REFERENCES


AN INNOVATIVE THERAPEUTIC PROGRAM FOR APHASIA PATIENTS AND THEIR RELATIVES

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ABSTRACT. Eleven aphasia patients and seven family members participated in a five-day residential course led by a speech pathologist, a psychologist and a neurologist. The aim of the course was to give the aphasic patients and their relatives information on the etiology, treatment possibilities and prognosis of aphasia; work on personal and interpersonal problems through psychological counseling; improve language function through comprehensive and intensive stimulation; examine the psychological, linguistic and neurological effects of the intensive course. The course participants met again one year after the course and were found to have changed positively both psychologically and interpersonally, but, as expected, only to a minor degree linguistically and neurologically. Through this intensive course, it was possible to assess the problems of the families more easily than in the hospital. The patients and their relatives reported that they had learnt to identify and to deal with their psychological problems in a more constructive way. They also felt that they had support from the other families and were able to share their experiences. We found that this type of intervention had many positive effects on the quality of the interrelations of the participants to cope with the chronic disease.

Key words: aphasia, rehabilitation, family therapy, spousal, psychological and social adjustment, depression

INTRODUCTION

Few studies have assessed the influence of family members on aphasic stroke patients. The few studies exist show an obvious need for bringing spouses into the rehabilitation process. Malone et al. (6) reported that the attitudes of the families of aphasics were often "unrealistic" because of mistaken beliefs about strokes. They suggested that aphasics and their families would benefit from counseling. Helsenick et al. (3) found that the spouses of aphasic patients viewed the patients' communication ability as less impaired than it actually was. Mullh (6) reported that the mutual influence aphasic stroke patients and their relatives have on each other, and the emotional behaviour of the spouses—in reaction to the patients' communication disorder—aggravates the verbal output of the patients.

In Sweden, as in most countries, therapy for aphasics is concentrated in larger hospitals in urban areas. In the more remote areas, treatment if any, is mediated by occupational therapists or untrained persons. As a consequence little or no information on aphasia and its concomitant problems is given to aphasic patients and their families. This was the primary impetus for the design and implement of the present study.

The aim of the present study was to examine the psychological, linguistic and neurological effects of an intensive five-day informational and psychotherapeutic regimen given to aphasic patients and their families in a residential situation.

METHODS

The patients were selected according to the following criteria: they lived in the area (county) where the course was held, they were known to at least one of the four speech teachers who worked in the area, they were able to bring a family member and they were not globally aphasic. From this population the final participants were selected at random.

Eleven aphasics and seven family members attended the five-day intensive course given at a boarding-school in a small town in Sweden. The course was led by a speech pathologist, a psychologist and a neurologist assisted by four speech teachers (school teachers with one year of postgraduate training in language and speech).

The participants met in four groups, each group led by a speech teacher, in which different activities were given. We tried to make the groups as homogeneous as possible. Family members were not grouped together with their aphasic spouses in order to avoid the overprotective attitude so often shown by family members. Group participants discussed the news from the daily papers, objects that the participants had bought with them, music that was played in the groups, poems that someone read to the others, they sang familiar songs etc. In small groups the aphasics practiced reading and writing or naming objects.

One family at a time left the group meetings to see the psychologist for examination and family therapy. In the

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neuropsychological examination an interview was performed to assess the neuropsychological deficits. In this interview the spouses were asked to report their observations. The following abilities were explored: (a) memory, (b) concentration, (c) emotional self-regulation, (d) intellect, (e) perception, and (f) abstraction. The psychologist also looked for somatogenically based changes in the patient’s behaviour. The test which was administered in intra-individual comparison is the widely used standardized Swedish test-battery, the “Duncan-Säde battery” (3). Other tests, used in intra-individual examination, were Boston’s Revised Visual Retention Test (2) and the Thematic Apperception Test (TAT). Test results were evaluated with great care since the measures were not designed for use with aphasia.

