratic and economic factors will prove to be major roadblocks.

Speech pathology will continue to advance, from a scientific viewpoint. Greater emphasis is needed in emphasizing the humanistic aspects of care. Speech pathologists need to interact to a greater extent with their aphasic patients, because the speech pathologist is the only health care professional who will in a consistent manner communicate with many of these individuals. The treatment program needs to become more pragmatic and focus on the interactions between the aphasic client, their significant others, and the community.

I have been asked to give a physician's perception of the future relationship between speech pathology and the practice of medicine. I must point out that the opinions are my own and based on my practice in the Veteran's Administration, although I will try to generalize to the community.

To put the issues in perspective, it is necessary to ask where medicine will be in ten years. In doing this we have to reflect on what is medicine, how it is practiced and how the practice has changed over the years. To start with, we need to examine three concepts: science, art and humanism. Following are definitions for the three words as used in this paper.

**Science:** Possession of knowledge as distinguished from ignorance or misunderstanding.

A branch of study that is concerned with observation and classifications of facts...and with the quantitative formulation of verifiable general laws chiefly by induction and hypothesis.

**Art:** The power of performing certain actions especially as acquired by experience, study, or observation: skill, dexterity.

Skill in the adaptation of things in the natural world to the use of human life.

**Humanism:** A doctrine, set of attitudes, or way of life centered upon human interests or values: As a philosophy that rejects supernaturalism, regards man as a natural object, and asserts the essential dignity and worth of man and his capacity to achieve self-realization.

The concepts are overlapping but the approaches used by each are different as they apply to patient care. I tend to lump art and humanism for simplicity.

Medicine is an art based on a science. For years, it was primarily an art, where the physician had few treatments but would attempt to comfort the patient, thus emphasizing humanism. In the last 20 to 30 years, as the science, and with it treatment and diagnosis, have improved, it often appears that the art has been lost. Physicians have become more enthralled with details of treatment and diagnostic techniques. The emphasis is on identifying and treating specific pathology, rather than dealing with the individual. Thus humanism and the art are ignored. This can be seen from the emphasis in medical schools 10-20 years ago for physicians to enter specialties. You had to be, for example, a cardiologist, gastroenterologist, or neurologist, because these individuals were most capable in managing the complex amount of information available within each discipline. The difficulty with this trend was that it left few to care for the entire individual, thus destroying humanistic aspects of patient care. More recently there has been a trend to return to grass roots and to train physicians as generalists who will practice primary care and cause a return to humanism.

With greater scientific knowledge, there has been increased public interest and concern in health and health care. The public seeks simple answers to guarantee health, and to diagnose and treat illness. On the other hand, physicians have become more aware that there are few simple answers and are very aware of the probability of success and failure. In trying to balance complex multivariate relations, the physician is often left in a quandry in answering the patient's demand for straightforward diagnoses and cures. The public wants the treatment to be increasingly specific, safe, and that the treatment will be a cure, and not a remedy. Such goals are frequently impossible to obtain. This forces greater focusing on the pathology and less on the humanistic aspects of treating illness.

The lay press has shown increasing interest in publishing scientific and pseudoscientific materials to better inform the public on health. This has resulted in increased public awareness of, and understanding of, illness. This is frequently associated with excessive claims regarding scientific discoveries. An example is media stories on multiple sclerosis, where reports dramatically present new breakthroughs which cause increased public expectation for a cure which never materializes. What the news media and thus what the public expect are simple answers to complex problems. The answers have to be yes or no. But in reality the treatments are imprecise. They are based on a probability of success or partial success. With the probability of success there is also a probability of failure. The public is frequently unwilling to accept the latter probability. Thus we see increasing medical litigation for negligence. At least as a lay person in the law, I get the impression that what is called negligence is frequently the negative probability of treatment.

