PO3.66. THE MEMORY PHONE: TECHNOLOGY ASSISTED TELEREHABILITATION FOR PERSONS WITH DEMENTIA AND THEIR FAMILY MEMBERS

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Introduction

The Memory Phone project (2013–2016) aimed at developing an interactive rehabilitation model at an early phase of dementia. The intervention was designed for persons at an early phase of Alzheimer's disease under 75 years of age, and their family members. The aim was to enhance functioning and wellbeing of both participant groups. One of the leading ideas was to develop technological applications with options that are not available by using the traditional rehabilitation methods.

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Fig. 1. FORAMENCognitiveTablet

Methods

The multi-methodological rehabilitation model consisted of group intervention, telerehabilitation and cognitive training (FORAMENCognitive Tablet) at home via mobile technology. The controlled study design was used to evaluate changes in cognitive functions, mood, quality of life and daily activities by neuropsychological methods of the 28 subjects who attended to the intervention and of 25 control subjects. In addition to these groups the qualitative data was collected of the 12 additional subjects and 50 family members. Outcomes were collected at baseline (before intervention), immediately following intervention period (13 weeks) and 6 months after the baseline measurement.

Week Number	Intervention Activities	Supervision
1	1 st Group meeting	Personal supervision
	Training at home	
2	1 st Peer Group meetings	
3	Training at home	
4	Training at home	
5	2 nd Group meeting (week 5)	
6	Training at home	
7	2 nd Peer Group meetings	
8	Training at home	
9	3 rd Group meeting	
10	Training at home	
11	3 rd Peer Group meetings	
12	Training at home	
13	4 th Group meeting	

Table 1: Intervention process

Results

Most participants hadn't received any previous support. The six months follow-up showed significant decrease in depression in the Alzheimer group reported by the subjects with Alzheimer's disease as well as by the family members. However, no change in depression was found in the subjects with Alzheimer's disease who attended to the control group. No significant changes were found in cognition, such as memory functions or attention. The family members, who took part in intervention, showed an increased positive value in caregiving (COPE).

According to qualitative methods participants experienced intervention motivating, and it structured their daily routines. The persons with AD found cognitive training useful, and brought joy in their lives. Altogether the intervention provided much needed reliable information, peer support and personal supervision.

Conclusions

The multidisciplinary rehabilitation may enable persons an early phase of dementia and their family members to cope better with changed life situation and maintain the activities that they value.

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