

## Improving Communication Competence in Global Aphasia

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A person with severe or global aphasia often is not considered a candidate for language treatment programs because of poor prognosis for recovery. The person with global aphasia referred to in this discussion has been well described as Type V (irreversible aphasic syndrome) by Schuell, et al (1964) and as global aphasic by Wepman (1969). Medicare and other third party payers resist payment for services delivered to global aphasic patients because of their poor prognosis and apparent lack of progress in language recovery over treatment sessions. Indeed, much of the literature on aphasia therapy does not support long term language therapy for the person with global aphasia (Boone, 1960; Schuell et al, 1964; Eisenson, 1977).

However, in a paper presented at the 1979 Clinical Aphasiology Conference, Marshall suggested that appropriate goals and programs for the globally aphasic individual have not yet been systematically designed, instituted and examined (Marshall et al, 1969). Furthermore, literature has emphasized that the clinician who works with the aphasic individual must be concerned with the social and psychological aspects of the person as well as with the disorder itself (Sarno, 1973). Schuell discussed the treatment of aphasia and ended by emphasizing that the essentials of good patient management include "family counselling...attention to the patient's adjustment to the situation...a supportive social milieu...and a consistent treatment regime." (Schuell, 1969, p. 125).

Holland (1977) has discussed in detail some practical therapy considerations for the aphasic individual and emphasized the need to extend the concept of language usage towards a broader perspective of communication competence. She writes:

"...we must begin to develop a sensitivity not only to the manner in which aphasics actually do communicate, but to what and when they can communicate--not talk--effectively...we need to develop a sensitivity to the adequacy of non-verbal as well as verbal aspects of an aphasic's communicative patterns in order to capitalize more fruitfully on total communicative strength." p. 173.

It is our belief that the key to improving the quality of life and the ability to interact and function on a daily basis for the globally aphasic person rests in nonlinguistic treatment areas rather than intensive therapy that focuses on linguistic parameters. Mehrabian (1968) has pointed out that nonverbal communication carries a large percentage of a message's true meaning and affect. Chester and Egolf (1974) believe that nonverbal or paralinguistic elements of communication may be the most viable communication approach available to the globally aphasic person.

## PURPOSE

The purpose of this paper will be to discuss an approach to treatment of global aphasia which emphasizes communication competence in nonlinguistic areas. Communication competence refers to a person's ability to take in all available communicative behaviors, nonverbal as well as linguistic, and then to make appropriate choices from among the modalities available to effect a response (Wieman, 1977). This treatment method has evolved over several years because of a need to provide better services to patients and families in the face of continued failure with language therapy in global aphasia. The method of treatment that is presented here is seen as a beginning step in an approach we believe will result in a higher level of function in daily living, increased ability to interact with the environment, and decreased costs in the care of persons with chronic global aphasia.

Treatment Setting. The treatment method proposed here has been developed in a small, rural Maine hospital rehabilitation setting (33 acute care beds, 20 skilled rehabilitation beds, 140 intermediate care/nursing home beds). The direct care staff in the rehabilitation nursing facility are primarily nursing assistants. At this time, the concept of total patient care (TPC) is being implemented in the rehabilitation nursing facility. A patient is assigned to one nursing assistant for one week at a time, rather than different person each day. The staff is expected to utilize part of each day to follow up on activities designed by the rehabilitation therapists.

Training Approach. Nine areas seen as important in improving communication competence in global aphasia can be found in Table 1. Each of the nine areas is included in the staff training program.

Table 1. Nine areas involved in the treatment of global aphasia through a communication competence approach.

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### A. Verbal Behaviors

1. Names
2. Verbal responses
3. Avoiding interruptions

### B. Non-verbal Behaviors

1. Eye contact
2. Head nods
3. Facial expressions
4. Reciprocity of affect

### C. Proxemic Considerations

1. Physical proximity
  2. Postural cues
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There are three different areas we see as important verbal behaviors.

