

# Manual for Adult Non-Fluent Aphasia Therapy in Hindi (Manat-Hindi)

Richa Deshpande & S. P. Goswami\*

## Abstract

*Aphasia therapy has always been a challenging affair for the speech language pathologists. The myriad therapy techniques suggested in the literature are unifocussed, have various pre-requisites for the residual language levels, follow different principles and refer to English language mostly. There is a dearth of training material in the Indian languages. Keeping this in view a manual is developed in Hindi for the treatment of the non-fluent aphasics. The illustrations of various activities are based on the principles of aphasia management.*

## Introduction

Aphasia therapy has always seen a challenging affair for the speech language pathologists. This is mainly because of the varied nature of the disorder itself. Aphasia manifests itself as an impairment of all or selected parameters of language. Depending on the modality affected, it has been classified into various types, eg: Global, Broca's, Wernicke's, etc. Aphasia can also be classified based on the site of lesion, anterior vs. posterior, i.e Broca's aphasia vs Wernicke's (lesion in the frontal /parietal lobe, etc). The symptomatology varies with the site of lesion. However, no two aphasic individuals diagnosed as suffering from similar subtype of aphasia, exhibit an identical symptom profile. So, accordingly the rehabilitation process has to be modified to suit the needs of a particular client.

Various therapy techniques have been devised over the years for the treatment of specific impairments in the parameters of the language. For example, the Helm elicited language program for syntax stimulation (Helm-Estabrooks & Ramsburger 1986) which targets the sentence types in syntax. Likewise some therapy procedures believe in stimulation for the overall facilitation of the language. For example, LOT - language oriented treatment by Bandur & Shewan (2001).

## Need

The myriad therapy techniques suggested in the literature, focus mainly on one or two of the language aspects, have various pre-requisites for residual language levels, follow different principles. Though the history of aphasia treatment is long, the literature mostly refers to the western culture and English language. The content relevancy has a strong impact on communication abilities (Longerich & Bordeaux 1954). The vast differences in the cultures and the language differences make it impossible to implement the therapy techniques directly in the clinical situations.

Also the treatment program has to be tailor-made for each aphasic individual. A detailed social history, the individual's pre-morbid lifestyle interest, skills, attitudes, detailed family history and information on family structure are warranted in each individual case (Longerich, 1968).

---

\* Reader in Speech Pathology, All India Institute of Speech and Hearing, Mysore, India  
email: goswami16@yahoo.com

There is a dearth of training materials in the Indian Languages, such material being abundant in English. One such is the manual for aphasia therapy in English, developed by Longerich (1968). This indicates a need for the development of a manual in Indian languages which will provide the clinician with readymade training material.

The present manual in Hindi is proposed for the treatment of non-fluent of aphasics. The illustrations of various activities are based on the principles of aphasia management.

**Aim:** To develop a manual for treatment of non-fluent aphasia in Hindi for adults.

## Method

The manual is based on general principles and guidelines prescribed in the literature for non-fluent aphasia in adults.

- a. Literature regarding non-fluent aphasia and the intervention strategies were reviewed from books, journals and internet sites.
- b. The information was organized and compiled.
- c. The treatment parameters were formulated under the following headings:
  - Functional Communication (FC)
  - Repetition (R)
  - Comprehension and Expression (C & E)
  - Naming (N)
  - Independent series (I)
- a. Everyday vocabulary and sentences were chosen as the training material. The training material was tested for familiarity with 15 speech and language pathologists (student clinicians who were Hindi speakers). They judged the training items as "Highly familiar" or "Familiar". Those judged as "Unfamiliar" were deleted.
- b. Pictures were drawn by a professional artist to depict the training material wherever appropriate.
- c. The pictures were tested for ambiguity and were judged as "Unambiguous".
- d. The clinicians also judged the appropriateness and hierarchy of materials.

## Development of Material

This manual consists of 5 main sections as noted above. Each section is further divided into various subsections.