Psychological reactions were identified by an unstructured interview approach and were classified into six groups according to what is in general use by the American Psychiatric Association: (1) anxiety, (2) dissociation, (3) conversion, (4) phobic reactions, (5) obsession, compulsion, and (6) depression. These reactions were described by the patient, his family, and were reconstituted in the follow-up study.

Family therapy was provided by the psychologist. The main technique used was conjoint family therapy (10). This technique focuses upon the relationships in the family rather than upon the personality structure of each member of the family. In the present study the psychologist tried to explore the changes in the relationships that had occurred because of the aphasia. The therapeutic presupposition was that the present situation, i.e. with one aphasic family member, was not only determined by the aphasia but also by the other interpersonal factors that were present before the aphasia occurred. It was postulated that the change in the family system caused by the aphasia takes a lot of energy from the family unit. If the family has difficulties to cope with the problems in a constructive way this might increase the problems for all members of the family, e.g. depression, impaired communication and feelings of guilt.

All patients were neuropsychologically examined. The language examination comprised the Gothenburg Aphasia Test (1) combined with items from the Boston Diagnostic Aphasia Examination (4) arriving at a diagnosis of aphasia syndrome based on the classification system used at the Väx- tors Veterans’ Administration Hospital.

All participants listened to lectures on the course, treatment and prognosis of aphasia, and its accompanying neuropsychological deficits. A lecture was also given on the psychological aspects of aphasia.

The social program consisted of an excursion to a city nearby where we visited a museum, an aquarium, a glass-blowing workshop and a restaurant. The aim of the excursion was to provide stimulation in all possible ways. Speech was encouraged, e.g. ordering the meal at the restaurant and asking for the bill. In the evenings the participants discussed and compared their everyday problems with the other families and were thus given new ideas how to solve their problems.

The participants filled in a questionnaire in which they gave their own opinion on the value of each part of the program. All participants enjoyed the program and denied being dissatisfied with the outcome of the course.

One year later none of the aphasics and six of the family members met again for five days for re-evaluation (cf. Table 1). Two patients failed to attend, one because of a gall-bladder operation, the other because of a vacation. Again, the same linguistic, neuropsychological and psychological test procedures were performed. A similar questionnaire was filled in during the follow-up period. The questionnaire had cognitive variables, but this time an attitude scale with behavioural aspects of the participants were included.

Case 1, a 40-year-old male with a subarachnoid hemorrhage four years previously. He had a persistent right-sided hemiparesis and an aphonic anaphasia. He attended the course alone. His wife had told us that he continued to rest. The patient reported to the psychologist that he and his wife often quarrelled about the present situation. He claimed that his wife was exaggerating his difficulties. In the psychological examination an almost obvious denial of the patients aphasic problems was noted.

At follow-up a year after he was still disinclined to accept his aphasia and preferred to talk about his premonitory situation. However, he did not dissociate himself from further consultation with the psychologist anyhow. During the period between the course and the follow-up the patient and his wife spontaneously asked for family-therapy at the hospital. This turned out to be a break-through for the patient in understanding his wife’s concerns. At follow-up they both described their every day life together as more free from tensions. It is noteworthy that they both decided to attend family therapy after the first course.

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Table I. Aphasia type and occurrence of depression during the course and at follow-up

<table>
<thead>
<tr>
<th>Case</th>
<th>Aphasia type</th>
<th>During the course</th>
<th>At follow up</th>
<th>Depress. During the course</th>
<th>At follow up</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Anomic</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>2</td>
<td>Mixed non-fluent</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>3</td>
<td>Mixed non-fluent</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>4</td>
<td>Mixed non-fluent</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>5</td>
<td>Anomic</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>6</td>
<td>Anomic</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>7</td>
<td>Mixed non-fluent</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>8</td>
<td>Transcerebral motor</td>
<td>Conduction</td>
<td>Conduction</td>
<td>Improved</td>
<td>Improved</td>
</tr>
</tbody>
</table>