Well, what has information dissemination and the desire for simplicity lead to in relation to treatment of illness? First, it has led to an enormous health industry in nonmedical treatments. For example vitamins and megavitamins have become extremely successful as treatments in the public eye. In my opinion these approaches have developed because they are presented as simple and absolute cures. Secondly, it has led to the concept of holistic medicine. I believe this movement is an important one in that the philosophy on which it is based is that of medicine 50 years ago. This philosophy has been lost in the scientific developments occurring during the last 20 to 30 years. The holistic practitioner says that we are basically healthy individuals. Our body is a whole unit which can be considered basically healthy even during illness. The emphasis in holistic medicine is based on maintaining

healthiness. Traditional medicine has focused on pathology and what is wrong with the system. Treatment is directed toward what is wrong rather than what is right. This is an important difference, because the holistic approach returns to humanism by focusing on what is right in the face of pathology and considering the entire individual. I think holism has much to offer, as it forces a focus on the whole individual.

Humanism may play a role in the effectiveness of a number of treatments. Consider that in the scientific evaluation of treatment, the goal is to evaluate a specific treatment independent of controlled variables. The more variables controlled the more directly is the treatment itself evaluated, and not confounding effects. In this way, treatments and treatment combinations are identified independent of other factors. However, these latter factors can be important in an overall treatment plan. One major factor not usually considered is the attitude of recipients on the value and possible success of the therapy. I believe that a positive attitude can be extremely important for good outcome. I believe that even poor therapies may be effective in an individual who has strong beliefs in the effectiveness of the therapy. It is clear that the brain has tremendous healing capacity, and that approaches that take advantage of this capability can be beneficial. Such approaches often use humanistic emphases, playing on the desire for well being.

With this in mind, where is medicine going? Let's start with the scientific aspects. Over the next ten years we are entering an era of new and fascinating improvements in diagnosis and treatment. Our ability to make synthetic drugs is markedly improving, and many are being evaluated for a number of illnesses. A second and extremely exciting area is genetic recombination. Using these techniques scientists and manufacturers are beginning to make known products and reproduce them in bacterial systems, allowing for the production of specific proteins. Agents such as interferon, copolymer 1, vasopressin, and insulin, to name a few will become readily available and their uses may prove of importance in improving health. Isolation and production of specific growth related factors may prove valuable, particularly for stroke care, by aiding the brain to regenerate. In the far future, brain transplants may become a useful technique for limited illnesses including stroke and spinal cord injuries. Already it has been tried in Parkinson's disease--however without success. In animal models, it has been applied successfully. Hypothalamic implants in rats unable to conceive and raise their young has allowed such rats to accomplish these feats. Another area of interest is robotics. The ability to create nonhuman limbs to replace damaged ones, or to be able to create communication systems for those unable to communicate holds promise but requires further development. Another area is better diagnosis and brain imaging which will allow us to understand not only the structural damage occurring with stroke but also the associated physiologic changes. Improved imaging of structure is now available with magnetic resonance which presently is limited to studying the distribution of protons. In the future, the techniques will improve and we may be able to image phosphorus and possibly carbon. With these complex imaging techniques, we will have to develop overlapping skills in understanding and reading multiple scans to predict what has happened and to decide on what treatment may be most useful for a given individual. Currently using PET, it is apparent that patients scanned acutely after stroke have differing patterns of brain metabolism. It is clear that patients with transient ischemic attacks may have different metabolic patterns and that the optimal treatment may very well differ across patterns. In certain individuals, the treatment may be

medical, in others, surgical, including endarterectomy or extracerebral-intracerebral bypass. With better diagnostic techniques it is becoming apparent when and when not to use a surgically oriented approach. It is clear that PET is offering us new insight into the physiology associated with stroke. As we better understand the physiology, strategies for rehabilitation may improve and become better directed.

Let us turn to the humanistic issues associated with medicine in the future. I think that in the next ten years, there will be a return to a more humanistic approach to patient care. We are seeing this now, as holistic concepts are being applied positively to medicine. Unfortunately, major roadblocks are developing which will draw the physician away from humanism. For instance, the high number of litigations against health care professionals leads to the concept of you against me and defensive health care. The physician is left having to protect himself as well as care for the patient. This I think is detrimental to the physician-patient relationship and to a humanistic approach.