**Functional Communication (FC):** This section deals with the most basic aspects of communication like common objects, verbs, names of family members, basic reading and writing skills, etc. which are applicable in everyday life. The sub-sections are:

- A. Responding to own name
- B. Recognition: Names of family members
- C. Recognition: Familiar objects
- D. Understanding action verbs
- E. Understanding verbal directions
- F. Functional verbal language
- G. Fill up
- H. Functional Reading (comprehension)
- I. Functional Writing



**Repetition (R):** This section deals with stimuli for repetition namely automatic speech equivocal responses, greetings, etc. The sub-sections are:

- A. Equivocal Response
- B. Egocentric Stimuli
- C. Environmental Stimuli
- D. Automatic speech
- E. Greetings
- F. Phases

**Comprehension and Expression (C and E):** This section deals with three main aspects of language use namely vocabulary, syntax and semantics. It aims at improving the comprehension and expression at the syntactic as well as semantic level. The sub-sections are:

- A. Vocabulary
- B. Syntax
  - I. Person, Number, Gender
  - II. Tenses
  - III. Sentence types
  - IV. Comparatives
  - V. Voice
  - VI. Case Markers
  - VII. Clauses
- C. Semantics
  - I. Polar Questions
  - II. Antonymy
  - III. Synonymy
  - IV. Syntagmatic and Paradigmatic relationship
  - V. Semantic similarity
  - VI. Semantic contiguity
  - VII. Semantic Anomaly

**Naming (N):** This section deals with the naming tasks in order to improve further fluency of language. A hierarchy of cues is described. The sub-sections are:

- A. Lexical generative
  - I. Category specific
  - II. Word Fluency
  - III. Phoneme fluency
- B. Confrontation naming
- C. Responsive naming.

**Independent series (I):** This section deals with independence of communication once the optimum level of language is reached.

- The activities are arranged in a hierarchy of levels of difficulty, wherever appropriate.
- The scoring pattern and progress criterion for each level of activity is given at the beginning of each subsection.
- The maximum expected score is given at the end of each activity.
- An overall progress-sheet is provided which gives the criteria of progression from one level to another.

## **MANAT – Hindi consists of 5 main sections:**

- **Functional communication:** This aims at enabling the aphasic patient to use some minimal amount of language in his daily life. The pictures in this section are ordered hierarchically to avoid confusion.
- **Repetition:** No pictures are provided for this section. The patient is expected to repeat with auditory cues alone.
- **Comprehension and Expression:** This aims at intensive training in various language skills. Here, too, the patient is exposed to simpler and lesser number of stimuli initially. As the patient progresses, the number of stimuli increases. However, in the sub-section like PNG markers and case markers the patient is expected to function at a higher level. Hence section starts with 5 items in a plate, each. In the imperative sentence type the role reversal technique is used.
- **Naming:** Pictures are provided for all the confrontation naming activities. Initially the patient is exposed to two pictures and slowly the number of pictures increases as the patient progresses. Cueing hierarchies are provided for each sub-section.
- **Independent series:** This section targets higher level comprehension, expression and problem-solving; the response expected is only in terms of expression.

### **Progression criterion list**

- I. Begin with Functional Communication and Comprehension simultaneously. Only when the total score in each of these sections reaches 50%, move to the next level.
- II. The activities of the Repetition section should be introduced now. When the patient scores 25% in Repetition and 75% in Functional Communication and Comprehension each, move to the next level.
- III. When the patient scores 100% on both Functional Communication and Comprehension and 50% on Repetition move to the next level.
- IV. The activities of Expression should be introduced now. When 25% score is reached in the Expression section and 75% in Repetition move to the next level.
- V. The activities in expression should be continued till a score of 75% is achieved. Naming should be introduced and worked on till 75% score is achieved. Move to the next level.
- VI. Activities in the Independent series should be introduced after 75% score is achieved in each of the previous sections.

## **Summary and Conclusion**

The present manual is designed keeping in view the linguistic characteristics of the non-fluent aphasics. The main domains used are Functional communication, Repetition, Comprehension and expression, Naming and Independent series. The various subsections deal with the major linguistic parameters under each of the domain mentioned. Familiar training material is used which is arranged in a hierarchy of difficulty. A scoring pattern and progress criterion is given for each subsection. A progress criterion is also given for the progression from one subsection to the other. The manual can be used by trained speech-language pathologists and student

clinicians. Further, the clinicians can easily modify the training material according to the individual patient's needs.

Limitations of the Manual: The other domains of language like reading, writing etc. have not been addressed (except basic skills in the functional communication section). The manual has not been administered on the clients due to time constraints.

## References

- Bandur, D. L. & Shewan, C. M. (2001). Language Oriented Treatment: A Psycholinguistic Approach to Aphasia. In R. Chapey. *Language Intervention Strategies in Aphasia and Related Neurogenic Communication Disorders*. New York: Lippincott, Williams & Wilkins.
- Helm-Estabrooks, N. & Ramsburger, G. (1986). Treatment of Agrammatism in long term Broca's Aphasia. *British Journal of Disorders of Communication*, 21, 39-45.
- Longerich, M. C. & Bordeaux, (1954) *Aphasia Therapeutics*. New York: The Macmillan Company.