1. Names. The use of a patient's name is seen as important in establishing a good relationship. A patient who has been accustomed to being addressed by a title throughout his life may be offended at the familiarity of staff automatically assuming a first-name relationship. Thus, it is important to use the appropriate titles, such as Doctor, Reverend, Miss/Mrs., Mr., Professor, when addressing a patient. It should be determined by interviewing family and friends of the patient what is the preferred manner of addressing the person.

2. Verbal Responses. Verbal responses are used to indicate understanding of, and feeling for, the other person's situation, in attempting to respond to the affective needs of a patient; i.e., "I know that you are very angry," or "It must be very difficult for you."

3. Avoiding Interruptions of the Speaker. Rhythm, intonation and speaker behavior are all used to determine when a message is complete, to avoid the rejection and frustration associated with the interruption of a message that may be unintelligible. As Martin (1978) suggests, a message that is not intelligible may have meaning or intent for the speaker. Increased understanding on the part of the listener facilitates improved communication and interaction.

In our treatment program, we focus on four specific non-verbal behaviors.

1. Eye Contact. Waiting for and maintaining eye contact is seen as important in keeping the channels of communication open. Lack of eye contact may signify excessive anxiety, poor self-image or rejection by the patient. A blank look may indicate depression or lack of understanding.

During eye contact, each interactant knows that the other is attending and that the channels of communication are open. Argyle and Dean (1965) suggest that a flicker of an eye toward a third party closes channels of communication. Eye contact can be a useful observation to determine if a person with severe aphasia is accepting of an interaction at a given moment. Strong support and acceptance of the severely involved person may lessen the fear of rejection, allowing for increased eye contact, which further facilitates and promotes communication (Argyle and Dean, 1965). (Good eye contact is generally felt when the listener utilizes glances of three to ten seconds in length.)

2. Head Nods. Observations of the presence (or absence) and rate of head nods can be used to indicate participation, understanding, and desire to respond within an interaction. Head nodding that is done slowly may indicate that the listener is relaxed and attending to the speaker. Conversely, increased speed of head nod may indicate that the listener is prepared to take a turn in the interaction or is becoming anxious or impatient.

3. Pleasantness, Appropriateness of Facial Expression. Facial expression is used reflectively to indicate support, empathy and pleasantness. Facial expression may also convey concern, anxiety, fear, depression and/or support. Facial expression can be used not only to convey those feelings to a patient but also to assist in understanding the patient's intent.

4. Reciprocity of Affect Displays. Smiling, laughing, frowning, scowling, and other cues are responded to in a reflection of the affect that is displayed by the patient. This is especially important in indicating to the patient that staff members are attempting to respond to and meet his/her needs. Reflecting affect indicates empathy and understanding on the part of the staff and is seen as a way of decreasing frustration, anger and hostility in the severely involved patient.

Our treatment approach also emphasizes two proxemic factors.

1. Physical Proximity Chosen During Interaction. Positioning can be used to indicate support, comfort and contact with the patient. A patient's need for space must be respected based upon observation with different kinds of physical contact in space. Utilization of physical proximity is particularly important when dealing with the person who has decreased mobility. A person in bed or a wheelchair with a hemiplegia may lack the mobility to control his space. Research has found that persons who stand nearer than 18 to 20 inches tend to turn and face each other at right angles or to stand side by side (Hall, 1955). It appears that less distance in the communication interaction may create anxiety by violating space. Conversely, distances of more than five and one-half feet create discomfort in people during conversation, causing some people to attempt to change their location (Sommer, 1962). Awareness of these optimal spaces seem to have particular application when leaning over a person in bed, or when engaged in some activity across a room and attempting at the same time to stimulate communication interaction. Careful positioning of the aphasic individual is also indicated when he or she is sitting in a day room or in some type of group activity. Seating at the corner seat of a table to allow physical closeness, but avoiding direct face to face arrangement may be the most facilitating position (Sommer, 1962).

2. General Postural Relaxation Cues. Postural cues include rocking movements and leg and foot movements to indicate anxiety, comfort, participation, and attention. Observation of postural clues provides information about the quality of the interaction and the opportunity to more appropriately respond to the needs of the individual.