Another issue affecting humanism is increased bureaucratic and economic factors. The direction in health care is that everything needs to be done by the book. However, the book is not created by the practitioner and does not take into account differences in individual needs. It is created by the health care regulator, the bureaucrat. It is becoming increasingly clear to me that the regulations and demands put before us are independent of patient care. It no longer matters what you do to the patient; what is important is how you document it. The theory is that if you document it appropriately then the care must be appropriate, but you and I know that is not necessarily the case. As our ability to give care is increasingly dictated and we are told how much care to give, the physician-patient relationship will and has changed. The physician will not be in a position to spend the time necessary to make it humanistic. They are not able to look at the individual as a human being with feelings, but are forced once again to focus on the pathology.

Having looked at medicine, let us turn to speech pathology. I believe we need to analyze speech pathology in the same way as medicine, from a scientific and a humanistic point of view. Scientifically, I believe that speech pathology will continue to investigate and develop improved diagnosis and treatment. I am not going to spend time on these aspects as you are much more knowledgeable than I in these areas. Over the next ten years, speech pathologists will learn to incorporate new treatments and information into their practices, resulting in a more complete patient care system. I wonder whether treatment approaches may change, with intermittent brief periods of intense retraining to reinforce behavior taking the place of long term continual treatment. As an example, think about when you took a speed reading course. To maintain speed, intermittent sessions are needed to reinforce the skill.

I think we will see a better integration of medical and speech approaches to treatment. As an example, I recently heard a paper on treatment of hypokinetic dysarthria with clonazepam. It is conceivable that clonazepam in conjunction with delayed auditory feedback and more traditional speech approaches may provide a more complete treatment for this dysarthria. Using current and improving imaging techniques, certain patterns of brain physiology and structural damage may be identified, which would suggest that using a certain medical and clinical approach may optimize recovery.

One of the problems I have with the scientific aspects of speech pathology has to do with integrating science with humanism. In particular, the documentation required by third party payers presents a problem. It is

wonderful to scientifically document, using standardized tests, that an individual has shown this or that amount of improvement (e.g., that a patient was only able to name 1 object and now can name 5 objects, or that before he could match 1 object and now can match 5 objects). This may be important for third party payers, but it leaves me cold because it lacks humanism. Many progress notes in medical charts suggest that speech pathologists have little idea of what they hope to achieve to improve patient communication and how this will improve home or family interactions. I am often left with the feeling that the speech pathologist has no idea of what they are doing for the patient. I know that feeling is wrong, but the documentation is so slanted towards measurement and not to humanistic issues, that I believe part of the effectiveness of therapy is lost. The present trend seems to be for increasing documentation, but the focus of treatment has to be pragmatic. The treatment emphasis on improving matching, naming, or reading scores assumes that improvement on such tests will generalize to the community. This concept is often misleading and may be wrong. Repetition of a task will definitely result in learning, but many of the tasks may train motor skills, but probably not linguistic or cognitive ones.

This leads to the art or humanism of speech pathology. I believe speech pathology is an important aspect of stroke rehabilitation for the aphasic individual. In many respects, the speech pathologist is the most important part of the rehabilitation team. A number of problems occur with aphasia and stroke, including depression, social isolation from the family, isolation from the community, isolation from health providers, and major communication disabilities. In addition the aphasic individual often has complicating medical problems such as heart disease, hypertension, gastrointestinal and bowel problems. In busy medical practices, the physician either cannot or will not spend the time to communicate with the aphasic patient. This can be a time consuming and tedious task. The speech pathologist, on the other hand, often spends hours with the aphasic individual to bring out existing language and to teach new strategies for communication. Frequently, it is the speech pathologist who will notice subtle changes in a patient. It is frequently the speech pathologist whom the family will come to because of a problem, not the physician or other health care individuals. It is frequently the speech pathologist who will interact most closely with the aphasic individual and his or her family after the first month or two following the stroke. It is frequently the speech pathologist who becomes the liaison and at times the primary care provider for the aphasic patient. I believe that the aphasic person often is lost between the cracks of medical and social care, and the speech pathologist fills the void, becoming the jack-of-all-trades for the aphasic individual. With the coming crunch in medical expenses, that role for the speech pathologist will increase.