Mean age 50

neuropsychological examination an interview was performed to assess the neuropsychological deficits. In this interview the spouses were asked to report their observations. The following abilities were explored: (a) memory, (b) concentration, (c) emotional self-regulation, (d) intellect, (e) perception, and (f) abstraction. The psychologist also looked for somatogenetically based changes in the patient's behavior. The test which was administered in intra-individual comparison is the widely used standardized Swedish test battery, the "Duncan-Silde battery" (4). Other tests, used in intra-individual examination, were Boston's Revised Visual Retention Test (2) and the Thematic Apperception Test (TAT). Test results were evaluated with regard to performance by means of a standard deviation score. The psychological reactions were identified by an unstructured interview approach and were classified into six groups according to what is in general use by the American Psychiatric Association: (1) anxiety, (2) dissociation, (3) conversion, (4) phobic reactions, (5) obsession, compulsion, and (6) depression. These reactions were described by the patient's behavior and were reclassified in the follow-up study.

The family therapy was provided by the psychologist. The main technique was conjoint family therapy (10). This technique focuses upon the relationships in the family rather than upon the personality structure of each member of the family. In the present study the psychologist tried to explore the changes in the relationships that had occurred because of the aphasia. The therapeutic presupposition was that the present situation, i.e. with one aphasic family member, was not only determined by the aphasia but also by the other interpersonal factors that were present before the new situation occurred. It was postulated that the change in the family system caused by the aphasia takes a lot of energy from the family unit. If the family has difficulties in coping with the problems in a constructive way this might increase the problems for all members of the family. 

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The patients filled in a questionnaire in which they gave their opinion of the value of each part of the program. All patients enjoyed the program and denied being dissatisfied with the outcome of the course.

One year later none of the families and six of the family members met again for five days for re-evaluation (cf. Table 1). Two patients failed to attend, one because of a guilt-blinder operation, the other because of a vacation. Again, the same linguistic, neurological and psychological test procedures were performed. A similar questionnaire was filled in during the follow-up period. The questionnaire had cognitive variables, but this time in an attitude scale with behavioural aspects of the participants were included.

PATIENTS AND RESULTS

Case 1. A 40-year-old male with a subarachnoid haemorrhage four years previously. He had a persistent right-sided hemiparesis and an aphasia. He attended the course alone. His wife had told us that he wasPages 52-53

Aphasia patients and their relatives

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under tension. No improvement was noticed in the family situation.

Case 2. A 54-year-old male with a persistent mild Wernicke's aphasia since two years but no hemi-symptoms two years after a skull trauma and subdural hematomas. During the one week course the patient had difficulties following conversation. He had also memory and concentration defects. The patient had interpersonal psychological problems, difficulties in keeping an adequate distance to the examiner, and his performance was marked by rigidity in shifting from subject to subject and task to task. He appeared uneasy and had motor incoherency. His family reported that they felt tired and overburdened.

At follow-up a year later he was more coherent in his thoughts and could keep an adequate distance to other people more easily. Still his rigidity in shifting from task to task was marked. He was no longer so anxious but still showed psychomotor hyperactivity. Both his wife and his son reported great relief in meeting not only the psychologist but also other people who were in a similar situation. They both reported an improvement in mood. Relations within the family were improved and the wife was positive towards family therapy sessions.

Case 3. A 62-year-old male with a probable cerebral infarction one year previously. No hemisymphology was found but he had an anomic aphasia. He showed no neuropsychological abnormalities but some psychomotor discomfort. He and his wife reported that they both described their relationship as harmonious.

At follow-up a year after a slight improvement of his probably pure anomic aphasia was noted. No changes in the family situation was seen.

