

Can AAC methods help the communication of the adults with severe aphasia and their families?

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ABSTRACT

The purpose of this paper is to introduce an intervention in progress on the adaptation courses of Stroke and Dysphasia Federation. These so called communication courses are arranged for people with severe aphasia and their significant others. The courses aim to activating the aphasics to use different kinds of augmentative and alternative communication methods (AAC) and to guide their significant others to support them in communication. The functional communication of the aphasics, the use of AAC methods and the benefit of the course is measured.

Keywords

Aphasia therapy, augmentative and alternative communication (AAC), Communicative Effectiveness Index (CETI), Communication Readiness and Use Index (CRUI), significant others.

INTRODUCTION

Aphasia affects not only the person who has got the stroke, but all the people around her/him, harmfully affecting the human communication [19]. To put it rather dramatically, without rehabilitation severe aphasia can cause "a social death" of a person. If the aphasia is very severe, the recovery of the speech can be very slow or even impossible.

Speech therapy still very much emphasizes speech and language recovery. If the results on these areas are minimal, and especially, if the speech therapy resources in the district are small, speech therapy often will end. But the need to communicate still remains, and this is why these people need other kinds of communication methods. Hence, more attention has been paid to pragmatics [12], functional communication [1,7,10,11], conversation analysis [15] and the role of the communication partners [14,19]. The use of augmentative and alternative communication methods (AAC) with aphasics is a new area. In the rehabilitation of the communication

the nearest relatives play a very important role and they also need guidance. [14,19].

NATURAL NONVERBAL COMMUNICATION AND THE AAC METHODS

Many authors write about different aspects of nonverbal communication in aphasics [2,8,9,15]. Here, nonverbal communication often refers to spontaneous nonverbal communication, for example gestures, facial expressions, pantomime and vocalizations. Natural nonverbal communication, such as gazes, gestures, facial expressions, body language, pantomime, pointing at maps and things is very usual. Is it possible to strengthen these to be more communicative or to be used more frequently?

Some of the aphasics can also use writing or drawings, word lists, picture books etc. The use of pencil and paper is very common in communication situations of the severely aphasic persons. Lyon [17,18] writes about drawing as an augmentative mode of communication and about its value as an aid to communication. Bertoni et al. [3] describes a therapy program proceeding from use of pictographs to the spontaneous production of line drawings in response to questions.

Previously we have not called these different ways to express oneself AAC methods, but nonverbal communication. In the rehabilitation of children these methods are included in AAC methods. Bliss symbols, PCS symbols, Pictogram pictures, signs, technical devices etc. are more often used in the rehabilitation of children. Now these methods are also gradually coming into the communication rehabilitation of the adults with severe aphasia. Some aphasics can learn these symbol-based AAC methods, but they need plenty of training [5,4,6,13].

APHASIA AND AAC

It is a little bit different to begin using AAC methods with adults than with children. Adults with acquired

communication disorders have already had intact language and speech skills and then lost them. With children however, you support the development of the language and communication skills with the AAC methods. Their communication skills are growing as their language skills are improving. When we talk about acquired communication disorders like aphasia, we do not know enough, which AAC methods are useful and which learning strategies we should use at first.

It is not easy to replace speech with other methods, because eventually it often means another symbol system, and at least the use of the system always demands some language processing. That is why all of the severe aphasics cannot use AAC methods, though some of them can. But who can, and what are the criteria to begin with?

The goal in using the AAC methods is that aphasic persons can give their communicative partners some hints about what is on their mind. After that it is easier for the partners to go on with supported communication.

INTERVENTION

The Stroke and Dysphasia Federation in Finland arranges adaptation courses with different themes. Communication courses are for severely aphasic persons and one of their closest person, called the significant other. Thus, every course consists of 8 aphasic persons and 8 significant others. The course lasts 8 (2) + 4 (4) days or 7 (2) + 7 (2) days, with three months between the first and the second period. The significant others participate the two or four last days of the periods (in parentheses). The aim of the course is very practical: It is to find the ways to help the aphasics and their significant others to communicate better in their everyday life.

On the courses we use different kind of natural nonverbal communication and augmentative and alternative communication methods with aphasic persons. The significant others are guided to support them in communication situations. The communication methods that are used are speech, writing either beginning of words or entire words, gestures, pantomime, signs, drawings, pictures, word lists, technical devices and interpreter services.

The aphasics work in speech therapy groups of four with one speech therapist, or in groups of eight with two speech therapists. In addition they have physiotherapy in groups. The speech therapists lecture on aphasia and on interpreter services. The significant others all work together with the speech therapist. In addition to the group therapy, the participants listen to the lectures of neurologists and social workers. On the last day the participants have

so called private "family counseling" with the speech therapist.

AIMS OF THE RESEARCH

The aim of this research is to examine what kind of AAC methods aphasic persons and their families use if any, if the AAC methods help the communication between adults with severe aphasia and their significant others, and if the functional communication abilities of the aphasic persons change after the intervention. The aim is also to examine, if the severely aphasic persons themselves can evaluate their own and their partners' communication skills, and the possible change in it during the time.

METHODS

Lomas et al. [16] created the Communicative Effectiveness Index (CETI) in 1989 to measure the verbal and nonverbal communication abilities of the aphasics. The spouses of the aphasic patients made the assessments by filling up a questionnaire.

Lyon et al. [19] used investigator-constructed Communication Readiness and Use Index (CRUI) questionnaires for adults with aphasia. The aphasic persons assessed themselves the communication situations after the intervention.

In this research, we use the translated version of the CETI for the relatives and the CETI and the translated version of CRUI for the aphasics.

In addition to this, we use some investigator-constructed questionnaires for the significant others and aphasic persons. It is our aim to capture the key elements of the useful communication methods and of the benefit the participants gain from the communication courses. The significant others are also asked some questions about the aphasic persons' "communicative personality" before and after the stroke.

In the questionnaires of the aphasic persons, pictures are added to help them to understand the written questions. Because almost every participant has very severe aphasia, the speech therapist reads the questions aloud for them. The investigator-constructed questionnaires include some open questions, but most of the answers are given on a 10-cm visual analogue scale. This gives the opportunity to assess the possible change in performance over time.

The questionnaires are filled up three times: First time before the first course period, second time three months later, just before the second course period, and third time six months after the course. The significant others fill up the formulas alone, whereas the aphasic persons are interviewed by the speech

therapist or they fill up some of the questionnaires in a little group, together with the speech therapist.

The data will be collected during the years 1999 and 2000 and are analyzed after that. The aim is to gain the data from 32 aphasic persons and their relatives. The results will be discussed later.

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