SPEECH AFTER STROKE

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A MANUAL FOR THE
SPEECH PATHOLOGIST
AND THE FAMILY MEMBER
Second Edition

By

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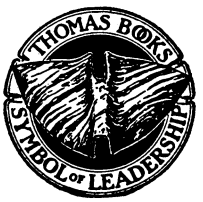

CHARLES C THOMAS · PUBLISHER
Springfield · Illinois · U.S.A.

Published and Distributed Throughout the World by
CHARLES C THOMAS • PUBLISHER
Bannerstone House
301–327 East Lawrence Avenue, Springfield, Illinois, U.S.A.

ISBN 0-398-04122-9

Library of Congress Catalog Card Number: 80-17949

First Edition, 1975
Second Edition, 1981

With THOMAS BOOKS careful attention is given to all details of manufacturing and design. It is the Publisher's desire to present books that are satisfactory as to their physical qualities and artistic possibilities and appropriate for their particular use. THOMAS BOOKS will be true to those laws of quality that assure a good name and good will.

Library of Congress Cataloging in Publication Data

Stryker, Stephanie.
Speech after stroke.

Bibliography: p.
Includes index.
1. Stroke patients — Rehabilitation. 2. Speech therapy. I. Title. [DNLM: 1. Aphasia — Therapy. 2. Cerebrovascular disorders. 3. Speech disorders — Rehabilitation. WL355 S928s]
RC388.5.S86 1980 616.8'1 80-17949
ISBN 0-398-04122-9

Printed in the United States of America
C-1

ACKNOWLEDGMENTS

Dale Stryker, M.S., Illustrator

The author takes pride in acknowledging her talented sister, Dale, who designed all of the illustrations. Her creativeness and artistic ability is evidenced by her graphically clear depictions which compliment the text. She is currently employed as an art teacher in the Dade County Public Schools. Miami, Florida. Many thanks for an excellent job!

Susan R. Cohen, B.A., Editorial Consultant

The author thanks her dear friend and editorial consultant, Sue, for her excellent suggestions and expertise in preparation of the manuscript regarding general organization and structure, and logical order of presentation of contents. She spent many hours with me, collating the material, indexing, and putting the manuscript into final form. I am deply grateful for her help.

Eleanor Stryker Toch, Manuscript Typist

The author wishes to express heartfelt thanks to her mother, Eleanor, who spent many long hours typing the entire manuscript. In addition, she made many innovative suggestions regarding revisions and additions to the wording of the text. Her encouragement and support throughout this project has been invaluable.

FOREWORD

Language clinicians working with aphasic patients are usually very busy people, ever on the lookout for materials that can be directly used or modified for use with their clients. Ms. Stryker's handbook *Speech After Stroke* is a useful collection of materials that can reduce the burden of search for the clinician.

I am particularly impressed with the potentials of the material for individual adaptation, especially in the early stages of therapy. The basic principle for the selection of materials is that of practicability. The materials are there because they have been found to produce results.

There is much that provides a basis for using the contents as points of departure and as prototypes for a clinician using individual imagination and creative ability to produce "exercises" specific to the needs of a particular patient. Nothing in this manual interferes with a clinician's creativity in the development of materials. In brief, the material is not prescriptive but representative of what a practicing speech pathologist with considerable experience with aphasic patients has found useful.

Jon Eisenson, Ph.D.

CONTENTS

PREFACE

"WHAT CAN I DO TO HELP MY HUSBAND OR WIFE SPEAK AGAIN?"

THIS QUESTION, which is heard repeatedly by the speech pathologist, prompted the writing of this book and dictates its contents. The purpose of this manual is to provide the speech pathologist and the untrained family members with structured practice material which can be used in helping the aphasic patient recover language and speech skills impaired due to a brain injury, commonly referred to as a "stroke." A brain injury may be caused by a vascular accident, trauma to the head, or a space-occupying lesion (tumor), etc. The loss of language skills due to any of these causes is termed "aphasia." Aphasia impairs communication ability, i.e. it affects a person's ability to comprehend, read, tell time, calculate, write, and speak. The degree to which these functions are impaired ranges from mild to severe and varies from patient to patient. Speech pathology treatment has proven to be helpful in the rehabilitation of these aphasic language disturbances.

Unfortunately, there is a paucity of material available commercially which is structured in a way that is simple enough yet suitable for the brain-injured adult without being childish. Presenting the adult aphasic patient with infantile picture cards and elementary word-phase drills can only result in devastating humiliation. The choice of words and pictures used in this manual was determined by their appropriateness for adults. The materials are relevant to the adult patient's everyday needs and activities. The exercises have been printed in bold-face, lower-case type for ease of reading to accommodate those with reduced visual acuity. In order to stimulate maximum vocabulary recall, the illustrations were organized into categories, e.g. "Grooming," "Clothing," "Food," "Drinks," "Furniture," etc. It is felt that grouping

illustrated words into categories would enhance language recall by the process of association of words within the same class.