Case 4. A 47-year-old female with, a probably embolic, cerebral infarction one year previously. The neurological examination revealed a right-sided hemi-hypesthesia and a bilateral general apraxia. She had a possible anomic aphasia although her auditory comprehension was not intact. Neuropsychological tests showed a reduced memory. She was withdrawn, shy and slightly depressed. Her husband reported difficulties in reaching her. He had difficulties in understanding the present situation both intellectually and emotionally, while their son seemed to be more flexible. The adults were stimulated to communicate and to look at each other while they were trying to express their feelings about the situation. After a year the neurological and the psychologi-
cal findings were unchanged but the aphasia had evolved into a more typical anomic aphasia. An obvious improvement in the relationship between the two adults was seen. They were more at ease in their behavior and they both reported that they had learned how to cope with their situation.

Case 7, a 45-year-old female with a subarachnoid haemorrhage one year previously. The neurological examination revealed a slight right-sided hemi-hypoaesthesia and hemi-dysphasia. She had a slight memory defect and she was depressed. She had an anomic aphasia. During the family therapy session she was very quiet. Her husband who was a farmer did most of the talking and he assured that this had been the situation even before his wife became aphasic. They both seemed to agree that their main problem was not concerning the patient but their 10-year-old son who had difficulties in school. The counseling was concentrated toward the family system as a whole and the son attended all the sessions.

At follow-up after a year the patient appeared happier and her husband thought that her mood had returned to normal. The family as a whole seemed to function normally now, despite the mainly unchanged situation for her son.

Case 8, a 59-year-old male who suffered from an intracerebral haemorrhage in the left temporal lobe two and a half years previously. The neurological examination revealed a severe right-sided hemiparesis and a slight hemihypaes thesis. His aphasia was mixed fluent. The neuropsychological examination showed a partly somatognosy generated atroso-emotional syndrome. He was cerebrotonic (socially restrained) and emotionally expressive (impaired motivation). Psychologically a neurasthenia was noted. His wife complained of the lack of emotional contact in their marriage.

At follow-up after a year he was still cerebrotonic but markedly less astenic and more emotionally conative. His appearance showed more mobile features. Psychologically he was low-voiced but he had ceased to show signs of neurasthenia. He was also more hopeful than at the examination one year previously. His wife was still asking for more emotional contact in the marriage but she said that she knew how and when she should ask for it. She also declared that she understood what was connected to her husband's brain damage and what she could respond to in a more demanding manner.

A 60-year-old female with a probable left hemisphere infarction. Neurologically and neuro-psychologically no abnormalities were found. He had a conduction aphasia. His stroke occurred 6 months prior to the course. He seemed to be locked in a reactive depression. He wanted to give up his work and was gloomy about the future. His wife was very concerned about him and they both agreed that the depression and the family situation asked for more radical treatment than plain counseling. A psychodrama technique was used. The situation when the patient became aphasic was role played and they were both given opportunities to react emotionally to the ongoing play. This was done with great care and a lot of support was given to both of them. The psychodrama was emotionally strong and they both cried a lot. They reported great relief after the drama was finished.

At follow-up after a year the patient was less depressed. He remained at his work and had a more realistic view of life. Both the patient and his wife described an improvement in mood. They claimed that their relationship in certain aspects was even better than before the patient became aphasic. Of course the handicap was still there and they were still depressed about it but differently. Or, as they put it, "in an angry and maybe more constructive way".

The questionnaires showed that the participants appreciated both the length and the content of the course. They stated that their knowledge of aphasia was very poor before the first course but good or very good after the course. They experienced that the course had a positive effect on their life situation.

We noted changes in several cognitive and behavioral aspects. The participants reported that they were more informed about aphasia and related neurological, neuropsychological and psychological symptoms. Furthermore, they reported qualitative and quantitative improvement in life situation when compared with before the course. This was found at the follow-up one year after the initial course.

The statements in the questionnaires suggested that a course of this kind, where aphasic and their families have the opportunity to be together under guidance of skilled personnel, is of great value as a complement to traditional aphasia management.