In being pragmatic, I believe more field work is necessary. I have seen patients who have worked with speech pathologists with treatment approaches which do not appear to maximize communication. The most striking examples have been with word boards for very severely aphasic patients. The patient is taught to point to a picture on a board when he has a need to communicate. These word boards are used particularly in chronic care settings. In the office setting the teaching is a magnificent success. If you pull out the board, the patient can and will use it. Frequently though, the individual and the nursing staff don't need the board and will not use it. They have developed other means of communication. It is amazing how quickly the nursing staff is taught by the patient that he needs to go to the bathroom. It takes only two or three accidents and a system is developed. But yet I have seen hours spent on developing these boards, with the patients showing very little

willingness to use them. The pragmatics were right in that what was needed is a communication system. What is wrong is that the pragmatics were generated in the office. They were not generated on the ward or in the home where the individual will actually function. I realize that there are major problems in practicing outside the office. Liability and time commitments are enormous. I don't know how to change that. I realize how unwilling third party payers are to pay for in-home visits. I can tell you from a practical point of view (after seeing patients and some of the things that are done by the speech pathologists) that the scope of treatment needs to be broadened. One or two visits to the patient's environment at strategic points in the course of therapy can markedly improve one's understanding of what has been and needs to be achieved. I recently visited with one of the CAC regulars, Sandy Milton. Sandy is a speech pathologist who is devoting her career to treatment of the head injured. I can't say that I saw her practice at work, but we had a nice discussion about her work and her rationalization for therapy, about some of her successes and some of her failures. Sandy believes in going into the home and designing treatment based specifically on individual problems. She works not only with the patient but with the family and the social situation. Treatment is then designed to aid with specific behavioral difficulties. These often focus on memory difficulties and social interactions. What she hopes to accomplish is improved communication within the family and community setting. Sandy admittedly has major problems with liability and with third party payers, but I think the approach she has chosen is clinically the right one. She does do some of her therapy within her office, but she also goes out and evaluates the home setting, and I think that is vital for an effective, humanistic, psychosocial approach. In my opinion that is the direction that speech pathology needs to go. Perhaps the approach is currently being used, but from comments I have received following my recent editorial in ASHA, my guess is that it has not and cannot be done extensively at this time. I believe this should be changed.

In conclusion, I believe that the role of the speech pathologist is crucial in the treatment of the aphasic individual. I believe that the role needs to be expanded to include the family, home and community. The broader application of therapeutic intervention can only improve communication ability and potential for the aphasic client.

#### DISCUSSION

- Q: I think speech pathologists really do spend a lot of time that isn't necessarily represented in documentation or in assessments of how they spend their time during the day. They spend a lot of time with families. The documentation doesn't represent it. I think that is because it is not required to.
- A: I agree with you. I am sure the speech pathologist spends a lot of time with families. But, being a physician who spends time reading the documentation, my feeling is that of all the people involved with the patient's rehabilitation team, the worst notes are from the speech pathologists. I know what speech pathologists do, but your notes often are meaningless to me in any realistic sense. I don't care if the individual can now match 10 objects to 10 pictures and before could only do that twice. It may be great for third party payers but it doesn't do anything for me, because I am trying to understand how the individual will communicate with significant others who will have to deal with this person in daily life. The problem I see with speech pathology is the same one that I have seen

for medicine. Medicine is both a science and an art. Our primary goal should be humanism. The difficulty is that as we become more scientific and as we become more involved in trying to prove that this is so and that isn't we lose the art and the humanism. So what we do (and what I think you are tending to do) is to focus on the pathology rather than on the person. I think that should be changed.

- Q: I absolutely agree with what you are saying. I have found a good compromise in report writing in that I write two reports. I write a short report every week which documents probes and percentages. At the end of the month, I write a report to the referring physician which talks about how the patient is communicating with his family and others. I think we need to communicate better with the referring physician, and referring physicians who care enough to read a monthly report are a very helpful feedback.
- A: People other than the referring physician read charts. Unless the letter to the physician is in the chart, it is of no use to anyone else. I would suggest you add one line to the weekly report stating how this will lead to a functional recovery.