This book is divided into five main sections. Within each section, the items have been arranged so as to progress from the simple to the more complex material. Each section is subdivided as follows:

Section #1 *COMPREHENSION OF THE SPOKEN WORD*
- A) Following commands
- B) Pointing to objects, body parts, and pictures
- C) Use of gestures and nodding the head "yes" and "no"
- D) Use of a "communication board"

Section #2 *IMITATIVE ABILITY AND ARTICULATION DRILLS*
- A) Strengthening the oral musculature — tongue and lip exercises
- B) Repetition practice — Lists of words and sentences of increasing length
- C) Articulation drills for individual consonant sounds

Section #3 *VOCABULARY RECALL, GRAMMAR AND SYNTAX*
- A) Fill-in tasks and sentence completion
- B) Illustrated useful objects in categories
- C) Grammar usage and proper word order drills
- D) Advanced fill-in sentences in paragraphs

Section #4 *READING DEVELOPMENT SKILLS*
- A) Comprehension of written material
- B) Oral reading of words and useful phrases, phonic drills — words that look similar
- C) Money concepts
- D) Time-telling practice with illustrated clocks
- E) Advanced oral reading selections

Section #5 *WRITING DEVELOPMENT SKILLS*
- A) Copying
- B) Writing to dictation
- C) Writing from memory
- D) Advanced writing

There is no set recommended time limit to be spent on each of these sections. Rather, when the patient is successful on an individual exercise, it is suggested that he progress to the next exercise, thus, the orientation for these exercises is the pa-

tient's needs, not a time framework. The importance of follow-up practice by the patient with his family cannot be over-emphasized.

It is best to start aphasia rehabilitation as soon as possible after the brain injury. Your physician will advise you when he feels the patient is ready to begin. If a patient is unwilling to cooperate with the speech pathologist, he should not be forced to continue. Motivation and willingness on the part of the patient plays an important role in the patient's success.

The words speech pathologist, clinician, and family member are used interchangeably throughout this manual for purposes of simplicity. It should be obvious however, that the terms speech pathologist and clinician refer to a professional person with specific clinical training. It is highly recommended that a speech pathologist/language clinician treat the aphasic patient. However, an untrained family member, nurse, or friend can act as an assistant to reinforce learning, using these materials as a guide.

The author encourages the clinician to improvise and expand these materials so as to adapt them to the specific needs of the individual patients.

INTRODUCTION

TYPES OF SPEECH AND LANGUAGE DISORDERS

There are three major types of speech and language disorders resulting from brain damage. They are—

1. *Aphasia*—a breakdown in language skills resulting in impaired comprehension of the spoken and written word (receptive language) as well as impaired speech, gestures, and written language (expressive language). There is a reduction of available vocabulary and word recall, demonstrated by the patient's difficulty naming items and expressing ideas, and impaired grammar usage and syntax (word order).
2. *Dysarthria*—impaired speech pronunciation due to oral musculature weakness. Speech is characterized by slurred imprecise articulation. Rate is altered; tongue movements are usually labored. Voice quality may be abnormal, i.e. hypernasal; volume may be weak; drooling and swallowing and breathing difficulties may be present. Dysarthria may either accompany aphasia or occur alone.
3. *Verbal Apraxia*—Impaired repetition and imitative ability; lack of voluntary control and proper sequencing of articulators (tongue, lips, jaws, and vocal folds). Speech is characterized by sound reversals, additions, and word approximations due to sensorimotor impairment. The ability to imitate oral movements on command and to repeat words and phases is impaired although there is no accompanying weakness of the oral musculature. Verbal apraxia often accompanies aphasia.

EVALUATING THE EXTENT OF THE DISORDER

In order to determine the extent and type of disorder and in order to assess the potential for relearning, the patient should be evaluated by a certified speech pathologist. The physician in charge of the case will most likely be able to recommend a local certified speech pathologist. If not, a list of such individuals is available by writing to the American Speech-Language-Hearing Association, 10801 Rockville Pike, Rockville, MD 20852.

The speech evaluation serves several purposes: First, it reveals the patient's present speech capabilities; second, based on the patient's test performance, an individualized treatment program can then be planned; third, even if the speech pathologist is unable to administer the follow-up care, he will discuss the results of the evaluation so as to guide the family members in knowing at what level to begin speech rehabilitation and how to proceed using this manual.