DISCUSSION

The experience of focusing intensively, in a residential situation, on problems associated with persistent aphasia was unique, in that no group which is traditionally spread across the recovery period was tele-

Aphasia patients and their relatives

Many speech pathologists have stressed the importance of giving the family members of aphasic patients the opportunity to participate in the rehabilita-
tion process (9). Since most of the participants in the present course thought that the information given was positive, one might conclude that there should be fewer misconceptions within the families. Our presuppositions about the content most suitable for assimilating the information seemed to be correct since the atmosphere was very relaxed and un-


References


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**REFERENCES**


The effects of an in-hospital educational programme for myocardial infarction patients

John Gunnar Maland and Odd Erik Hauvik

From the Institute of Hygiene and Social Medicine and the Institute of Clinical Psychology, University of Bergen, Norway

ABSTRACT. The effects of a standardized audiovisual educational programme for myocardial infarction (MI) patients have been evaluated in 4 hospital departments using a time-sequential quasi-experimental design. Compared with controls, patients offered the educational programme were more knowledgeable and had less fear-provoking beliefs about the MI, expressed more optimistic expectations about future physical ability, resumed physical activities more rapidly, reported less initial emotional disturbances, and consulted physicians less often during the first 6 weeks after discharge. Six-month mortality-rate was significantly lower in the educational group, but long-term survival was identical in the two groups. The educational programme had no effect in smoking, return to work, resumption of sexual activity, or number of re-hospitalizations. The results indicate that standardized patient teaching during hospitalization is feasible and improves short-term coping behaviour after a MI.

Key words: coronary artery disease, myocardial infarction, rehabilitation, patient education, health knowledge, illness perception, sick role behaviour, mortality

After a myocardial infarction (MI), patients face a number of adaptive tasks relating to emotional reactions, behavioural modifications, and the resumption of family and social roles. It has been claimed that insufficient knowledge about the illness may be of crucial importance for optimal rehabilitation and adaptation in heart patients (21, 26, 29).

According to cognitive psychological theory, a heart attack constitutes a life crisis in which the individual's reactions are partly mediated through the perceived meaning of the illness (3, 10). From this point of view, patient education should be implemented in medical care from the very beginning of an illness. However, the acute physical and emotional stress may restrict the MI-patient's ability to take in and retain information, and the effectiveness of in-hospital teaching for cardiac patients has been questioned (28). In some studies, none or only minor effects of rather ambitious educational programmes have been found (7, 22, 28), whereas other studies have indicated more positive results of early teaching and counselling efforts among heart patients (15, 19).

Ideally, patient education should be personal and tailored to the patient's particular needs (24). In practice, shortness of time and scarcity of human resources constitute major hindrances for optimal patient education during hospitalization. However, several reviews have found standardized patient teaching to be effective (6, 14), and some studies have even indicated certain advantages in audiovisual presentations compared with personal teaching techniques (1, 5).

The purpose of this study was to examine the short-term (i.e. within 6 months) and long-term (within 40 months) effects of a specially designed audiovisual educational programme for hospitalized MI patients, with respect to feasibility, patient evaluation, health knowledge, illness perceptions, sick role behaviour, and mortality. The study is a part of a larger research project concerning cardiac rehabilitation.

METHODS

Study design. The study involved 4 medical departments in 3 hospitals in Western Norway: a 1 200-bed University hospital with 2 medical departments, a 300-bed Community hospital, and a 150-bed District hospital. In all 4 departments, MI patients hospitalized during a predetermined time interval were offered a series of 3 audiovisual educational programmes. The time intervals ranged from 5 to 14 months, according to patient turnover in each department. During comparable intervals, no standardized patient education was available. During either periods, there was no limitation on the amount of informal patient information given. To minimize the possibility for a systematic influence from external factors, e.g. mass media health campaigns or changes in treatment routines, the group sequence in two of the departments was reversed (Fig. 1).

Patients fulfilling the following criteria were eligible for the study: 1) below 67 years of age, 2) a diagnosis of recent MI, 3) no medical or psychological contraindications, and