#### METHOD

The methodology in this program involves the training of staff to identify a number of nonlinguistic responses that occur in communication interactions and to further refine and facilitate the use of those responses in real life communication situations. The identification and facilitation of these nonlinguistic responses enhance the probability of the patient reaching his true potential and also results in an improved quality of life.

Each nursing staff member participates in a lecture, discussion, and observation program in the identification, utilization and facilitation of each of the nine areas of communication competence under the supervision of the speech/language pathologist. An aspect of this communication competence training for staff is accomplished through the use of videotape recordings. Bochner and Kelly (1974) outline strategies for allowing a person to get outside a situation to observe self-communication behaviors. The techniques employed include videotape feedback, affect stimulation and interpersonal process recall. In affect stimulation and interpersonal process recall, the staff member is videotaped experiencing and responding to the affective communication of a globally aphasic patient. The videotapes are then reviewed with the staff person to identify thoughts and feelings experienced during the interaction. Archer and Kagan, as reported by Bochner and Kelly (1974), report substantially increased empathetic communication skills when these techniques are utilized in training.

We will present two cases that involve global aphasia and the improvements that took place in communication competence and activities of daily living following implementation of this treatment program.

## CASE ONE

V.G. is a 76-year-old female who had a cerebral vascular accident in the left cerebral hemisphere and was considered to be globally aphasic. She began the treatment program at four months post onset of the CVA and at that time was totally dependent on others for her care. She was withdrawn, refused to interact with others and did not appear to be oriented to her environment. She resisted all therapy attempts and displayed angry and hostile behavior toward the staff. She did not respond appropriately to formal aphasia testing, which included the Boston Diagnostic Aphasia Examination (Goodglass and Kaplan, 1972), and the Porch Index of Communicative Ability (Porch, 1971), and she did not respond accurately to conversation or directions. In addition, she was totally dependent on others for feeding, dressing and self care. Previous to her illness, V.G. had been living independently in her own home. Thus, the long term goal of her rehabilitation was to return her to as near an independent level of function as possible. She was begun in a treatment program that involved daily speech, occupational, and physical therapy. Language treatment began by identifying strategies that would stimulate appropriate nonverbal responses. She presented with severe cross-modality language deficits, in addition to oral verbal apraxia and what appeared to be a visual/tactile agnosia with marked right hemianopsia. She did not localize voices and often attended to a male face when a female was speaking. Staff members were observed to consistently misinterpret her unintelligible messages, in spite of melodic intonation and affect which provided cues as to the nature of her request or message.

Language training focused on the kinds of nonverbal responses produced by V.G. which could be utilized in improving the communication interaction between V.G. and the staff. As areas of nonlinguistic response by V.G. were identified, they were explained and demonstrated to staff members. It then became the responsibility of staff members to elicit as many successful interactions as possible with V.G., utilizing nonlinguistic strategies.

By the third week of stimulation she was responding more appropriately and cooperatively to requests of staff members, was beginning to feed herself and attempting to dress herself and engage in other ADL activities. There was a marked decrease in her hostility and anger. Therapy then became centered around stimulating as many appropriate responses as possible to provide maximum positive experience in communication. Following four months of stimulation she was observed to be alert to her environment, responding appropriately to voice, compensating for her visual deficits, interacting in a small group setting using a combination of automatic speech, head nods, affect intonation patterns and eye contact.

V.G. was then discharged to a boarding home. In the boarding home, her responses continue to be appropriate, she displays no maladaptive behaviors, is able to interact with her peers (laughing appropriately in conversation, responding yes/no to simple requests, and interacting in nonlinguistic behaviors such as "chit chat" during television watching). She is considered by those in the home to be a social, pleasant woman. Reevaluation with the BDAE and the PICA was attempted at eight months post onset and she showed no changes in her language skills. However, she is able to successfully interact with those in her environment using nonlinguistic strategies. This is supported by her independence in daily living skills, decreases in

hostile and rejecting behaviors, increased attempts to seek others for companionship, acceptance by her peers in the boarding home, and the sociability noted by others in the boarding home.