ADMINISTERING APHASIA THERAPY

The recommended procedures for administering speech pathology treatment to the aphasic patient are as follows:

1. *Tell the patient why he is having this speech difficulty.* Explain to him in simple terms that he has suffered a brain injury and that this is the cause of his speech and language difficulty. Many patients have actually said that they think they are "going crazy." This is of course not true and should be made clear to the patient to avoid further frustration.
2. *Encourage and reassure the patient that he is likely to improve.* Most stoke patients do improve; however, improvement usually takes many months or more.
3. *Be patient.* Avoid scolding or shouting at the patient while urging him to respond. One must realize that most patients are trying their best. They are not purposely withholding information, but rather are displaying reduced vocabulary. Many are depressed and need support rather than chiding. Not all family members can work well as an assistant. If a person's temperament is such that he is impatient, nervous, overanxious, or intolerant, this person should not work with the patient.
4. *Speak slowly to the aphasic patient.* Patients with brain damage often have input difficulties and consequently need more time to assimilate information. A patient with a comprehension deficit hears but doesn't fully understand what is being said to him. It is much the same as listening to a foreign language when in a foreign country. The patient hears the words, but he requires slow presentation of the material so that he can grasp the material better.
5. *Use simple concrete language.* Ask straightforward questions to avoid unnecessary confusion. For example, say "Do you want coffee?"—"yes or no?" (Wait for the patient's response.) "Do you want tea?"—rather than asking the more complex question, "Do you want coffee, tea, or would you prefer milk?"
6. *Make realistic goals and expectations.* Avoid demanding too

much of the patient. If a person cannot name things, demanding words and full sentences is not a realistic goal for beginning treatment.

7. *Give the patient ample time to respond.* If given enough time, many patients can elicit the correct response. It is much the same as when a person has the word on the tip of his tongue, so to speak; if given enough time, often he will be able to evoke the proper response.
8. *Begin practice sessions at a level where the patient can feel successful.* Graduate slowly upward to more difficult levels. Avoid haphazard drilling, in which the family member attempts not only to cover too much material but also does this without a logical sequence or presentation. A patient should not be subjected to a speech pathology session in which all of the material presented is too difficult for him. A frustrated patient easily becomes disinterested, fatigued and, depressed. On the other hand, a successful patient will be more cooperative and be more likely to progress.
9. *Watch for signs of fatigue and perseveration.* Perseveration means repetition of an act or word after it is no longer appropriate. Brain-injured patients often display perseveration and shortened attention span. These signs indicate a need for a change of activity. Usually stopping and resting for awhile or changing the subject is helpful.
10. *Keep treatment sessions short and at frequent intervals.* This, of course, depends on the individual's attention span, but most often a fifteen- to twenty-minute practice session two to three times a day is better than one hour-long session.
11. *Treat the patient as a adult, not a child.* Even though he may be unable to communicate effectively, and may at times display childlike behavior, e.g. uncontrolled or inappropriate crying or laughing caused by the brain injury, he should not be ridiculed or babied.

Oftentimes, well meaning friends who may have experienced similar circumstances with stroke patients may attempt to impose their own ideas on your family member. Although their intentions are good, one must remember that each patient is unique and treatment procedures may vary. Following the above recommended procedures will provide guidelines for treatment. The exercises should be adapted to suit the patient's particular interests and needs.

SPEECH AFTER STROKE

SECTION I

COMPREHENSION OF THE SPOKEN WORD

A) Following commands

B) Pointing to objects, body parts, and pictures

C) Use of gestures—nodding "yes and no"

D) Use of a communication board

SECTION I

COMPREHENSION OF THE SPOKEN WORD

THE RECOVERY OF LANGUAGE depends mainly upon the patient's ability to understand and follow directions and upon the scope and severity of his illness. The relearning of expressive speech and language skills cannot occur unless the patient can comprehend the speech pathologist's instructions. Most patients who have aphasia usually demonstrate some impairment in auditory comprehension, that is, impairment in understanding the spoken word. This impairment may range from minimal to severe. During the initial evaluation an assessment is made of the patient's comprehension abilities in order to determine if he is an appropriate candidate for rehabilitation and at what level the treatment should begin.

Very often a patient may appear to understand conversational speech by nodding his head and smiling. However, when asked to follow specific simple commands, he may be unable to do so. Although it is difficult for the family to accept the fact that their loved one cannot comprehend as he did prior to the brain injury, it is in the best interests of the patient for one to be realistic about his deficit. It should be kept in mind, however, that improvement in comprehension often occurs spontaneously, and even though the improvement in some cases may be more gradual, for example, over a period of several months, most patients do make some progress.

The exercises and illustrations in this section are designed to