#### CASE TWO

F.B. is a 78-year-old lady who previous to her admission was living independently in her own home. She experienced a left hemisphere cerebral vascular accident resulting in global aphasia and a dense right hemiplegia. She was evaluated in the acute care hospital setting at two months post onset. She was medically stable and had no complications following the onset of the CVA. At two months post onset she did not respond to her environment, did not respond to voice, was unable to assist herself in any self care activities and was a patient who needed total care.

She began a stimulation program in our rehabilitation nursing facility. The speech/language pathologist had daily contact with F.B. to determine what nonlinguistic channels were available to her. The first behavior to begin to emerge was inappropriate and nonfocused perseverative vocalization produced in response to communication from another person. F.B. then began to localize voice and to display head nodding behaviors. Staff members were then alerted to utilize head nods and they were also advised to attempt to focus on any type of intonation or affect that might be present in the undifferentiated vocalizations being produced by F.B. Through the first two and one-half weeks, the use of F.B.'s vocalization, head nods, eye contact and localization of sound remained inconsistent. However, by the fourth week of stimulation she was consistently responding to speaker affect with head nods and eye contact and was utilizing an intonation pattern in her vocalization to express her acceptance or rejection of activities within her environment.

At this time F.B. continues to be involved in a treatment program in this facility. Substantial gains have been noted during her first month of treatment, in that she is able to interact more appropriately with her environment, is utilizing head nods, eye contact and intonation patterns to indicate participation and acceptance, is beginning to feed herself, and is cooperating with other rehabilitation therapies. Although F.B. shows no measurable change in her linguistic performance, her ability to communicate and interact with others shows significant improvement. As her ability to interact with her environment has increased, concurrent increases have been seen in her ability to function in ADL activities and to care for herself.

#### CONCLUSIONS

It appears that there is potential for developing more effective treatment approaches for the globally aphasic population, utilizing systematic stimulation and facilitation of nonverbal modalities, as demonstrated in this paper. The nonverbal modes are most likely to remain intact or at least functional and thus the probability for processing is greater through nonverbal channels in the globally aphasic patient. This treatment approach has resulted in significant gains for several globally aphasic persons. As interaction ability increases, concurrent gains are seen in independent living skills and the quality of life of the patient and family, with decreases noted in maladaptive behaviors and significant decreases in the health care cost of serving the globally aphasic person.

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## DISCUSSION

- Q: Does the speech/language pathologist treat the patient in this program or is the treatment staff responsible?

A: Providing enriched stimulation is everyone's responsibility. The speech/language pathologist evaluates the patient to determine the most effective nonverbal modes available to the person, then develops a program to stimulate and facilitate those areas for the staff. It becomes the responsibility of the staff to elicit a successful nonverbal response during each contact with the aphasic person. The speech pathologist designs what appears to be the most appropriate treatment approach for language stimulation.

Q: How can you determine if the positive changes you note are the result of the treatment program, the environment, or part of the natural recovery process?

A: We feel that we have ample anecdotal data to support this training approach. Our next step will be to quantify the data. This type of approach increases the quality of the environment and takes advantage of changes that may occur in the recovery process. We do feel it is significant that a person is able to make functional communicative change during treatment when, previous to stimulation, no appropriate responses were made at two, four and eight months post onset.

Q: Do you have a name for this treatment approach to differentiate it from others?

A: Not yet---any suggestions?

Comment: With reference to your use of names---we've noticed that the less cognitively aware a person is, the more we tend to call people by their first name. We have to watch ourselves not to treat the severely involved person in a less responsible and more childlike manner. Also, Sarno, Sands and Silverman notwithstanding, I see this as a supplement to, but not a replacement for intensive language treatment in global aphasia. We should continue to treat the global patient.

Q: Is the staff at your facility trained in remotivation and sensori-awareness techniques?

A: The staff has training in sensori-awareness approach but not in remotivation techniques.

Q: How do you deal with restructuring the patient's environment?

A: As much as possible, we surround the patient with familiar objects that can be most readily related to, especially clothes, pictures, and furniture (such as a favorite chair) from home.